

**STUDY  
ON  
EFFICIENT OPERATION AND MAINTENANCE  
EXPENSES**

**for**

**THIRUVANANTHAPURAM INTERNATIONAL  
AIRPORT, THIRUVANANTHAPURAM (TRV)**

**for**

**SECOND CONTROL PERIOD (FY 2016-17 - FY 2020-21)  
&  
FY 2021-22**

**Initiated by the Airports Economic Regulatory Authority of India (AERA)  
February, 2024**

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### List of Abbreviations

Abbreviation	Expansion
A&G	Administrative & General
AAHL	Adani Airport Holdings Ltd
AAI	Airports Authority of India
AAICLAS	Airports Authority of India Cargo Logistics and Allied Services
AEL	Adani Enterprises Limited
AERA / the Authority	Airports Economic Regulatory Authority of India
AGM	Assistant General Manager
AMC	Annual Maintenance Contract
ANS	Air Navigation Services
AOCC	Airport Operations Control Centre
AODB	Airport Operational Data Base
ARFF	Aircraft Rescue and Fire Fighting
ARR	Aggregate Revenue Requirement
ATC	Air Traffic Control
ATM	Air Traffic Movement
BOT	Build Operate Transfer
CAGR	Compounded Annual Growth Rate
CAO	Chief Airport Officer
CCTV	Closed Circuit Television
CHQ	Corporate Headquarters
CISF	Central Industrial Security Force
CNS	Communication, Navigation and Surveillance
COD	Commercial Operation Date
COVID-19	Corona Virus Disease of 2019
CSS	Corporate Support Service
DIAL	Delhi International Airport Limited
EHCR	Employee Head Count Ratio
EHS	Environment, health and safety
ESS	Environmental Support Services
FCP	First Control Period
FIDS	Flight Information Display System
FY	Financial Year
GAL	GMR Airports Limited
GHIAL	GMR Hyderabad International Airport Limited
GST	Goods & Service Tax
HRA	Human Resources and Admin
IATA	International Air Transport Association
ILBS	Inline Baggage Screening
IT	Information Technology
MESS	Mechanized Environmental Support Services
MIAL	Mumbai International Airport Limited
MoU	Memorandum of Understanding
MPPA	Million Passengers Per Annum
MT	Metric Tonnes
MYTP	Multi Year Tariff Proposal
O&M	Operation and Maintenance
OPEX	Operational Expenditure
PAX	Passenger
PBT	Profit Before Tax
PF	Provident Fund
PP	Prior Period



Abbreviation	Expansion
PPP	Public-private partnership
PSF	Passenger Service Fee
R&M	Repair and Maintenance
RAB	Regulatory Asset Base
RHQ	Regional Headquarters
SAP	Systems Applications and Products in Data Processing
SCP	Second Control Period
SPV	Special Purpose Vehicle
SQM (sqm)	Square meters
TBLR	Terminal Building Ratio
TKIAL	TRV (Kerala) International Airport Limited
TO	Tariff Order
TRV	Thiruvananthapuram International Airport
UDF	User Development Fee
XBIS	X-ray Baggage Inspection Systems

## 1. OBJECTIVE OF THIS STUDY

### 1.1 Background

- 1.1.1 Thiruvananthapuram International Airport (TRV), established in 1932, holds the distinction of being the first airport in the state of Kerala, India. Its inaugural flight took off on 1<sup>st</sup> November 1935. Today, TRV stands as the second busiest airport in Kerala, catering to 4 MPPA in FY 2019-20. The passenger traffic in FY 2022-23 was 3.5 MPPA. The Airport is situated 3.7 kilometers away from the city center and also in close proximity to various prominent destinations such as Kovalam beach and the under-construction Vizhinjam International Seaport.
- 1.1.2 TRV operates with two terminals. Terminal 1, which commenced operation in 1985, primarily handles domestic flight operations, excluding those of Air India. Terminal 2 was inaugurated in 2011 and serves as the hub for all international flight operations along with domestic flights operated by Air India.
- 1.1.3 TRV was recognized as a major airport in FY 2008-09 according to the definition outlined in Section 2 (i) of the Airports Economic Regulatory Authority of India (AERA) Act, 2008, together with the AERA (Amendment) Acts of 2019 and 2021. In accordance with the AERA Act of 2008, the Authority had issued Guidelines for the purpose of determination of Aeronautical tariff for major airports. As per the Guidelines, AERA had issued Tariff Order (TO) No. 03/2017-18 dated 2<sup>nd</sup> June 2017, in the matter of determination of Aeronautical tariff for TRV for the Second Control Period (SCP).
- 1.1.4 The operation and maintenance of TRV were previously handled by the Airports Authority of India (AAI). In FY 2018-19, AAI decided to undertake the operations, management, and development of TRV on a public private partnership (PPP) basis through a global competitive bidding process. TRV (Kerala) International Airport Limited (TKIAL), signed a concession agreement on 19<sup>th</sup> January 2021. The agreement grants TKIAL the rights to operate, manage, and develop the airport for a lease period of 50 years.
- 1.1.5 As per the terms of the concession agreement, TKIAL commenced the operations, management, and development of TRV on 14<sup>th</sup> October 2021. As part of its responsibilities, TKIAL has the entitlement to demand and collect fees from the Users for the provision of the Aeronautical and Non-Aeronautical Services including airlines and passengers.
- 1.1.6 TKIAL, on 15<sup>th</sup> April 2022 sought a clarification from the Authority related to control period for TRV. The Authority vide its Public Notice No. 05/2022-23 dated 20<sup>th</sup> June 2022 decided the following:
  - i. *“To shift the Control Period for Trivandrum Airport from 01.04.2021-31.03.2026 to 01.04.2022-31.03.2027. The periodicity of the Control Period will be five years only.*
  - ii. *To consider the true up for 01.04.2021 to 31.03.2022 at the time of determination of tariff for the Third Control Period as per AERA policy.”*
- 1.1.7 To comply with AERA Act 2008 read with AERA (Amendment) Act 2019 and 2021 and AERA Guidelines, the following submissions have been made for the determination of aeronautical tariffs for major airports:
  - On 14<sup>th</sup> December 2022, AAI submitted a true-up proposal for SCP and the period from 1<sup>st</sup> April 2021 to 13<sup>th</sup> October 2021 (referred to as the "Pre-COD period").
  - On 21<sup>st</sup> February 2023, TKIAL submitted a true-up proposal for the period from 14<sup>th</sup> October 2021 (Commercial Operation Date (COD)) to 31<sup>st</sup> March 2022 (referred to as the "Post-COD period").

- On 21<sup>st</sup> February 2023, TKIAL also submitted a Multi-Year Tariff Proposal (MYTP) for the Third Control Period (TCP) covering FY 2022-23 to FY 2026-27.

1.1.8 As an interim measure, TKIAL applied to AERA on 27<sup>th</sup> August 2021, requesting permission to levy existing rates at TRV from the Commercial Operations Date (COD) until 31<sup>st</sup> March 2022. AERA through its order No. 41/2022-23 dated 22<sup>nd</sup> March 2023, granted permission to levy existing aeronautical tariffs until 30<sup>th</sup> September 2023, or until the regular tariff determination for Third Control Period, whichever occurs earlier.

## **1.2 Objective**

- 1.2.1 Establishing efficient Operation and Maintenance (O&M) expenses is fundamental to the determination of tariff for Aeronautical services in the interest of all stakeholders. The O&M expenses of Airports across the Country have been increasing consistently, driven by investments in expanding, modernizing and improving the operational efficiency of airports. Furthermore, there has been an increase in the adoption of the latest technology to improve the efficiency of operation and service at airports, which has resulted in the usage of numerous technology-related products and services at airports both in-house and with third-party engagement.
- 1.2.2 Assessment of O&M expenses requires examination of financial information submitted by the Airport Operators and independent assessment of baseline operating expense levels, expense reduction, efficiency initiatives and conduct of benchmarking exercise.
- 1.2.3 The objective of the Study is to understand and analyze the historical trends of change in O&M expenses and how TRV has been performing in comparison to select peers in the industry, which in turn is expected to help understand the reasons for current expenses being higher or lower than the efficient expense levels. The outcome of the same would assist the Authority in determining the efficient O&M expenses of TRV.
- 1.2.4 The Study also aims to assess the allocation of O&M expenses as Aeronautical, Non-Aeronautical and Common expenses, as per the general principles followed by AERA, so that the passengers and other stakeholders are not over-burdened with resultant fees / charges.
- 1.2.5 Towards this objective, AERA has decided to conduct an independent study on efficient Operation and Maintenance (O&M) expenses and their allocation as Aeronautical and Non-aeronautical components in respect of O&M expenses appearing in the extract of the audited trial balance of AAI for SCP and Pre COD period and the audited financial statements of TKIAL for the Post COD period along with True up workings as submitted by AAI and TKIAL. AERA proposes to use the findings of this Study for the process of determination of Tariff for the Third Control Period.
- 1.2.6 As part of this Study, the following have been examined/ referred:
- i. The AERA Act, 2008 with its amendment in 2019 and 2021
  - ii. Airports Economic Regulatory Authority of India (Terms and Conditions for Determination of Tariff for Airport Operators) Guidelines, 2011 dated 28<sup>th</sup> February 2011
  - iii. AERA Order No. 14/2016-2017 dated 23<sup>rd</sup> January 2017 [In the matter of aligning certain aspects of AERA's Regulatory Approach (Adoption of Regulatory Till) with the provisions of the National Civil Aviation Policy – 2016 (NCAP – 2016) approved by the Government of India]

- iv. AERA Order No. 03/2017-2018 dated 2<sup>nd</sup> June 2017 [In the matter of Determination of tariffs for Aeronautical Services in respect of Trivandrum International Airport, Thiruvananthapuram (TRV) for the second Control Period (01.04.2016-31.03.2021)] and previous tariff orders for other similar airports.
- v. Concession Agreement dated 19<sup>th</sup> January 2021 entered into between AAI and TKIAL for TRV.
- vi. Memorandum of Understanding (MoU) between Government of India (Ministry of Civil Aviation) and TKIAL
- vii. True up submissions of AAI and TKIAL
- viii. Annual Reports, Trial Balances, clarifications, and other details received from AAI and TKIAL

## 2. TERMS OF REFERENCE AND OUR WORK PERFORMED

### 2.1 Terms of Reference

2.1.1 AERA has outlined the scope of work for Operational expenditure (OPEX), segregation between Aero and Non-Aero and the Study on efficient operations and maintenance expenses in clauses (d) and (f) Section 3.1 of its Request for Proposal (RFP) No. 01/2022-2023 dated 30<sup>th</sup> August 2022 for engagement of consultants to assist AERA in determination of tariffs for aeronautical services at Thiruvananthapuram International Airport, Thiruvananthapuram for the Control Period (01.04.2022 to 31.03.2027), which states as follows:

“3.1 (d) – Asset / OPEX segregation between Aero and Non-Aero”

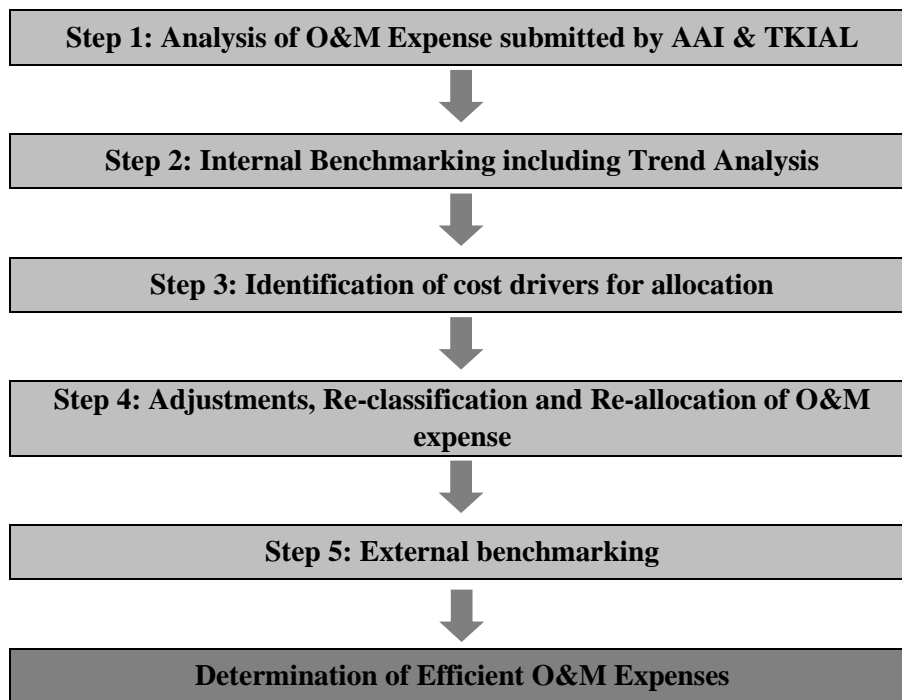
“3.1 (f) – Examine and recommend efficient costs for O&M as part of tariff determination process.”:

### 2.2 Work Performed

#### Methodology

2.2.1 The steps elaborated below have been followed for determining the efficient O&M expenses for TRV in this Study:

**Figure 1: Approach for this Study**



#### **Step 1: Analysis of O&M Expenses submitted by AAI & TKIAL**

2.2.2 In the initial phase, an evaluation of the Operation and Maintenance (O&M) expenditure has been conducted based on the information provided by AAI. The submitted data, including the O&M expenses, have been examined as part of this analysis. The Study has relied on the trial balances submitted by AAI for SCP and Pre COD period and the audited financial statement of TKIAL for Post COD period, to authenticate the expenses. AAI & TKIAL has provided the O&M expenses under the following heads:

### **Heads of O&M expenses as per AAI's submission**

- **Employee Benefit Expenses** such as basic pay, contribution to provident fund, retirement benefit etc.
- **Administration and General (A&G) Expenses** such as rents, taxes, insurance etc.
- **Corporate Headquarters (CHQ)/ Regional Headquarters (RHQ) Expenses** such as retirement benefits, admin expenses etc.
- **Repairs and Maintenance (R&M) Expenses** for repairs of buildings, equipment, vehicles, offices etc.
- **Utility and Outsourcing Expenses** such as diesel, electricity, water charges, Upkeep, hiring manpower.
- **Other Outflows** such as User Development Fee (UDF) collection charges.

### **Heads of O&M expenses as per TKIAL's submission**

- **Manpower expenses** such as salaries, wages, bonus, contribution to provident fund, staff welfare expenses etc. for employees of TKIAL as well as Select Employee cost of AAI staff to be reimbursed to AAI.
- **Utility expenses** such as electricity, water and fuel
- **IT expenses** such as system license costs, IT consumables, operating cost of server and website
- **Security expenses** such as hiring of manpower for X-ray, surveillance vehicles etc.
- **Allocation of corporate expenses** such as allocation of common costs incurred by group companies of TKIAL.
- **Administration and general expenses** such as business promotion, communication expenses, consultancy, office maintenance, rent, traveling and conveyance.
- **Insurance expenses** for project assets, personnel and third-party liability
- **Repair and maintenance expenses** for buildings, plant and machinery, roads, runways, culverts, equipment, etc.
- **Other operating expenses** such as housekeeping, vehicle hiring charges etc.
- **Bank charges** incurred for the Company's operations.
- **Independent Engineer's Fees** for review, inspection and monitoring of O&M

### **Step 2: Internal Benchmarking including Trend analysis**

2.2.3 In order to understand the changes in various heads of O&M expenses, it is necessary to compare the actual expenses incurred by AAI with the approved expenses in the SCP order by AERA. Additionally, analysis of trends in the Aeronautical O&M expenses was conducted in the following ways:

- For the period from FY 2011-12 to FY 2019-20 (Compounded Annual Growth Rate (CAGR) comparison of Major O&M expenses for the First Control Period with Second Control Period up to FY 2019-20 i.e., pre-Covid year) based on AAI's True up submission and correlation of each of the Major O&M expenses with Passenger traffic and Air Traffic Movement (ATM) during the same period.
- FY 2020-21 has been excluded from this CAGR analysis, since the airport operations and passenger traffic and ATM were significantly impacted by Corona Virus Disease of 2019 (COVID-19) pandemic.

2.2.4 The primary objective of this Study is to identify the correlation between the year-on-year changes in the various expenses and the factors that influence them, such as passenger traffic, ATM traffic, number of employees etc. The Study aims to examine the reasons for the variation in O&M expenses growth as per historical data and the submissions made by AAI and TKIAL.

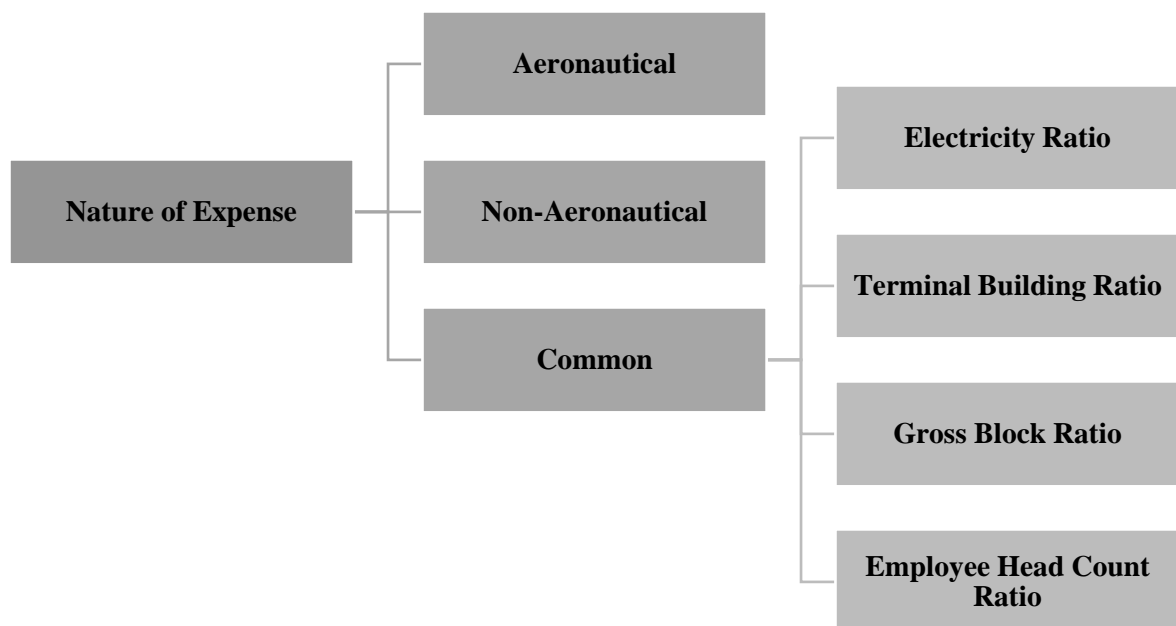
2.2.5 The major expenses submitted by AAI and TKIAL were studied in detail to assess the reasonableness of the same.

### **Step 3: Identification of cost drivers for allocation**

2.2.6 The basis used by AAI and TKIAL for segregation of Common expenses between Aeronautical and Non-aeronautical expenses has been analysed and wherever necessary, an alternate basis of allocation has been proposed, based on principles laid down as under:

- Common expenses pertaining to terminal operations have been segregated between Aeronautical and Non-Aeronautical expenses based on the Terminal Building ratio.
- Common employee related expenses have been segregated between Aeronautical and Non-Aeronautical expenses based on the Employee Head Count ratio.
- Common expenses included in O&M heads (such as Repairs & Maintenance expenses) and in Administrative and other expenses (such as property taxes) have been segregated between Aeronautical and Non-Aeronautical expenses on the Gross Block Assets (GBA) ratio.
- Power cost included in Utilities and Outsourcing head of O&M expenses has been segregated between Aeronautical, Air Navigation Services (ANS) and Non-Aeronautical expenses based on the Electricity ratio.

**Figure 2: Allocation of O&M Expenses**



### **Step 4: Adjustments, Re-classification and Re-allocation of O&M expense**

2.2.7 Based on Steps 1, 2, and 3 outlined above, it is essential to perform adjustments, re-classification, and re-allocation of the O&M expenses submitted by AAI and TKIAL. This step involves necessary modifications

to align the O&M expenses with appropriate re-classification and allocate them based on relevant expense ratios.

- **Adjustments:** It is necessary to make suitable adjustments to the expense categories to accurately reflect the nature of the expenses. This may involve merging similar categories, re-categorizing expenses, and addressing any inconsistencies that may be present.
- **Re-classification:** Once the expense categories have been carefully reviewed and adjusted, the O&M expenses should be re-classified based on their nature and purpose. This includes categorizing them as aeronautical, ANS, common, or non-aeronautical expenses, as applicable.
- **Re-allocation:** The expenses should then be allocated based on the cost drivers determined in Step 3. This ensures that the expenses are appropriately distributed among the relevant cost centers or cost categories, based on the factors that drive those costs.

#### **Step 5: Peer analysis and benchmarking (External benchmarking)**

- 2.2.8 As part of the analysis, major expense heads were compared with those of select airports to evaluate the reasonableness of the expenses of TRV. The comparable airports for the peer analysis were selected based on their passenger traffic.
- 2.2.9 To compare the expenses effectively, an appropriate driver such as passenger traffic, gross block, revenue, and number of employees was utilized across the selected airports. The observations related to the management of the O&M expenses of TRV against those of selected peers are presented in this Study.
- 2.2.10 The benchmarking exercise has been performed only in respect of major Aeronautical O&M expenses incurred during the period from FY 2016-17 to FY 2019-20. However, FY 2020-21 & FY 2021-22 (i.e. Pre & Post COD) have been excluded from this analysis, since the airport operations and traffic were significantly impacted by COVID-19 pandemic and also there was a transition of TRV's management from AAI to TKIAL. Therefore, FY 2021-22 was not a standard year for comparison.
- 2.2.11 The analysis and findings related to the comparison of O&M expenses with select airports have been discussed in detail in the respective chapters of this report. By comparing their expenses with those of peer airports and evaluating their efficient O&M practices, this Study aims to identify any potential areas for improvement and provide necessary recommendations to enhance their overall performance.



### 3. ASSESSMENT OF O&M EXPENSES OF AAI FOR SECOND CONTROL PERIOD AND PRE-COD PERIOD

#### 3.1 O&M Expenses submitted by AAI for SCP and Pre-COD Period

- 3.1.1 AAI has submitted the following aeronautical O&M expenses for true up of the Second Control Period and Pre COD period:

**Table 1: O&M expenses submitted by AAI for true-up of SCP & Pre-COD Period**

Particulars (Rs in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	SCP Total (A)	Pre-COD (B)	Total (A+B)
Payroll Costs	48.71	60.58	74.97	78.42	58.01	<b>320.70</b>	33.30	<b>354.00</b>
Admin. & Other Expenses	2.61	1.90	2.56	3.92	5.59	<b>16.58</b>	0.04	<b>16.62</b>
Apportionment of administrative and general expenditure of CHQ/RHQ	32.58	43.44	42.45	52.47	31.11	<b>202.05</b>	17.54	<b>219.59</b>
Repair and Maintenance Costs	11.95	11.46	12.54	12.46	15.65	<b>64.05</b>	9.61	<b>73.66</b>
Utilities & Outsourcing Expenses	13.64	16.57	16.52	18.68	16.83	<b>82.25</b>	9.63	<b>91.88</b>
Other Outflows	1.53	2.64	3.01	3.06	0.45	<b>10.68</b>	0.66	<b>11.33</b>
<b>Total Operating Expenditure</b>	<b>111.01</b>	<b>136.60</b>	<b>152.05</b>	<b>169.01</b>	<b>127.64</b>	<b>696.30</b>	<b>70.78</b>	<b>767.08</b>

#### 3.2 O&M Expenses approved as per the Order for the Second Control Period

- 3.2.1 In Order no. 03/2017-2018 dated 2<sup>nd</sup> June 2017 for the Second Control Period, the Authority had approved the aeronautical O&M expenses of Rs. 633.47 crores based on its analysis of the submissions made by AAI as shown in the table below:

**Table 2: O&M expenses considered by the Authority in the Second Control Period Order (Table 41 of the Order)**

Particulars (Rs. in crores)	FY17	FY18	FY19	FY20	FY21	Total
Payroll expenditure	54.62	68.28	73.00	78.04	83.44	<b>357.38</b>
Administrative and general expenditure	2.67	2.94	3.22	3.54	3.89	<b>16.26</b>
Apportionment of A&G expenses of CHQ/RHQ	22.70	23.84	25.03	26.28	27.59	<b>125.44</b>
Repairs and Maintenance expenditure	9.87	10.85	11.94	13.13	14.44	<b>60.23</b>
Utility and Outsourcing expenditure	13.29	13.61	13.96	14.36	14.79	<b>70.01</b>
Other outflows	0.75	0.79	0.83	0.87	0.91	<b>4.15</b>
<b>Total</b>	<b>103.90</b>	<b>120.31</b>	<b>127.98</b>	<b>136.22</b>	<b>145.06</b>	<b>633.47</b>

- 3.2.2 The following allocation ratios were adopted by the Authority for allocating the expenses in the SCP order:

**Table 3: Allocation Ratio adopted by the Authority in the Second Control Period Order**

Particulars	%
Terminal Building Ratio (TBLR)	90%:10%
Employee Head Count Ratio (EHCR)	95%:5%

- 3.2.3 The major decisions in terms of O&M expenses and allocation ratios adopted by the Authority in the SCP order are as follows:

*Para 7.6: The Authority observed that the percentage of non- aeronautical area is lower as compared to similar airports. The Authority had proposed to adopt 90% as aeronautical area for asset allocation of terminal related assets to encourage growth of Non-Aeronautical Revenue (NAR) which would cross-subsidize aeronautical charges.*

*Para 7.16: The Authority notes that allocation ratio of 97.9% as mentioned by International Air Transport Association (IATA) refers to the average allocation of total assets and not just terminal assets. As per AAI's submissions, terminal related assets have been allocated based on 93.47%:6.53%, 93.11%:6.89% and 92.70%:7.30% respectively for FY 2015-16, FY 2016-17 and FY 2017-18. The Authority had proposed to consider terminal related assets in the ratio of 90%:10% for aeronautical and non-aeronautical allocation.*

*Decision 11.c.: The Authority decides to true up the O&M expenditure for 2016-17 to 2020-21 of the 2<sup>nd</sup> Control Period based on the actuals at the time of determination of tariff for the 3<sup>rd</sup> Control Period.*

### **3.3 Assessment of Allocation ratios submitted by AAI and as per the current Study for SCP and Pre-COD Period**

#### **Principles for Allocation of Expenses and Allocation Ratios**

##### **3.3.1 Introduction to segregation of expenses**

3.3.1.1 As part of this Study, principles for allocation of various expenses have been reviewed and a basis has been developed for the allocation of expenses into aeronautical, non-aeronautical and ANS activities. The appropriate proportion of common expenses that may be included under Aeronautical expenses has also been determined. The following principles for allocation have been adopted for various O&M expense elements:

- Expenses which are incurred for operation and maintenance of Aeronautical assets to be categorized as aeronautical expenses.
- Expenses which are incurred for operation and maintenance of non-aeronautical assets to be categorized as non-aeronautical expenses.
- Expenses which are incurred for operation and maintenance of ANS assets to be categorized as ANS expenses.
- Expenses for which the benefits or use cannot be exclusively linked to either Aeronautical, Nonaeronautical or ANS to be segregated as Common expenses.
- Expenses primarily incurred for provision of Aeronautical services but are also used for provision of non-aeronautical services or ANS services are segregated as Common expenses. Examples are expenses for Civil and Electrical Maintenance for Terminal Building.
- Expenses which are used for general corporate purposes including legal, administration, and management affairs are treated as Common expenses.
- Common expenses are apportioned to Aeronautical activity based on an appropriate ratio. This ratio has been determined such that it is fair with respect to the actual nature of the services for which these expenses will be incurred. However, in the absence of any specific information regarding the purpose of incurring the expense, a reasonable ratio is determined based on review of other records of the Airport.

##### **3.3.2 Allocation of O&M expenses as per AAI's submission**

3.3.2.1 AAI has provided the expense classification as well as the allocation ratio for each category and subcategory of O&M expenses relating to the SCP which was followed for Pre COD period as well. The table below presents the detailed information submitted by AAI. In their true-up submission, AAI has outlined their methodology for allocating A&G expenses, R&M expenses and Utility and Outsourcing expenses as aeronautical and non-aeronautical. The methodology involves the following:

- a) For specific expenses related to Repairs & Maintenance, the non-aeronautical portion is identified through internal assessment at the contractual/transaction level.

- b) For other generic expenses, relatable ratios are applied to the activity, and only the aeronautical portion is included in the true-up submission.

**Table 4: O&M expenses classification and allocation ratio adopted by AAI for SCP**

Expense Category	Expense Sub-Category / Description	Expense Classification	Allocation Basis
Payroll Costs	Salary, wages & bonus	Common	EHCR
A&G Expenses	Advertisement; Arbitration Expenses; Legal Charges;	Common	Actuals
	Other fees like Aerodrome license; Travelling and Conveyance; Freight Charges/Shifting Expenses; Insurance Cost; Rent, Rates & Taxes; Municipal Taxes; Consultancy/Advisory Expenses; Interest & Solatium; Interest Capex Term Loan Axis; Interest on Finance Lease XBIS; Prior Period (PP) Exp-Admin & other expense	Aeronautical	100%
	Books, Journals & Periodicals; Telephone Charges; Office Expenses; Other Sundry Expenses	Common	EHCR
R&M Expenses	Civil Works; Electrical Works	Common	TBLR
	Furniture & Fittings; Electronics	Common	EHCR
	R&M Build Operate Transfer (BOT) XBIS Lease; Airport Operations Control Centre (AOCC) Expenses; Inline Bag Manpower; Vehicle	Aeronautical	100%
CHQ/RHQ Expenses	CHQ/RHQ expenses allocated to TRV	Common	95%
Utility & Outsourcing Expenses	Power Charges	Common	Electricity Ratio
	Water Charges	Aeronautical	100%
	Consumption of other consumables	Common	TBLR
	Consumption of paper glass; Consumption of Petrol, Oil, Lubricant (Car & Jeeps); Hire charges for cars/jeeps; Other hire charges	Aeronautical	100%
	Watch & Ward Exp./Other Security Contracts; Conservancy Charges/Cleaning Contracts (ESS); Upkeep (MESS)	Common	TBLR
Other Outflows	Collection charges on UDF; Collection charges paid to IATA (Aero charges); Collection charges on Passenger Service Fee (PSF)	Aeronautical	100%

- 3.3.2.2 The following allocation ratios have been used by AAI for allocation of Common expenses to Aeronautical and Non-aeronautical expenses:

**Table 5: Allocation ratios of Common O&M expenses as per AAI's submission**

Particulars	FY 17	FY 18	FY 19	FY 20	FY 21	Pre COD
EHCR (Aero : Non-Aero : ANS)	74.50% :	72.31% :	71.37% :	70.22% :	70.07% :	68.02% :
	1.20% :	1.24% :	1.45% :	1.06% :	1.11% :	1.19% :
	24.30%	26.45%	27.18%	28.72%	28.82%	30.79%
EHCR (Aero : Non-Aero)	98.41% :	98.31% :	98.01% :	98.51% :	98.44% :	98.28% :
	1.59%	1.69%	1.99%	1.49%	1.56%	1.72%
Terminal Building Ratio (Aero : Non-Aero)	92.34% :	92.12% :	92.21% :	92.19% :	93.29% :	91.59% :
	7.66%	7.88%	7.79%	7.81%	6.71%	8.41%
Electricity Ratio (Aero : Non-Aero : ANS)	80.44% :	80.44% :	80.44% :	80.44% :	80.44% :	80.44% :
	0.01% :	0.01% :	0.01% :	0.01% :	0.01% :	0.01% :
	19.55%	19.55%	19.55%	19.55%	19.55%	19.55%

### 3.3.3 Assessment of allocation ratios as per the Study

#### Terminal Building Ratio

##### AAI Submission

- 3.3.3.1 AAI had considered the following Terminal Building Ratio based on their analysis of the actual usage.

**Table 6: Terminal Building Ratio submitted by AAI**

Particulars (sqm)	Location	FY 17	FY 18	FY 19	FY 20	FY 21	Pre COD
Space Rented	T1	938	927	960	965	880	971
Capacity	T1	15,543	15,543	15,543	15,543	15,543	15,543
<b>Non-Aero %</b>	<b>T1</b>	<b>6.04%</b>	<b>5.97%</b>	<b>6.18%</b>	<b>6.21%</b>	<b>5.66%</b>	<b>6.25%</b>
<b>Aero %</b>	<b>T1</b>	<b>93.96%</b>	<b>94.03%</b>	<b>93.82%</b>	<b>93.79%</b>	<b>94.34%</b>	<b>93.75%</b>
Space Rented	T2	3,047	3,173	3,093	3,097	2,613	3,407
Capacity	T2	36,497	36,497	36,497	36,497	36,497	36,497
<b>Non-Aero %</b>	<b>T2</b>	<b>8.35%</b>	<b>8.69%</b>	<b>8.47%</b>	<b>8.49%</b>	<b>7.16%</b>	<b>9.33%</b>
<b>Aero %</b>	<b>T2</b>	<b>91.65%</b>	<b>91.31%</b>	<b>91.53%</b>	<b>91.51%</b>	<b>92.84%</b>	<b>90.67%</b>
Space Rented	T1 + T2	3,985	4,101	4,053	4,062	3,493	4,378
Capacity	T1 + T2	52,040	52,040	52,040	52,040	52,040	52,040
<b>Non-Aero %</b>	<b>T1 + T2</b>	<b>7.66%</b>	<b>7.88%</b>	<b>7.79%</b>	<b>7.81%</b>	<b>6.71%</b>	<b>8.41%</b>
<b>Aero %</b>	<b>T1 + T2</b>	<b>92.34%</b>	<b>92.12%</b>	<b>92.21%</b>	<b>92.19%</b>	<b>93.29%</b>	<b>91.59%</b>

**As per Study**

- 3.3.3.2 The Authority in the Second Control Period Order decided to adopt the Terminal Building Ratio as 90%:10% (Aeronautical : Non-Aeronautical) (refer para 3.2.3 for extract of decision in SCP Order) to encourage the growth of non-aeronautical revenues which would cross-subsidize aeronautical charges. Further it can be observed that in its computations, AAI has considered only the specific areas allocated to commercial activities as non-aeronautical. The common areas have not been identified and further bifurcated between aeronautical and non-aeronautical. Therefore, in light of the above, the Terminal Building Ratio has been considered as 90:10 (Aeronautical : Non-Aeronautical) in line with the Authority's decision in Order No. 03 /2017-18 dated 2<sup>nd</sup> June 2017.

**Gross Block Ratio****As per the Study**

- 3.3.3.3 For bifurcation of certain expenses that are common to the entire airport, the Study would utilize the Gross Block ratio (ratio of aeronautical gross block to total gross block). Based on the adjustments required in the Fixed Asset Register of AAI as identified in the Study on allocation of assets between Aeronautical and Non-aeronautical assets for Thiruvananthapuram International Airport, TRV (Asset Allocation Study), the ratio of gross block has been considered as follows:

**Table 7: Allocation of Gross Block as per the current Study**

Particulars	FY 17	FY 18	FY 19	FY 20	FY 21	Pre COD
Aero Gross Block %	91.82%	91.68%	91.62%	91.89%	92.17%	92.29%
Non-Aero Gross Block %	2.95%	2.93%	2.79%	2.60%	2.46%	2.42%
ANS Gross Block %	5.23%	5.39%	5.59%	5.51%	5.37%	5.29%

**Employee Head Count Ratio****AAI Submission**

- 3.3.3.4 The department-wise breakup of employees for the Second Control period till COD along with the basis of computing the Employee Head Count Ratio (EHCR) for AAI is summarized in the table below:

**Table 8: Employee details as submitted by AAI**

Particulars (No. of employees)	Classification as per AAI	FY 17	FY 18	FY 19	FY 20	FY 21	Pre COD
Airport Systems	Aero	20	19	19	15	16	14
Air Traffic Controller	ANS	58	68	74	77	73	76
Cargo	Aero	-	-	-	-	-	-
Communication, Navigation & Surveillance	ANS	63	60	57	58	57	53
Commercial	Non-Aero	6	6	7	5	5	5
Engg-Civil	Aero	45	40	37	34	33	32
Engg-Elect	Aero	63	61	62	61	55	46
Finance	Common	19	18	16	18	18	19
Fire	Aero	112	105	100	93	90	88
Housekeeping	Aero	3	2	1	2	2	2
Human Resource Department	Common	17	18	17	16	14	15
Information Technology	Aero	2	2	2	2	2	1
Land Management	Aero	2	2	2	2	2	2
Law	Aero	-	1	1	1	1	1
Medical	Aero	3	3	3	4	4	4
Motor Department	Aero	23	20	19	21	19	17
Airport Planning & Development	Aero	4	4	4	4	4	4
Official Language	Aero	4	4	3	3	3	3
Officer on Special Duty	Aero	-	-	-	-	-	-
Security	Aero	6	6	6	5	5	4
Store	Aero	5	5	5	5	5	2
Terminal	Aero	43	40	47	44	43	31
<b>Total</b>		<b>498</b>	<b>484</b>	<b>482</b>	<b>470</b>	<b>451</b>	<b>419</b>
<b>Employee Head Count Ratio (Aero : ANS : Non-Aero)</b>							
Aero		74.50%	72.31%	71.37%	70.22%	70.07%	68.02%
Non-Aero		1.20%	1.24%	1.45%	1.06%	1.11%	1.19%
ANS		24.30%	26.45%	27.18%	28.72%	28.82%	30.79%
<b>Employee Head Count Ratio for (Aero : Non-Aero)</b>							
Aero		98.41%	98.31%	98.01%	98.51%	98.44%	98.28%
Non-Aero		1.59%	1.69%	1.99%	1.49%	1.56%	1.72%

**Employee Head Count Ratio as per the Study**

- 3.3.3.5 After a detailed evaluation of AAI's method for calculating EHCR, it was observed that the categorization of certain departments, including Law, Housekeeping, Land Management and Medical do not seem appropriate. Upon asking about the services provided by these departments, AAI explained that they offer services not only to aeronautical areas but also to other departments and non-aeronautical areas within the terminal building.
- 3.3.3.6 Based on the clarification provided by AAI, the Study has now reclassified these departments as either common or non-aero, based on the nature of the services they offer. This reclassification of departments as common or non-aero will result in a more precise allocation of expenses between aeronautical and non-aeronautical activities.
- 3.3.3.7 Furthermore, this reclassification will contribute to fair and accurate calculation of aeronautical tariffs, which will be based on the actual cost of aeronautical activities. Based on the assessment as per the Study, the

classification of employee departments to Aero, ANS, Non-Aero and common has been reclassified and presented below:

**Table 9: Reclassification of Employee departments as per the current Study**

Particulars (No. of employees)	Classification as per AAI	Re-Classification	FY 17	FY 18	FY 19	FY 20	FY 21	Pre COD
Airport Systems	Aero	Aero	20	19	19	15	16	14
Air Traffic Controller	ANS	ANS	58	68	74	77	73	76
Cargo	Aero	Aero	-	-	-	-	-	-
Communication, Navigation & Surveillance	ANS	ANS	63	60	57	58	57	53
Commercial	Non-Aero	Non-Aero	6	6	7	5	5	5
Engg-Civil	Aero	Aero	45	40	37	34	33	32
Engg-Elect	Aero	Aero	63	61	62	61	55	46
Finance	Common	Common	19	18	16	18	18	19
Fire	Aero	Aero	112	105	100	93	90	88
Housekeeping	Aero	Common	3	2	1	2	2	2
Human Resource Department	Common	Common	17	18	17	16	14	15
Information Technology	Aero	Aero	2	2	2	2	2	1
Land Management	Aero	Non-Aero	2	2	2	2	2	2
Law	Aero	Common	-	1	1	1	1	1
Medical	Aero	Common	3	3	3	4	4	4
Motor Department	Aero	Aero	23	20	19	21	19	17
Airport Planning & Development	Aero	Aero	4	4	4	4	4	4
Official Language	Aero	Aero	4	4	3	3	3	3
Officer on Special Duty	Aero	Aero	-	-	-	-	-	-
Security	Aero	Aero	6	6	6	5	5	4
Store	Aero	Aero	5	5	5	5	5	2
Terminal	Aero	Aero	43	40	47	44	43	31
<b>Total</b>			<b>498</b>	<b>484</b>	<b>482</b>	<b>470</b>	<b>451</b>	<b>419</b>

3.3.3.8 However, it was noted that while the costs directly pertaining to the ANS employees have already been excluded from the O&M expenses, the common expenses are included. Accordingly, the Study considered the common employees allocated to ANS as deemed nonaeronautical employees since such costs are not a subject of the Study report. Based on the above adjustment, the revised EHCR computed as per the Study is as follows:

**Table 10: Employee Head Count Ratio as per the current Study**

Particulars	FY 17	FY 18	FY 19	FY 20	FY 21	Pre COD
<b>No. of resources</b>						
Aero	327	306	304	287	275	242
Non-Aero	8	8	9	7	7	7
ANS	121	128	131	135	130	129
Common	42	42	38	41	39	41
<b>Total</b>	<b>498</b>	<b>484</b>	<b>482</b>	<b>470</b>	<b>451</b>	<b>419</b>
<b>Reallocation of common resources</b>						
Aero	30	29	26	27	26	26
Non-Aero	1	1	1	1	1	1

Particulars	FY 17	FY 18	FY 19	FY 20	FY 21	Pre COD
ANS (deemed non-aeronautical)	11	12	11	13	12	14
<b>Total</b>	<b>42</b>	<b>42</b>	<b>38</b>	<b>41</b>	<b>39</b>	<b>41</b>
<b>Employee count after reallocation of common resources</b>						
Aero	357	335	330	314	301	268
Non-Aero	20	21	21	21	20	22
ANS	121	128	131	135	130	129
<b>Total</b>	<b>498</b>	<b>484</b>	<b>482</b>	<b>470</b>	<b>451</b>	<b>419</b>
<b>Employee Head Count Ratio (Aero: ANS : Non Aero)</b>						
Aero	71.71%	69.23%	68.47%	66.90%	66.75%	64.02%
Non-Aero	3.99%	4.32%	4.35%	4.38%	4.43%	5.19%
ANS	24.30%	26.45%	27.18%	28.72%	28.82%	30.79%
<b>Employee Head Count Ratio (Aero : Non-Aero)</b>						
Aero	94.73%	94.12%	94.02%	93.86%	93.78%	92.50%
Non-Aero	5.27%	5.88%	5.98%	6.14%	6.22%	7.50%

### Electricity Ratio

#### AAI Submission

3.3.3.9 The Electricity ratio as per AAI's submission is given in the table below:

**Table 11: Electricity ratio as per AAI's submission**

Particulars	FY 17	FY 18	FY 19	FY 20	FY 21	Pre COD
Airport	80.45%	80.45%	80.45%	80.45%	80.45%	80.45%
ANS	19.55%	19.55%	19.55%	19.55%	19.55%	19.55%

#### Electricity Ratio as per the Study

- 3.3.3.10 On requesting to provide the rationale behind the computation of the Electricity Ratio, AAI has provided the following explanation: *"The ratio for the division of electricity expenses between ANS and Airport is determined by considering the average consumption of units by the equipment used for the ANS Directorate. AAI does not have separate meters for ANS, airports, cargo, non-aero, and aero activities. The electricity ratio is based on the load assessment conducted by AAI's electrical department for each department. Since Non-Aero Revenue is accounted against electricity cost pertaining to airport only, there is no need to allocate cost towards Non-Aero."*
- 3.3.3.11 According to the explanation provided by AAI, the bifurcation of electricity units is determined through manual calculations, which involve assessing the load factor of each area. AAI submitted the electricity ratio, which represents the percentage of units consumed by ANS and other areas of the airport, including aero and non-aero areas.
- 3.3.3.12 Furthermore, AAI recovers the utility cost from concessionaires based on the load factor of non-aero areas. To determine the utility cost specific to the aeronautical area, AAI uses the electricity ratio between ANS and the airport. This cost is then adjusted by considering the recoveries from concessionaires.
- 3.3.3.13 The Study, based on the submission, calculates the percentage of recoveries from non-aeronautical concessionaires, which range from 4.63% to 11.87% for the SCP and Pre-COD period. The details of these calculations are provided below.

**Table 12: Percentage of Electricity Recoveries from Non- Aeronautical Concessionaires as per AAI submission**

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	SCP Total (A)	Pre-COD (B)	Total (A+B)
Electricity Expense - Airport (A)	10.43	10.77	10.37	10.78	8.27	<b>50.63</b>	4.20	<b>54.83</b>
Recoveries - Non-Aero (B)	0.75	0.79	1.23	0.98	0.38	<b>4.13</b>	0.23	<b>4.36</b>
<b>Aeronautical Electricity Expense (C = A - B)</b>	<b>9.68</b>	<b>9.98</b>	<b>9.14</b>	<b>9.80</b>	<b>7.89</b>	<b>46.50</b>	<b>3.97</b>	<b>50.47</b>
<b>% Recoveries (D = B ÷ A)</b>	<b>7.18%</b>	<b>7.31%</b>	<b>11.87%</b>	<b>9.08%</b>	<b>4.63%</b>		<b>5.45%</b>	

3.3.3.14 Based on the aforementioned understanding, the Study agrees with the electricity ratio submitted by AAI for the ANS and airport areas. Therefore, the allocation proportion between ANS and the airport is considered appropriate.

### 3.3.4 Summary

3.3.4.1 The Study has outlined the principle for allocating expenses into the categories of aeronautical, non-aeronautical, common and ANS in para 3.3.1.1. Based upon these principles, the Study has reclassified the expenses submitted by AAI into their respective categories in the subsequent paragraphs.

3.3.4.2 The allocations ratios submitted by AAI and recomputed as per the Study are as follows:

**Table 13: Allocation Ratios submitted by AAI and recomputed as per the current Study for SCP**

Particulars	FY 17	FY 18	FY 19	FY 20	FY 21
<b>Submitted by AAI</b>					
EHCR (Aero : Non-Aero : ANS)	74.50% : 1.20% : 24.30%	72.31% : 1.24% : 26.45%	71.37% : 1.45% : 27.18%	70.22% : 1.06% : 28.72%	70.07% : 1.11% : 28.82%
EHCR (Aero : Non-Aero)	98.41% : 1.59%	98.31% : 1.69%	98.01% : 1.99%	98.51% : 1.49%	98.44% : 1.56%
TBLR (Aero : Non-Aero)	92.34% : 7.66%	92.12% : 7.88%	92.21% : 7.79%	92.19% : 7.81%	93.29% : 6.71%
Electricity Ratio (Aero : Non-Aero : ANS)	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%
<b>Recomputed as per the Study</b>					
EHCR (Aero : Non-Aero : ANS)	71.71% : 3.99% : 24.30%	69.23% : 4.32% : 26.45%	68.47% : 4.35% : 27.18%	66.90% : 4.38% : 28.72%	66.75% : 4.43% : 28.82%
EHCR (Aero : Non-Aero)	94.73% : 5.27%	94.12% : 5.88%	94.02% : 5.98%	93.86% : 6.14%	93.78% : 6.22%
TBLR (Aero : Non-Aero)	90% : 10%	90% : 10%	90% : 10%	90% : 10%	90% : 10%
Electricity Ratio (Aero : Non-Aero : ANS)	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%
GBR (Aero : Non-Aero : ANS)	91.82% : 2.95% : 5.23%	91.68% : 2.93% : 5.39%	91.62% : 2.79% : 5.59%	91.89% : 2.60% : 5.51%	92.17% : 2.46% : 5.37%

## 3.4 Assessment of O&M Expenses and its allocation submitted by AAI and as per the current Study for SCP

### Head wise assessment of O&M expenses submitted by AAI for SCP

3.4.1 AAI has classified the O&M (Operations and Maintenance) expenses into six categories, which are presented as follows. The nature of each category is explained in para 2.2.2.

1. Employee Benefit Expense
2. Administration and General (A&G) Expense
3. CHQ/RHQ Expense
4. Repairs and Maintenance (R&M) Expense



5. Utility and Outsourcing Expense
6. Other Outflow

3.4.2 These expenses are detailed in the same sequence in the following paragraphs.

#### 1. Employee Benefit Expense

#### 3.4.3 Reasonable assessment of Employee Benefit Expenses (Comparison of Tariff Projections vs. Actuals)

**Table 14: Comparison of Employee benefit expenses as per SCP Order vs Actuals**

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	Total
<b>True-up as per AAI Submission</b>						
Employee expenses	46.96	51.80	56.59	67.19	55.79	<b>278.33</b>
Retirement benefits at CHQ	1.75	8.78	18.38	11.24	2.22	<b>42.37</b>
<b>Total employee benefit expenses (A)</b>	<b>48.71</b>	<b>60.58</b>	<b>74.97</b>	<b>78.42</b>	<b>58.01</b>	<b>320.70</b>
<b>As per Tariff Order for SCP</b>						
Employee expenses – Non CHQ	48.21	60.26	64.41	68.85	73.60	<b>315.33</b>
Employee expenses – CHQ	8.66	10.83	11.59	12.40	13.27	<b>56.75</b>
Less: Common expenses related to ANS	2.25	2.81	3.00	3.21	3.43	<b>14.70</b>
<b>Total employee benefit expenses (B)</b>	<b>54.62</b>	<b>68.28</b>	<b>73.00</b>	<b>78.04</b>	<b>83.44</b>	<b>357.38</b>
<b>Difference (C = A - B)</b>	<b>-5.91</b>	<b>-7.70</b>	<b>1.97</b>	<b>0.38</b>	<b>-25.43</b>	<b>-36.68</b>

3.4.3.1 From the above table, it can be observed that the total Employee benefit expenses of Rs. 320.70 crores incurred by AAI is lower than the approved amount of Rs. 357.38 crores as per the SCP order. However, a closer examination of the individual years reveals that the expenses for FY 2018-19 and FY 2019-20 are marginally higher than the approved amount.

3.4.3.2 On examination, it was observed that:

- In FY 2018-19, CHQ/RHQ expenses related to employee costs were higher due to provisions made for retirement benefit costs and a three-year pension (covering 27 months from January 2017 to March 2019) based on actuarial valuation.
- In FY 2019-20, overtime expenses which is part of employee expenses doubled compared to FY 2018-19. This increase was due to employees dedicating extra time and effort during the severe floods in Kerala.

3.4.3.3 In FY 2020-21, AAI incurred Rs. 58.01 crores in employee expenses, whereas the approved amount according to the SCP Order was Rs. 83.44 crores. The reduction in expenses was primarily attributed to the COVID-19 pandemic, which led to a 5% reduction in the number of employees and a significant decrease of Rs. 9 crores in retirement benefit expenses based on actuarial valuation.

3.4.3.4 Based on the above comparison of the actual expense as per AAI true up submission with that considered in the SCP order, the employee benefit expenses from FY 2016-17 to FY 2020-21 are considered reasonable..

3.4.3.5 The employee expenses have been further analysed with respect to two parameters viz, number of passengers per employee and average salary per employee for the four FYs, i.e., FY 2016-17 to FY 2019-20. FY 2020-21 has been excluded for such comparison since it was impacted by COVID Pandemic.

3.4.3.6 The following table elaborates the above-mentioned parameters for TRV:

**Table 15: Analysis of employee expenses of AAI**

Particulars	UoM	FY 17	FY 18	FY 19	FY 20	FY 21	Total for SCP
Employee expenses – as per actuals (A)	Rs. in crores	48.71	60.58	74.97	78.42	58.01	<b>320.70</b>

Particulars	UoM	FY 17	FY 18	FY 19	FY 20	FY 21	Total for SCP
Number of aeronautical employees (Aeronautical) (B)	Nos	371	350	344	330	316	
Average salary per employee (C = A ÷ B)	Rs. in crores	0.13	0.17	0.22	0.24	0.18	
Number of Pax (D)	MPPA	3.88	4.39	4.43	3.92	0.94	<b>17.56</b>
Number of passengers per employee (E = D ÷ B)	'000 Nos	10.46	12.55	12.89	11.88	2.96	

3.4.3.7 From the above table, it is evident that the Average salary per employee shows an increasing trend. There has been an increase in employee expenses in FY 2017-18 & FY 2018-19 on account of revision in pay. Also, the number of passengers per employee has generally increased, indicating that AAI has been able to handle a higher passenger load with a relatively stable or decreasing number of aeronautical employees. This suggests efficient resource utilization.

3.4.3.8 It is important to note that the actual employee benefit expenses for each tariff year remained within the projections approved by AERA in the Second Control Period Order. Therefore, the employee expenses for TRV during the Second Control Period appear to be reasonable.

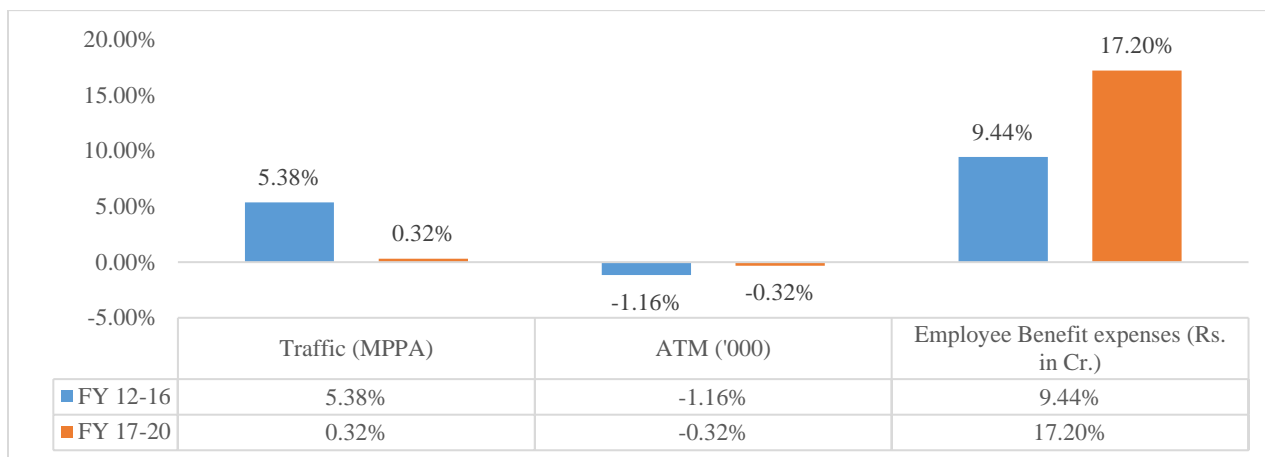
3.4.3.9 Furthermore, a comparison of employee expenses with other airports has been conducted, as detailed in para 5.3.

#### 3.4.4 Trend Analysis

3.4.4.1 The trend analysis (explained in para 2.2.3) of CAGR of Employee benefit expenses for the period FY 2011-12 to FY 2015-16 (i.e., First Control period) as compared with FY 2016-17 to FY 2019-20 (i.e., Second Control period without considering Covid year i.e., FY 2020-21) in correlation with passenger and ATM for the same period has been presented in the tables and corresponding charts below:

**Table 16: CAGR of Passenger Traffic, ATM and Employee Benefit Expenses**

Particulars	First Control Period							Second Control Period							
	FY 12	FY 13	FY 14	FY 15	FY 16	Total	CAGR (%) (FY12 - FY16)	FY 17	FY 18	FY 19	FY 20	Total	CAGR (%) (FY17 - FY20)	FY 21	Total
Traffic (MPPA)	2.81	2.84	2.93	3.17	3.47	15.23	5.38%	3.88	4.39	4.43	3.92	16.63	0.32%	0.94	17.56
ATM ('000)	27.24	24.80	23.78	23.72	26.00	125.54	-1.16%	29.12	33.74	33.09	28.84	124.79	-0.32%	9.31	134.10
Employee Benefit expenses (Rs. in crores)	37.30	43.60	49.70	56.30	53.50	240.40	9.44%	48.71	60.58	74.97	78.42	262.69	17.20%	58.01	320.70

**Figure 3: CAGR of Employee Benefit Expenses for the periods FY 2011-12 to FY 2015-16 and FY 2016-17 to FY 2019-20****3.4.4.2 Key findings are detailed below:**

- In the First Control Period (FCP), payroll expenses showed significant growth with a CAGR of 9.44%, outpacing both passenger traffic and ATM.
- In SCP, payroll expenses continued to rise at a higher rate with a CAGR of 17.20%, surpassing the growth rates of both passenger traffic and ATM.

**3.4.4.3** Overall, the analysis indicates that payroll expenses consistently increased at a higher rate compared to both passenger traffic and air traffic movements during both control periods. Despite a decline in the growth rate of passenger traffic and fluctuations in ATM, payroll expenses exhibited robust growth. The reasons for such increase in SCP have been explained in para 3.4.3.2 based on which the employee benefit expenses seem to be reasonable.

**3.4.5 Reclassification and Reallocation of Expenses**

- 3.4.5.1** AAI has proposed to allocate the Employee Benefit Expenses into Aeronautical, Non-Aeronautical or Common and reallocate the Common expenses using Employee Head Count ratio. It was noted that the costs pertaining to ANS employees have been accounted for separately by AAI and have not been included in the Employee Benefit Expenses.
- 3.4.5.2** While analyzing employee expenses in detail, it was observed that AAI has considered the retirement benefits allocated by CHQ as 100% aeronautical expenses until FY 2018-19 and thereafter used a ratio (refer Table 8) of aero to non-aero employees until COD.
- 3.4.5.3** AAI has allocated the Common Employee Benefit Expenses based on the Employee Head Count ratio determined by them (refer Table 8). However, as explained in para 3.3.3.5 the Employee Head Count ratio has been revised as per the Study (refer Table 10).
- 3.4.5.4** Thus, on account of the revision in the Employee Head Count ratio, the Common Employee Benefit Expenses and Retirement benefits allocated by CHQ being reallocated based on the ratio proposed as per the Study, cumulatively the Aeronautical employee benefit expenses is reduced by Rs. 4.53 crores. The impact on account of the proposed reallocation is summarized below:

**Table 17: Impact on Aeronautical Employee Benefit Expenses**

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	Total
<b>AAI's submission</b>						
Salaries and Wages	29.61	30.32	35.43	41.05	37.06	<b>173.48</b>
Provident Fund (PF) Contribution	3.08	3.32	3.23	3.83	3.80	<b>17.26</b>
Fringe Benefits, incl. Perks & Medical Exp.	12.90	17.41	17.88	20.42	14.95	<b>83.56</b>
Overtime	2.77	2.75	2.40	4.63	1.97	<b>14.52</b>
Allocation of Retirement Benefit provided at CHQ in r/o TRV Employees	1.75	8.78	18.38	11.24	2.22	<b>42.37</b>
<b>Grand Total</b>	<b>50.11</b>	<b>62.58</b>	<b>77.33</b>	<b>81.17</b>	<b>60.00</b>	<b>331.19</b>
Less: Common Employee Expenses pertains to ANS	-1.26	-1.83	-2.15	-2.59	-1.88	<b>-9.70</b>
Less: Common Employee Expenses pertains to Non-Aero	-0.09	-0.13	-0.17	-0.15	-0.11	<b>-0.65</b>
Less: Cost of Redeployment (DIAL/MIAL)	-0.06	-0.04	-0.04	-0.00	-	<b>-0.14</b>
<b>Net Employee expenses (A)</b>	<b>48.71</b>	<b>60.58</b>	<b>74.97</b>	<b>78.42</b>	<b>58.01</b>	<b>320.70</b>
<b>Revision as per the Study</b>						
Salaries and Wages	28.50	29.03	33.99	39.11	35.31	<b>165.94</b>
PF Contribution	2.96	3.17	3.10	3.65	3.62	<b>16.51</b>
Fringe Benefits, incl. Perks & Medical Exp.	12.42	16.66	17.16	19.46	14.24	<b>79.94</b>
Overtime	2.67	2.64	2.31	4.41	1.88	<b>13.89</b>
Allocation of Retirement Benefit provided at CHQ in r/o TRV Employees	1.66	8.26	17.28	10.71	2.12	<b>40.03</b>
<b>Grand Total</b>	<b>48.21</b>	<b>59.77</b>	<b>73.83</b>	<b>77.34</b>	<b>57.16</b>	<b>316.31</b>
Less: Common Employee Expenses pertains to ANS	-	-	-	-	-	<b>-</b>
Less: Common Employee Expenses pertains to Non-Aero	-	-	-	-	-	<b>-</b>
Less: Cost of Redeployment (DIAL/MIAL)	-0.06	-0.04	-0.04	-0.00	-	<b>-0.14</b>
<b>Net Employee expenses (B)</b>	<b>48.15</b>	<b>59.73</b>	<b>73.80</b>	<b>77.33</b>	<b>57.16</b>	<b>316.17</b>
<b>Downward adjustment in Aeronautical expenses (C = A – B)</b>	<b>0.56</b>	<b>0.86</b>	<b>1.18</b>	<b>1.09</b>	<b>0.85</b>	<b>4.53</b>

**3.4.6 Summary**

- 3.4.6.1 Based on the Reasonableness assessment and trend analysis detailed in paras 3.4.3 & 3.4.4, it was observed that employee expenses increased in FY 2017-18 and FY 2018-19 due to pay revisions and provisions for retirement benefit costs. Additionally, a three-year pension was implemented covering 27 months from January 2017 to March 2019 which also contributed to the rise in employee costs. Upon comparison with the approved figures of the SCP Order, the employee benefit expense appears to be reasonable.
- 3.4.6.2 Due to revision in the allocation ratio as per the Study, the Aeronautical employee benefit expenses submitted by AAI for SCP were rationalized to Rs. 316.17 crores as per Table 17.

**2. Administration and General (A&G) Expense**

- 3.4.7 **Reasonable assessment of Administrative and General Expense (Comparison of Tariff Projections vs. Actuals)**

**Table 18: Comparison of A&G expenses as per SCP Order vs Actuals**

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	Total
<b>As per AAI submission</b>						
<b>Administrator Charges</b>						
Travelling Expenses	0.78	0.64	1.11	1.20	0.35	<b>4.09</b>
Municipal Tax	0.01	0.01	0.03	0.31	0.33	<b>0.69</b>
Rent, Rates & Taxes	0.02	0.02	-	0.00	0.00	<b>0.04</b>
Other Fees Like Aerodrome Licensing	-	-	0.08	0.29	0.01	<b>0.38</b>
Advertisement-Inviting Tender.	0.22	0.18	0.13	0.09	0.01	<b>0.63</b>
Books, Journals & Periodicals.	0.00	0.00	0.00	0.00	0.00	<b>0.01</b>
Arbitration Exp.	-	-	0.03	-	-	<b>0.03</b>

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	Total
Telephone Charges	0.83	0.27	0.23	0.25	0.38	<b>1.95</b>
<b>Legal Charges</b>						
Legal charges	0.01	0.08	0.07	0.14	0.20	<b>0.50</b>
<b>Consultancy / Advisory Expenses</b>						
Other Professional Fees & Expenses	0.04	0.09	0.15	0.22	0.21	<b>0.72</b>
Expenditure On Seminar & Development Course	0.03	0.10	0.02	0.02	-	<b>0.17</b>
<b>Other Charges</b>						
Insurance Costs	0.02	0.05	0.02	0.03	0.00	<b>0.12</b>
Office Expenses.	0.21	0.11	0.19	0.10	0.09	<b>0.69</b>
Interest & Solatium	0.00	-	0.29	-	1.65	<b>1.95</b>
Other Sundry Expenses	0.12	0.19	0.18	1.28	0.37	<b>2.13</b>
Freight Charges/Shifting Expenses	0.04	0.01	0.00	0.00	0.00	<b>0.06</b>
Expenditure On Rajbhasha	0.02	0.03	0.04	0.02	0.01	<b>0.12</b>
Interest on Capex term loan Axis	-	-	-	-	0.10	<b>0.10</b>
Interest on Finance Lease XBIS	-	-	-	0.20	0.16	<b>0.35</b>
PP Exp-Admin & other expenses	0.26	0.11	-	-0.24	1.73	<b>1.86</b>
<b>Total A&amp;G expenses (A)</b>	<b>2.61</b>	<b>1.90</b>	<b>2.56</b>	<b>3.92</b>	<b>5.59</b>	<b>16.58</b>
<b>A&amp;G expenses as per SCP Order (B)</b>	<b>2.67</b>	<b>2.94</b>	<b>3.22</b>	<b>3.54</b>	<b>3.89</b>	<b>16.26</b>
<b>Difference (A - B)</b>	<b>-0.06</b>	<b>-1.04</b>	<b>-0.66</b>	<b>0.38</b>	<b>1.70</b>	<b>0.32</b>

3.4.7.1 From the above table, it can be observed that the total A&G expenses of Rs. 16.58 crores incurred by AAI is slightly higher than the approved amount of Rs. 16.26 crores as per the SCP order. Upon a comprehensive analysis, it has been observed that the aforementioned increase in expenses can be attributed to the following factors:

1. Travelling Expenses: In later years, there has been a significant increase in the travelling expenses incurred by AAI. Specifically, during FY 2018-19, the expenses increased by 73% when compared to the preceding year i.e., FY 2017-18. AAI submitted that the reason behind the increase or escalation was due to a change in company's travel policies in FY 2018-19 which led to an increase in the cost.

It is observed that AAI had classified all the travel expenses related to the airport segment as 100% aeronautical expense. These expenses were primarily incurred by AAI employees involved in aero, non-aero and common activities. As a result, the aeronautical expenses were overstated. To correct this, it is necessary to reclassify and subsequently reallocate these expenses based on the principles outlined in the respective para 3.3.1.1 in order to accurately present the aeronautical expenses to be charged to Aggregate Revenue Requirement (ARR). The details of the reclassification and further reallocation have been discussed in para 3.4.9.

2. Municipal Taxes: It can be observed from the table above that the municipal tax expense was constant during FY 2016-17 to FY 2018-19, but it started to increase from FY 2019-20. AAI clarified that *"AAI had not received a demand for municipal taxes in the last 5 years, hence the liability was accounted for in books and after receipt of demand the taxes have been paid. There was a delay by local taxes Authority to raise bills, hence there has not been any penalty included in the demand. The Tax authority has raised demand for FY 2016-17 to 2021-22 (Up to COD)"*. It is pertinent to note that, the municipal taxes are determined by the local tax Authority and based on demand, AAI has incurred the expenses. It is reasonable for AAI to account for these expenses once the demand is received and pay them accordingly.
3. Telephone Expenses: It was noted that AAI included the telephone expenses incurred by ANS department as part of the aero cost in all the years of SCP. 80% of the telephone expenses recorded pertained to the ANS department. This indicates that the costs of the ANS department were being allocated to the aero

category which was potentially inflating the overall aero costs. The necessary reclassification has been carried out and is detailed in Table 22.

4. Interest & Solatium Expense: During FY 2020-21, an expense of Rs. 1.65 crores were recorded, which is significantly higher compared to expenses incurred in other years of SCP and is higher than other administrative expenses recorded during the same year. It was observed that this amount corresponds to the enhanced compensation determined by the Hon'ble Sub Court, Trivandrum, in cases of land acquisition and resettlement (LAR).

This cost is related to land acquisition and should be treated in the same manner as other enhanced compensation provided by AAI, as considered in the SCP i.e., assets. Therefore, it is proposed that this cost should not be expensed but rather considered as part of the assets.

5. Other Sundry Expenses: In FY 2019-20 and FY 2020-21, AAI recorded an expense of Rs. 0.97 crores and 0.07 crores as interest and penalties paid to relevant Authorities, which was clubbed under the category of other sundry expenses. This expense was not recorded in any other year of the SCP, which resulted in higher sundry expenses as compared to other administrative expenses. This has been considered 100% aero by AAI.

However, as per Order of TRV for SCP, the Authority noted that *“All statutory levies in the nature of fees, levies, taxes and other such charges by Central or State Government or local bodies, local taxes, levies directly imposed on and paid by AAI on final product/service provided by AAI will be reviewed by the Authority for the purpose of corrections. Any additional expenditure by way of interest payments, penalties, fines and such penal levies associated with such statutory levies which AAI has to pay, for either any delay or non-compliance, the same may not be trued up”*.

Based on the above, the Study proposes not to consider the interest and penalty expenses for true up. This is because such expenses are a burden on the passengers for which they are not liable and to ensure fair and transparent practices in airport operations.

6. Interest on Capex: It has been noted that interest on Capex has been included in the admin expenses for the SCP. It was explained by AAI that the interest is associated with a loan obtained from AXIS Bank at the headquarters level. This interest has been allocated to the station (TRV) based on the portion of the loan utilized for acquiring capital assets. According to the Study and Direction 5 of AERA, interest on Capex represents the financing cost incurred in acquiring capital assets. Therefore, this cost should be capitalized and considered as part of Regulatory Asset Base (RAB) in order to claim a return on investment. AAI has provided the details of the assets for which the loan was taken. Hence, the cost has not been considered as part of O&M expenses but as part of RAB in the Study on Allocation of Assets between Aeronautical and Non-Aeronautical Assets for TRV, Thiruvananthapuram.
7. Prior Period Expenses: It can be seen that prior period expenses have been recorded in almost every year of SCP. AAI has furnished us with the specific details of these prior period expenses. Based on this information, the Study has made the following analysis:

**Table 19: Analysis related to Prior Period Expenses**

Year	Particulars	Submitted by AAI (Rs. in crores)	Observations
FY17	PP Expense-Security	0.26	Based on the information provided, the submission made by AAI categorized it as an expense in FY 2016-17. However, it is

Year	Particulars	Submitted by AAI (Rs. in crores)	Observations
			important to note that this expense actually represents a reversal of a liability that was previously recorded in the books. The liability was initially recognized due to certain outstanding requirements from the Kerala Police Department, which ultimately did not materialize.  Based on the above, the Study proposes taking into account the reversal of this expense in FY 2016-17.
FY18	PP Expense-Operating	0.11	The Study proposes to adopt the expense figures submitted by AAI. As explained by them, these expenses are specifically related to SCP.
FY20	PP Expense-OPE-XBIS (BOT)	-0.59	Discussed in para 3.4.7.1 (8).
FY20	PP Expense -Admin & other	0.35	Payment made towards additional Goods & Service Tax (GST) liability raised for FY18. Based on the explanation provided in para 3.4.7.1 (5), the Study proposes excluding interest and penalty expenses when determining expenses for true-up purposes.
FY21	PP Expense -Security	1.57	Expense pertains to Central Industrial Security Force (CISF) related security for which the expense and income is not regulated by AERA. Thus, the Study proposes not to consider the expense for FY 2020-21.
FY21	PP Expense -Admin & other	0.16	Payment made towards additional GST liability raised for FY 2018-19 & FY 2019-20. Based on the explanation provided in para 3.4.7.1 (5), the Study proposes excluding interest and penalty expenses when determining expenses for true-up purposes.
<b>Total</b>		<b>1.86</b>	

8. Interest on Finance Lease: It can be seen that interest on finance lease of Rs. 0.35 crores have been recorded by AAI in FY 2019-20 and FY 2020-21 only. It is noted that AAI made adjustments to its treatment of lease expense due to the requirements of the provisions of the accounting standard. Initially, in FY 2017-18, AAI entered into a contract to operate X-ray Baggage Inspection Systems (XBIS) on a Build-Operate-Transfer (BOT) model basis. Under this contract, AAI leased the XBIS system for a period of 6 years at an annual lease payment of Rs. 0.65 crores.

Initially, AAI treated this lease as an operating lease and accounted for it under the head of Repair & Maintenance (R&M) expenses until FY 2018-19 (refer Table 28). However, in FY 2019-20, due to the change in accounting, AAI changed the lease classification from an operating lease to a "Financial Lease."

As a result of this change in accounting treatment, the following have been impacted:

- Addition to Regulated Asset Base (RAB): An asset amounting to Rs. 3.10 crores were added to the RAB as of 1<sup>st</sup> April 2019, considering its useful life as 15 years.
- Depreciation: AAI charging depreciation of Rs. 0.21 crores per year from FY 2019-20 onwards on the capitalized asset.
- Reversal Entry: A reversal entry of Rs. 0.62 crores were passed under the account head R&M XBIS BOT lease for adjusting the R&M expense charged in FY 2019-20.
- Interest on the finance lease was recognized as O&M expense from FY 2019-20 with corresponding adjustments entries for previous years i.e., FY 2017-18 and FY 2018-19.

- Prior Period income of Rs. 0.59 crores were recognized in FY 2019-20 for the adjustment of accumulated depreciation and interest on the finance lease for previous years i.e., FY 2017-18 and FY 2018-19.
- Liability Recognition: A liability of Rs. 2.05 crores were recognized in FY2019-20 to account for the financial lease obligation.

**Table 20: Financial Lease Expense Details as per the current Study**

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	Total
<b>Financial Lease submitted by AAI as per books</b>						
Addition to Asset (A)	-	-	-	3.10	-	<b>3.10</b>
Accumulated Depreciation (B)				0.85	1.19	
Net block (C = A – B)				2.25	1.91	
Liability (D)	-	-	-	2.05	1.55	<b>3.60</b>
Depreciation (E)	-	-	-	0.34	0.34	<b>0.68</b>
Int on Fin Lease XBIS (F)	-	-	-	0.20	0.16	<b>0.36</b>
R&M BOT XBIS Lease (G) (Table 28)	-	0.29	0.65	0.03	-	<b>0.97</b>
Prior period expense/(income) (as per accounting treatment) (H)	-	-	-	-0.07	-	<b>-0.07</b>
<b>Total Impact (I = C - D + E + F - G + H)</b>	-	<b>-0.29</b>	<b>-0.65</b>	<b>0.63</b>	<b>0.86</b>	<b>0.55</b>
<b>Operational Lease as per Study</b>						
R&M BOT XBIS Lease	-	0.29	0.65	0.65	0.65	<b>2.24</b>

Based on the analysis, it is observed that the accounting does not reflect the lease commitment of Rs. 0.65 crores payable annually to the vendor every year. Therefore, it is proposed to consider the value of lease payment as part of the O&M expenses by adjusting the following:

1. Recategorizing the amount of Rs. 0.97 crores shown under R&M head to A&G expense head.
2. In RAB, excluding the amount of Rs. 3.10 crores considered as an addition in FY 2019-20 along with the depreciation.
3. Removing the Liability so recognized from the books (which does not have impact on ARR)
4. Excluding Interest on Finance lease (reflected in Table 22) and recognizing Lease rent of Rs. 0.65 crores per annum.

After incorporating the above adjustment, the lease expense under A&G expense will be as follows:

**Table 21: Lease Expense Adjustment as per the current Study**

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	Total
R&M BOT XBIS Lease submitted by AAI (A) (Table 28)	-	0.29	0.65	0.03	-	<b>0.97</b>
Operational Lease payment to be adjusted (B)	-	-	-	0.62	0.65	<b>1.27</b>
<b>R&amp;M BOT XBIS Lease as per the Study (C = A + B)</b>	-	<b>0.29</b>	<b>0.65</b>	<b>0.65</b>	<b>0.65</b>	<b>2.24</b>

- 3.4.7.2 It is noted that the actual expenses exceeded the figures approved in the SCP order due to various factors such as errors, interest and penalties, changes in accounting treatment and other reasons. Adjustments have been made to rectify these. The revised A&G expenses so adjusted appear to be reasonable and is presented in the table below.

**Table 22: A&G expenses after adjustments as per the current Study**

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	Total
<b>A&amp;G Expense as per AAI's submission (A)</b>	<b>2.61</b>	<b>1.90</b>	<b>2.56</b>	<b>3.92</b>	<b>5.59</b>	<b>16.58</b>
<b>Adjustments as per the Study</b>						
Telephone Charges (B)	-0.68	-0.08	-0.11	-0.14	-0.09	-1.09
Interest & Solatium (C)	-	-	-	-	-1.65	-1.65



Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	Total
Other Sundry Expenses (D)	-	-	-	-0.97	-0.07	-1.04
Interest on Capex Term Loan Axis (E)	-	-	-	-	-0.10	-0.10
Interest on Finance Lease XBIS (F)	-	-	-	-0.20	-0.16	-0.35
Prior Period Expense - Admin & other expenses (G)	-0.51	-	-	-0.24	-1.73	-2.00
R&M BOT XBIS Lease (H) (Table 21)	-	0.29	0.65	0.65	0.65	2.24
<b>Total adjustments as per the Study (I = SUM of B to I)</b>	<b>-1.19</b>	<b>2.10</b>	<b>0.54</b>	<b>-0.42</b>	<b>-3.14</b>	<b>-4.00</b>
<b>Adjusted A&amp;G Expense (J = A + I)</b>	<b>1.42</b>	<b>2.11</b>	<b>3.10</b>	<b>3.50</b>	<b>2.45</b>	<b>12.58</b>

3.4.7.3 From an external benchmarking perspective, the A&G expenses of AAI appear to be on par with the expenses incurred by other comparable airports (external benchmarking is detailed in para 5.4)

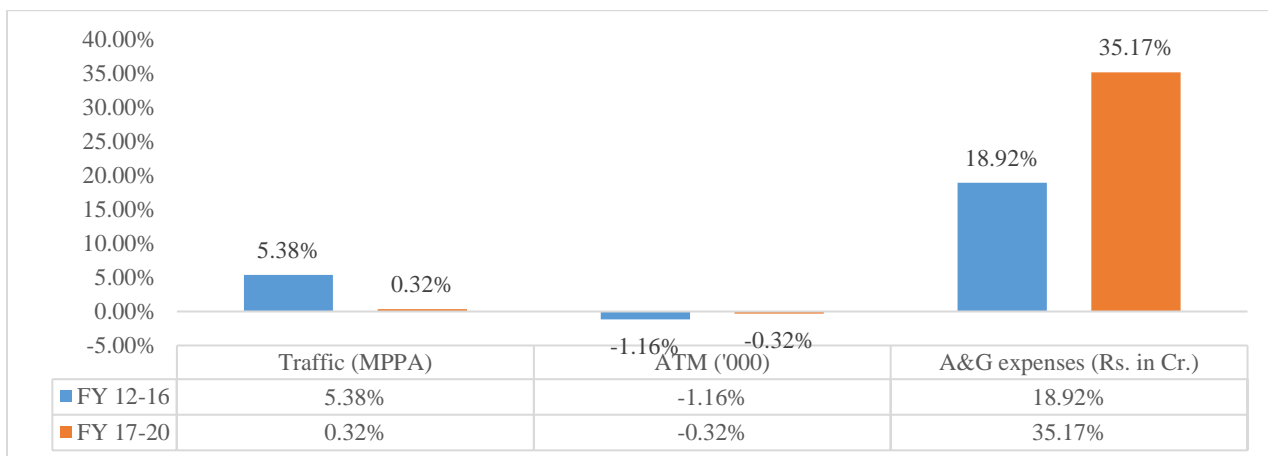
### 3.4.8 Trend Analysis

3.4.8.1 The trend analysis (explained in para 2.2.3) of CAGR of A&G expenses for the period FY 2011-12 to FY 2015-16 (i.e., First Control period) as compared with FY 2016-17 to FY 2019-20 (i.e., Second Control period) without considering Covid year i.e., FY 2020-21) in correlation with passenger and ATM for the same period has been presented in the tables and corresponding charts below:

**Table 23: CAGR of Passenger Traffic, ATM and A&G expenses**

Particulars	First Control Period							Second Control Period							
	FY 12	FY 13	FY 14	FY 15	FY 16	Total	CAGR (%) (FY12 - FY16)	FY 17	FY 18	FY 19	FY 20	Total	CAGR (%) (FY17 - FY20)	FY 21	Total
Traffic (MPPA)	2.81	2.84	2.93	3.17	3.47	15.23	5.38%	3.88	4.39	4.43	3.92	16.63	0.32%	0.94	17.56
ATM ('000)	27.24	24.80	23.78	23.72	26.00	125.54	-1.16%	29.12	33.74	33.09	28.84	124.79	-0.32%	9.31	134.10
A&G expenses (Rs. in crores)	1.30	1.70	1.60	2.10	2.60	9.30	18.92%	1.42	2.11	3.10	3.50	10.13	35.17%	2.45	12.58

**Figure 4: CAGR of A&G expenses for the periods FY 2011-12 to FY 2015-16 and FY 2016-17 to FY 2019-20**



3.4.8.2 It can be observed from Table 23 and Figure 4 that the CAGR of A&G expenses grew at a rate higher than the respective growth in Traffic of passenger and ATM, for both the First and Second Control Periods. Further, it is observed that the CAGR of SCP (35.17%) is higher than the CAGR of FCP (18.92%).

3.4.8.3 Based on the analysis, it is observed that the expenses related to administration and general operations have been increasing at a faster pace compared to the growth in passenger traffic and air traffic movements. The reasons for the increase have been explained in para 3.4.7.1 and based on the same the A&G expenses computed as per the study appear reasonable.

#### 3.4.9 Reclassification and Reallocation of Expenses

3.4.9.1 AAI's submissions regarding A&G expenses have been analyzed in detail, as stated in para 3.4.7.1. As a result, adjustments have been made and are reflected in Table 22. The analysis revealed that these expenses encompass a wide range of costs associated with various aspects including travel, advertising, municipal taxes, rent, rates, insurances and more. These costs may have a direct or indirect connection to employees, terminal buildings and the airport as a whole.

3.4.9.2 Consequently, the Study has undertaken a reclassification and reallocation of certain components of A&G expenses based on the principles and revised ratio discussed in para 3.3.1 & 3.3.3 respectively. The following outlines the details of the reclassification and reallocation of expenses with the impact:

**Table 24: Reclassification and Reallocation of A&G Expenses as per the current Study for SCP**

Particulars (Rs. in crores)	Adjusted amount as per Table 22 (A)	Classification		Allocation		As per Study (B)	Impact (C= A - B)
		AAI	Study	AAI	Study		
Travelling Expenses	4.09	Aeronautical	Common	100%	EHCR (Aero:Non-Aero)	3.70	0.38
Municipal Tax	0.69	Aeronautical	Common	100%	GBR	0.63	0.06
Rent, Rates & Taxes	0.04	Aeronautical	Common	100%	GBR	0.04	0.00
Other Fees Like Aerodrome Licensing	0.38	Aeronautical	Aeronautical	100%	100%	0.38	-
Advertisement-Inviting Tender.	0.63	Common	Common	Actuals	Actuals	0.63	-
Books, Journals & Periodicals.	0.01	Common	Common	EHCR (Aero:Non-Aero:ANS)	EHCR (Aero:Non-Aero:ANS)	0.01	0.00
Arbitration Exp.	0.03	Common	Common	Actuals	Actuals	0.03	-
Telephone Charges	0.85	Common	Common	EHCR (Aero:Non-Aero:ANS)	EHCR (Aero:Non-Aero:ANS)	0.82	0.03
Legal Charges	0.50	Common	Common	Actuals	Actuals	0.50	-
Other Professional Fees & Expenses	0.72	Aeronautical	Common	100%	GBR	0.67	0.05
Expenditure On Seminar & Development Course	0.17	Aeronautical	Common	100%	EHCR (Aero:Non-Aero)	0.16	0.01
Insurance Costs	0.12	Aeronautical	Common	100%	GBR/EHCR	0.13	-0.01
Office Expenses.	0.69	Common	Common	EHCR (Aero:Non-Aero:ANS)	EHCR (Aero:Non-Aero:ANS)	0.66	0.03
Interest & Solatium	0.30	Aeronautical	Common	100%	GBR	0.27	0.03
Other Sundry Expenses	1.09	Common	Common	EHCR (Aero:Non-Aero:ANS)	EHCR (Aero:Non-Aero:ANS)	1.06	0.03
Freight Charges/Shifting Expenses.	0.06	Aeronautical	Common	100%	EHCR (Aero:Non-Aero)	0.06	0.00

Particulars (Rs. in crores)	Adjusted amount as per Table 22 (A)	Classification		Allocation		As per Study (B)	Impact (C= A - B)
		AAI	Study	AAI	Study		
Expenditure On Rajbhasha	0.12	Common	Common	EHCR (Aero:Non-Aero:ANS)	EHCR (Aero:Non-Aero:ANS)	0.12	0.01
Int on Capex term loan	-	Aeronautical		100%		-	-
Int on Fin Leas XBIS	-	Aeronautical		100%		-	-
PP Exp-Admin & Other expenses	-0.15	Aeronautical		100%		-0.15	-
R&M BOT XBIS Lease	2.24		Aeronautical		100%	2.24	-
<b>Total</b>	<b>12.58</b>					<b>11.96</b>	<b>0.62</b>
<b>Summary</b>							
<b>A&amp;G Expenses submitted by AAI for SCP (Table 18) (D)</b>						<b>16.58</b>	
<b>Impact due to</b>							
Adjustments as per study (E)						-4.00	
Reclassification and Reallocation (F)						-0.62	
<b>Total Impact (G = E + F)</b>						<b>-4.62</b>	
<b>A&amp;G Expenses as per the Study (H = D + G)</b>						<b>11.96</b>	

3.4.9.3 As a result of the revision of A&G expenses as per the above table, the Aeronautical A&G expenses have been reduced by Rs. 4.62 crores as compared to the expenses submitted by AAI for true up.

#### 3.4.10 Summary

3.4.10.1 In para 3.4.7, it was observed that A&G expenses for SCP submitted by AAI was higher than the approved figure in the SCP order. On detailed analysis, it was observed that major reasons for the increase was interest and penalties payments and inconsistencies such as treating ANS expenses as aeronautical expense. These have been adjusted appropriately. Also, the Study has made adjustment of accounting treatment recorded by AAI for payment of lease by treating it as financial lease.

3.4.10.2 After adjustments, the A&G expenses seem to be reasonable as compared to SCP Order approved amount.

3.4.10.3 A&G expenses were adjusted, reclassified and reallocated based on principle set in para 3.3.1. Due to such revision, the Aeronautical A&G expenses submitted by AAI for SCP were rationalized to Rs. 11.96 crores as per Table 24.

### 3. CHQ & RHQ Expense

#### 3.4.11 Reasonable assessment of CHQ & RHQ Expense (Comparison of Tariff Projections vs. Actuals)

**Table 25: Comparison of CHQ & RHQ Expense as per SCP Order vs Actuals**

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	Total
CHQ & RHQ expenses submitted by AAI (A)	32.58	43.44	42.45	52.47	31.11	<b>202.05</b>
CHQ & RHQ expenses as per SCP Order (B)	22.70	23.84	25.03	26.28	27.59	<b>125.44</b>
<b>Difference (C = A - B)</b>	<b>9.88</b>	<b>19.60</b>	<b>17.42</b>	<b>26.19</b>	<b>3.52</b>	<b>76.61</b>

3.4.11.1 From the above table, it can be observed that the total CHQ & RHQ Expense of Rs. 202.05 crores incurred by AAI is significantly higher than the approved amount of Rs. 125.44 crores as per the SCP order. This has resulted in a variance of approximately 61%.

3.4.11.2 AAI was asked to justify this steep increase in CHQ & RHQ Expenses to which AAI responded that it was due to revision in CHQ & RHQ Expense allocation.

3.4.11.3 However, the deviation is quite significant, and the justification given by AAI does not satisfactorily explain the magnitude of this deviation. Therefore, these expenses need to be further scrutinized and the same has been carried out in para 3.4.13

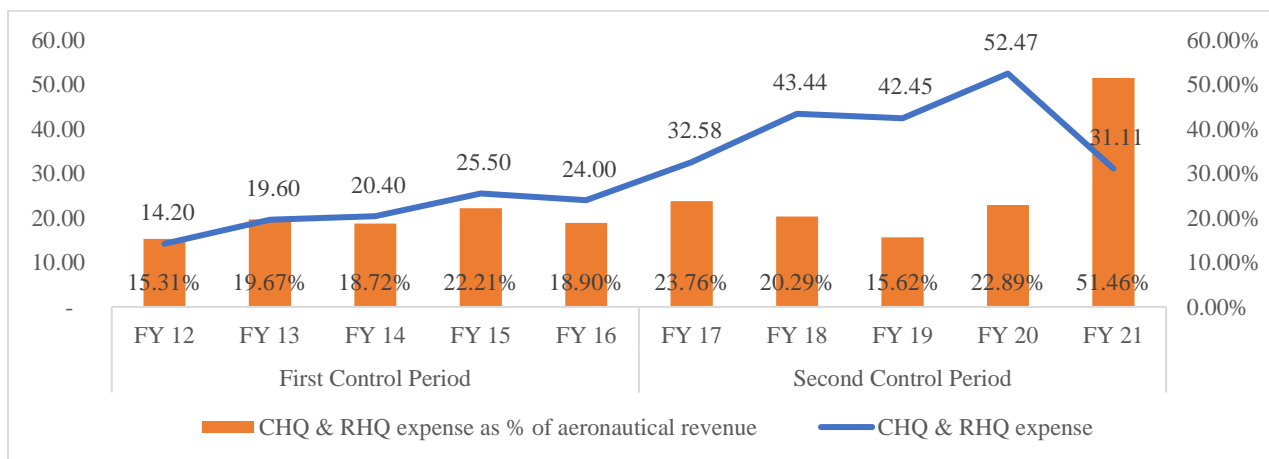
### 3.4.12 Trend Analysis

3.4.12.1 The trend analysis of CHQ & RHQ Expenses for the period FY 2011-12 to FY 2015-16 (i.e., First Control period) as compared with FY 2016-17 to FY 2020-21 (i.e., Second Control period) in correlation with % of aeronautical revenue for the same period has been presented in the tables and corresponding charts below:

**Table 26: CHQ & RHQ Expense comparison between FCP & SCP with % of Revenue**

Particulars (Rs. in crores)	First Control Period						Second Control Period					
	FY 12	FY 13	FY 14	FY 15	FY 16	Total	FY 17	FY 18	FY 19	FY 20	FY 21	Total
Aeronautical revenue	92.72	99.65	108.96	114.80	126.98	<b>543.11</b>	137.07	214.14	271.75	229.27	60.46	<b>912.70</b>
CHQ & RHQ expense	14.20	19.60	20.40	25.50	24.00	<b>103.70</b>	32.58	43.44	42.45	52.47	31.11	<b>202.05</b>
CHQ & RHQ expense as % of aeronautical revenue	15.31%	19.67%	18.72%	22.21%	18.90%		23.76%	20.29%	15.62%	22.89%	51.46%	

**Figure 5: CHQ & RHQ Expenses for FCP & SCP with % of Revenue**



3.4.12.2 From the above table and figure, the following observations can be made:

- CHQ & RHQ Expenses grew considerably in the Second Control Period as compared to the First Control Period. CHQ & RHQ Expenses as a % of revenue have been increasing in the SCP..
- The total CHQ & RHQ Expense for FCP was Rs. 103.70 crores, whereas for the Second Control Period, the cost increased by 95% amounting to Rs. 202.05 crores.

- It can be seen from the above table that the cost in FY 2016-17 increased by 36% as compared to FY 2015-16.

3.4.12.3 The comparison revealed that the CHQ & RHQ Expense for SCP are considerably higher in comparison to FCP. Consequently, it is necessary to conduct a more detailed scrutiny of these expenses, which is carried out below.

### 3.4.13 Rationalization and reallocation of CHQ & RHQ Expense

3.4.13.1 The basis for allocation of AAI's CHQ & RHQ Expenses to TRV and other airports was reviewed, and the following was noted:

- All expenses incurred by CHQ & RHQ (such as staff costs, Administrative and other expenses, Repairs & Maintenance, utilities, outsourcing expenses, etc.) are allocated to all AAI airports.
- All the above-mentioned expenses including Employee benefit expenses are allocated in the ratio of revenues earned by each airport.
- Expenses such as legal costs, interest and penalties are related to specific airports but have also been allocated to the common pool and apportioned to all AAI airports.

3.4.13.2 Based on analysis of the major components of CHQ & RHQ Expenses for the period from FY 2016-17 to FY 2020-21 submitted by AAI, the following expense allocation has been proposed as per the Study:

#### a) Pay and Allowances

- AAI has considered pay and allowances of Commercial department at CHQ & RHQ as Aeronautical expenses, whereas it is proposed to consider such expenses as Non-Aeronautical.
- AAI has excluded pay and allowances of employees involved in ATM, Communications, Navigation and Surveillance (CNS) and Cargo departments at CHQ & RHQ while determining the allocation to the airport. However, costs of support services departments including HR, Finance, Civil, and Terminal Management (Housekeeping) were not excluded in the determination of such allocation.
- CHQ & RHQ staff also provide services to Non-Aeronautical activities, Air Traffic Control (ATC) and CNS cadres at respective airports for which appropriate adjustment was not carried out.

In order to give effect to the above re-allocation, it is proposed that 20% of CHQ & RHQ pay and allowances be excluded towards adjustment for:

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

It is proposed that the balance 80% of CHQ & RHQ pay and allowances be allocated to airports.

#### b) Administrative and other expenses

- AAI has incurred legal and arbitration costs at CHQ & RHQ, which have been allocated across all AAI airports instead of allocation to specific airports on a case-to-case basis.
- Further, AAI has paid interest and penalties to Government of India at CHQ & RHQ due to various lapses and delays and allocated the same across all AAI airports instead of allocation to specific airports on a case-to-case basis.
- As per Section 13 of the AERA Act, 2008 and International Civil Aviation Organization's (ICAO) principle of 'Cost-relatedness', it is determined that CHQ/ RHQ expenses being allocated to TRV on the basis of revenue results in large year-on-year variation in such expenses.

3.4.13.3 Accordingly, the revised allocation of CHQ & RHQ expenses to TRV is Rs. 133.72 crores as compared to Rs. 202.05 crores allocated by AAI for SCP and the same has been proposed by carrying-out the following rationalization:

- i. By excluding 20% of CHQ and RHQ pay and allowances towards adjustment for support services to ANS, Cargo, Commercial at CHQ & RHQ and Officials of Directorate and Commercial
- ii. By excluding the allocated costs of legal and arbitration expenses and interest and penalties paid to Government of India by AAI at CHQ & RHQ

**Table 27: CHQ & RHQ Expense after rationalization and allocation for SCP**

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	Total
Allocation of CHQ/ RHQ – Administrative and other expenses by AAI (A)	32.58	43.44	42.45	52.47	31.11	<b>202.05</b>
Revised allocation of CHQ/ RHQ expenses as per Study (B)	14.67	17.96	30.70	43.63	26.76	<b>133.72</b>
<b>Amount not proposed to be considered as per Study (C = A – B)</b>	<b>17.91</b>	<b>25.49</b>	<b>11.75</b>	<b>8.84</b>	<b>4.35</b>	<b>68.33</b>

#### 3.4.14 Summary

3.4.14.1 In para 3.4.11, it was noted that the CHQ & RHQ expense reported by AAI for the SCP were significantly higher than the approved amount specified in the SCP order. A comprehensive analysis was carried out as per the Study to examine and justify these expenses. As a result, the CHQ & RHQ expenses were rationalized and reallocated. Through this revision, the aeronautical CHQ & RHQ expense submitted by AAI for the SCP has been rationalized to its optimum level and allowed it to the tune of Rs. 133.72 crores (Table 27).

#### 4. Repairs and Maintenance (R&M) Expense

3.4.15 Reasonable assessment of Repairs and Maintenance Expense (Comparison of Tariff Projections vs. Actuals)

**Table 28: Comparison of R&M Expenses as per SCP Order vs Actuals**

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	Total
<b>As per AAI submission</b>						
Civil Works (A)	3.25	3.28	3.31	2.53	2.49	<b>14.86</b>
Electrical works (B)	5.80	4.86	5.15	6.37	7.73	<b>29.91</b>
Furniture and Fittings (C)	0.10	0.11	0.02	0.02	0.01	<b>0.25</b>
Electronics (D)	0.92	0.57	1.18	0.85	1.19	<b>4.70</b>
R&M BOT XBIS Lease (E)	-	0.29	0.65	0.03	-	<b>0.97</b>
AOCC Expenses (F)	1.67	2.08	1.66	1.75	1.63	<b>8.78</b>
Inline Bag Manpower (G)	-	-	-	0.52	2.33	<b>2.85</b>
Vehicle (H)	0.22	0.27	0.58	0.40	0.27	<b>1.73</b>
<b>Total R&amp;M expenses (I = sum of A to H)</b>	<b>11.95</b>	<b>11.46</b>	<b>12.54</b>	<b>12.46</b>	<b>15.65</b>	<b>64.05</b>
<b>R&amp;M expenses as per SCP Order (J)</b>	<b>9.87</b>	<b>10.85</b>	<b>11.94</b>	<b>13.13</b>	<b>14.44</b>	<b>60.23</b>
<b>Difference (K = I - J)</b>	<b>2.08</b>	<b>0.61</b>	<b>0.60</b>	<b>-0.67</b>	<b>1.21</b>	<b>3.82</b>

3.4.15.1 From the above table, it is noted that AAI has incurred a total of Rs. 64.05 crores in R&M expenses, exceeding the approved amount of Rs. 60.23 crores specified in the SCP order. Throughout the remaining years of the SCP (FY 2017-18 to FY 2019-20), the expenses displayed a nominal growth rate. However, in FY 2020-21, the R&M expenses saw a significant spike of 26% compared to the previous year.

3.4.15.2 While viewing the R&M expenses line-item wise, it is observed that AAI had incurred significant expenses in the following areas:

- An additional R&M expense named Inline Bag Manpower for FY 2019-20 & FY 2020-21 was recorded by AAI, amounting to Rs. 2.85 crores.
- The Electronic expenses for FY 2018-19 increased by 107% as compared to FY 2017-18.

3.4.15.3 AAI was asked to justify the increase, to which AAI submitted as follows:

- R&M Electrical: In FY 2019-20, the increase in cost was due to a new contract for comprehensive maintenance and operation of the baggage handling system, which started from 1<sup>st</sup> March 2019 and amounted to Rs. 2.78 crores for a period of 3 years.
- Electronics: In FY 2018-19, expenses of Rs. 0.30 crores for trolley retrievers were incurred, and all security-related expenditures such as Annual Maintenance Contract (AMC) of security equipment and Inline Baggage Screening (ILBS) expenses were booked under this code.
- Inline Bag Manpower: Trained manpower from Airports Authority of India Cargo Logistics and Allied Services (AAICLAS) have been hired to operate the XBIS (X-ray Baggage Inspection System) machines. However, this cost was mistakenly included under R&M expenses. It should actually be categorized under Hiring Charges as part of the Utility & Outsourcing expense head.
- Vehicles: In FY 2018-19, spares for Rosenbauer amounting to Rs. 0.41 crores were purchased, and in FY 2019-20, additional spares worth Rs. 0.11 crores were acquired.

3.4.15.4 Based on the above replies of AAI and detailed analysis of other expenses, it was observed that AAI had incurred reasonable R&M expenses compared to what was approved by AERA in the SCP Order. However, certain re-categorization is required such as Inline Manpower cost to be moved under Utilities & Outsourcing expenses and R&M-BOT XBIS lease to A&G expense (refer para 3.4.7.1(8)(1)). After adjusting the same, the revised R&M expenses for SCP are as follows:

**Table 29: R&M Expenses after adjustments as per the current Study**

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	Total
R&M Expense as per AAI's submission (A)	11.95	11.46	12.54	12.46	15.65	64.05
<b>Adjustments as per the Study</b>						
R&M BOT XBIS Lease (Table 21-row 1) (B)	-	-0.29	-0.65	-0.03	-	-0.97
Inline Bag Manpower (C)	-	-	-	-0.52	-2.33	-2.85
<b>Total adjustments as per the Study (D = B + C)</b>	-	-0.29	-0.65	-0.55	-2.33	-3.82
<b>Adjusted R&amp;M Expense (E = A + D)</b>	<b>11.95</b>	<b>11.17</b>	<b>11.90</b>	<b>11.90</b>	<b>13.32</b>	<b>60.23</b>

3.4.15.5 However, from an external benchmarking perspective, the R&M Expenses of AAI appear to be on par with the expenses incurred by other comparable airports (external benchmarking is detailed in para 5.5).

3.4.15.6 Upon conducting a more detailed analysis of the actual R&M expenses in relation to the Regulated Asset Base (RAB) as presented below, it is noted that these expenses consistently remain below 6% of the Opening RAB throughout all the years of the Second Control Period. This assessment aligns with the methodology employed by the Authority in similar airports.

**Table 30: R&M expense as a % of opening RAB**

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	Total
Adjusted R&M Expenses (A)	11.95	11.17	11.90	11.90	13.32	60.23
Opening RAB (Considered from Asset Allocation Report) (B)	357.01	452.25	435.68	447.52	476.74	
<b>Adjusted R&amp;M Expenses as % of Opening RAB (C)</b>	<b>3.35%</b>	<b>2.47%</b>	<b>2.73%</b>	<b>2.66%</b>	<b>2.79%</b>	

3.4.15.7 By comparing the R&M expenses to the Opening RAB, it is observed that the expenses incurred are within reasonable limits. Consequently, there is no need for any adjustment to be made in this regard.

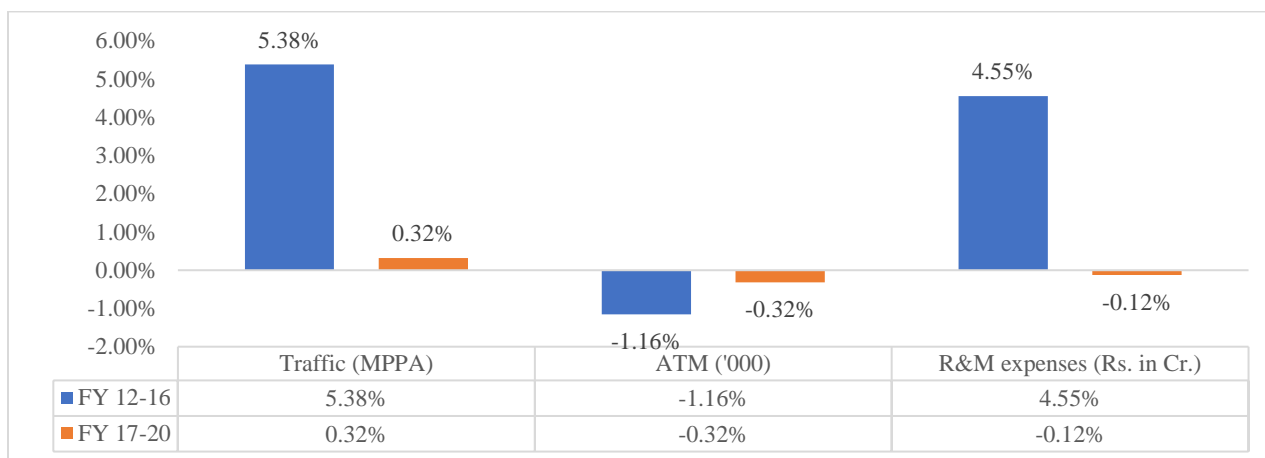
### 3.4.16 Trend Analysis

3.4.16.1 The trend analysis (explained in para 2.2.3) of CAGR of R&M Expenses for the period FY 2011-12 to FY 2015-16 (i.e., First Control period) as compared with FY 2016-17 to FY 2019-20 (i.e., Second Control period) without considering Covid year i.e., FY 2020-21) in correlation with passenger and ATM for the same period has been presented in the tables and corresponding charts below:

**Table 31: CAGR of Passenger Traffic, ATM and R&M Expenses**

Particulars	First Control Period							Second Control Period							
	FY 12	FY 13	FY 14	FY 15	FY 16	Total	CAGR (%) (FY12 - FY16)	FY 17	FY 18	FY 19	FY 20	Total	CAGR (%) (FY17 - FY20)	FY 21	Total
Traffic (MPPA)	2.81	2.84	2.93	3.17	3.47	15.23	5.38%	3.88	4.39	4.43	3.92	16.63	0.32%	0.94	17.56
ATM ('000)	27.24	24.80	23.78	23.72	26.00	125.54	-1.16%	29.12	33.74	33.09	28.84	124.79	-0.32%	9.31	134.10
R&M expenses (Rs. in crores)	7.70	6.40	7.10	7.30	9.20	37.70	4.55%	11.95	11.17	11.90	11.90	46.92	-0.12%	13.32	60.23

**Figure 6: CAGR of R&M Expenses for the periods FY 2011-12 to FY 2015-16 and FY 2016-17 to FY 2019-20**



3.4.16.2 It can be observed from Table 31 and Figure 6, the CAGR of R&M Expenses grew at a rate lower than the respective growth in Traffic of Passenger and ATM, for both the First and Second Control Periods. Further, it is observed that the CAGR of SCP (-0.12%) is lower than the CAGR of FCP (4.55%). This indicates that the R&M expenses for the SCP are reasonably justified.

### 3.4.17 Reallocation of Expenses

3.4.17.1 AAI's submissions regarding R&M expenses have been analyzed in detail in the above paragraphs and appear to be reasonable. Few adjustments have been made and are reflected in Table 29. After adjustments, the Study analysed the nature of each line item of R&M expenses to ascertain that the cost allocated by AAI is appropriate. It was observed that AAI has allocated expenses based on actuals for which specific bifurcation towards aero, non-aero, ANS and common were available and for others and common expenses (remaining



after assigning specific to aero, non-aero and ANS) relevant ratios were applied. However, the Study has undertaken a reclassification and reallocation of such R&M expenses based on the principles and revised ratio discussed in para 3.3.1 & 3.3.3 respectively. The following outlines the details of the reclassification and reallocation of expenses with the impact:

**Table 32: Reclassified and Reallocated R&M expenses for SCP as per the current Study**

Particulars (Rs. in crores)	Aeronautical R&M Expenses		Impact (C = A - B)
	Adjusted as per Table 29 (A)	Study (B)	
Civil Works	14.86	14.64	0.22
Electrical works	29.91	29.85	0.06
Furniture and Fittings	0.25	0.25	0.01
Electronics	4.70	4.66	0.04
AOCC Expenses	8.78	8.78	-
Vehicle	1.73	1.72	0.01
<b>Total</b>	<b>60.23</b>	<b>59.89</b>	<b>0.34</b>
<b>Summary</b>			
<b>R&amp;M Expenses submitted by AAI for SCP (Table 28) (D)</b>		<b>64.05</b>	
<b>Impact due to</b>			
Adjustments as per study (E)		-3.82	
Reclassification and Reallocation (F)		-0.34	
<b>Total Impact (G = E + F)</b>		<b>-4.16</b>	
<b>R&amp;M Expenses as per the Study (H = D + G)</b>		<b>59.89</b>	

*Note: Line-item wise R&M expenses wise with reclassification and reallocation has been presented in Annexure 1*

3.4.17.2 As a result of the revision of R&M Expenses as per the above table, the Aeronautical R&M Expenses have been reduced by Rs. 4.16 crores as compared to the expenses submitted by AAI for true up.

#### 3.4.18 Summary

3.4.18.1 In para 3.4.15, it was observed that R&M Expenses for SCP submitted by AAI was higher than the approved figure in the SCP order. Upon detailed analysis, it was determined that the expenses incurred by AAI were reasonable when compared to the approved figure in the SCP order and the actual FCP expenses.

3.4.18.2 The Study has made adjustment in R&M expenses by re-categorizing Inline Manpower cost to Utilities & Outsourcing expenses head and R&M-BOT XBIS lease to A&G expense head (refer 3.4.7.1(8)(1)).

3.4.18.3 However, from an external benchmarking perspective, the R&M Expenses of AAI appear to be on par with the expenses incurred by other comparable airports (external benchmarking is detailed in para 5.5).

3.4.18.4 By comparing the R&M expenses to the Opening RAB, it is concluded that the expenses incurred are within reasonable limits i.e., 6% of the Opening RAB (benchmark set by the Authority for most of the airports).

3.4.18.5 After considering adjustments, R&M Expenses were reclassified and reallocated based on principle set in para 3.3.1. Due to such revision, the Aeronautical R&M Expenses submitted by AAI for SCP was rationalized to Rs. 59.89 crores as per Table 32.

### 5. Utility and Outsourcing Expense

3.4.19 **Reasonable assessment of Utility and Outsourcing Expense (Comparison of Tariff Projections vs. Actuals)**

**Table 33: Comparison of Utility and Outsourcing Expenses as per SCP Order vs Actuals**

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	Total
<b>As per AAI submission</b>						
Power Costs	9.68	9.98	9.14	9.80	7.89	<b>46.49</b>
Water Costs	0.38	0.31	0.27	0.16	0.26	<b>1.37</b>
Consumption Of Paper Glass	0.02	0.04	0.02	0.03	0.02	<b>0.13</b>
Consumption Of Other Consumables	0.22	0.38	0.27	0.42	0.45	<b>1.73</b>
Hire Charges Of Car/Jeeps	0.19	0.17	0.25	0.56	0.54	<b>1.71</b>
Other Hire Charges	0.23	0.20	0.78	0.87	0.95	<b>3.02</b>
Consumption of Petrol, Oil, Lubricant (Car & Jeeps)	0.19	0.23	0.27	0.26	0.24	<b>1.19</b>
Watch & Ward Exp./Other Security Contracts	0.44	0.83	0.74	1.07	1.29	<b>4.36</b>
Conservancy Charges/Cleaning Contracts (ESS)	1.08	1.48	1.64	2.04	2.10	<b>8.35</b>
Upkeep (Mess)	1.21	2.96	3.15	3.48	3.09	<b>13.89</b>
<b>Total Utility &amp; Outsourcing expenses (A)</b>	<b>13.64</b>	<b>16.57</b>	<b>16.52</b>	<b>18.68</b>	<b>16.83</b>	<b>82.25</b>
<b>Utility &amp; Outsourcing expenses as per SCP Order (B)</b>	<b>13.29</b>	<b>13.61</b>	<b>13.96</b>	<b>14.36</b>	<b>14.79</b>	<b>70.01</b>
<b>Difference (C = A - B)</b>	<b>0.35</b>	<b>2.96</b>	<b>2.56</b>	<b>4.32</b>	<b>2.04</b>	<b>12.24</b>

3.4.19.1 From the above table, it can be observed that AAI has exceeded the approved amount of Rs. 70.01 crores specified in the SCP order for Utility and Outsourcing Expenses by incurring a total of Rs. 82.25 crores. It should be noted that the SCP Order included projected figures for Upkeep and Conservancy charges within the Utility and Outsourcing Expenses category, which is typically classified as administrative expenses in other airports.

3.4.19.2 Upon analysis, it was noticed that in FY 2017-18, the expenses for upkeep and watch & ward witnessed significant increases of 144% and 87% respectively compared to the previous year (FY 2016-17). AAI was asked to justify the substantial increase in the said expenses to which AAI submitted the following reasons:

- Upkeep expense: The increase was due to additional requirements such as the implementation of mechanized cleaning of the airport terminal through the Mechanized Environmental Support Services (MESS) contract, which commenced in May 2017. Furthermore, in April 2019, the scope of work for the MESS contract was expanded, leading to further expense increments.
- Watch & Ward Expense: The cost escalated due to the engagement of the Kerala traffic police for traffic control purposes. Additionally, an increase in the cost of the bird chaser contract in FY 2017-18 contributed to the higher expenses.

3.4.19.3 While analyzing the expenses line item wise, it was observed that hiring of manpower cost related to cargo operation were included in the aeronautical expense amounting to Rs. 0.36 crores from FY 2017-18 to FY 2020-21. The cargo operations have been concessioned out to AAICLAS by AAI in FY 2017-18. AAI was asked to justify the same to which they responded that these services are being used by AAICLAS only and the same is recovered from AAICLAS which does not form part of revenue. Therefore, this expense should be excluded from aeronautical expenses.

3.4.19.4 Furthermore, it was observed that in FY 2020-21, the actual cost exceeded the projected figure in the SCP order, even after considering the impact of the COVID-19 pandemic restrictions. Upon review, it was noted that although electricity consumption had decreased, expenses related to hiring charges and other contracts for maintaining the airport continued to ensure its cleanliness and upkeep.

3.4.19.5 Taking into account the responses provided by AAI and the analysis conducted, it can be concluded that the expenses incurred were necessary for the proper functioning and maintenance of the airport. Therefore, the utility expenses for TRV in the SCP order appear to be reasonable.

3.4.19.6 Additionally, as per para 3.4.15.4 of the Study, Inline Manpower cost has been reclassified from R&M expense to Utilities & Outsourcing expenses in line with the hiring of manpower. After adjusting for this reclassification and adjustment of manpower cost for AAICLAS as explained in para 3.4.19.3, the revised Utility and Outsourcing Expenses for the SCP are as follows:

**Table 34: Utility and Outsourcing Expenses after adjustments as per the current Study**

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	Total
Utility & Outsourcing expenses as submitted by AAI (A)	13.64	16.57	16.52	18.68	16.83	82.25
Adjustments as per the Study						
Other Hire Charges. - AAICLAS (B)	-	-0.02	- 0.08	- 0.24	- 0.02	-0.36
In Line Bag Manpower (C)* (Refer Table 29 )	-	-	-	0.52	2.33	2.85
Total adjustments as per the Study (D = B + C)	-	-0.02	-0.08	0.29	2.30	2.49
Adjusted Utility & Outsourcing expenses as per the Study (E = A + D)	13.64	16.55	16.44	18.97	19.14	84.74

\* Inline Manpower cost has been reclassified from R&M expense to Utilities & Outsourcing expenses (refer para 3.4.15.4)

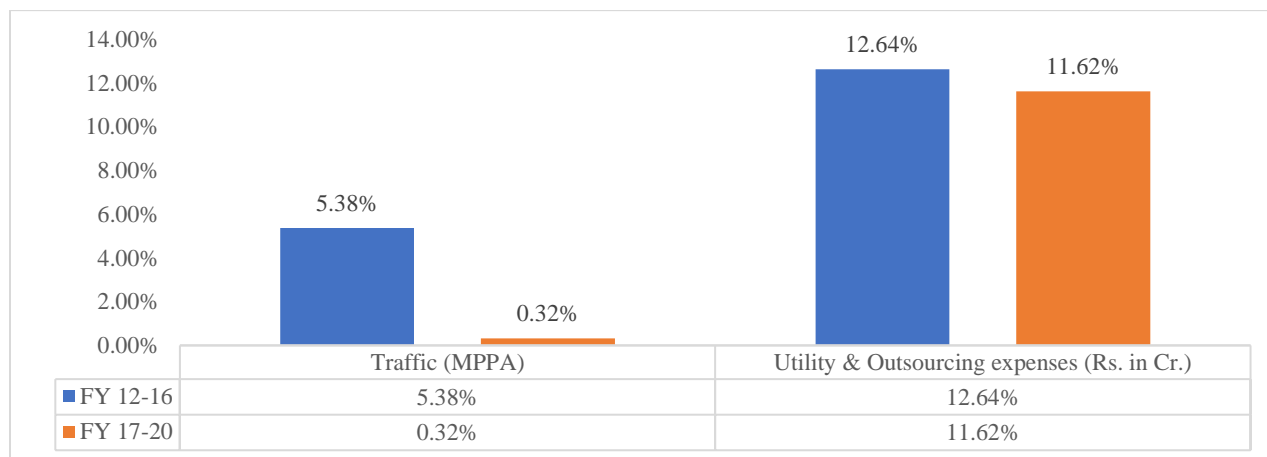
3.4.19.7 Furthermore, from an external benchmarking perspective, AAI's Utility and Outsourcing Expenses seem to be in line with the expenses incurred by other comparable airports. Detailed information regarding the external benchmarking analysis can be found in para 5.7.

#### 3.4.20 Trend Analysis

3.4.20.1 The trend analysis of CAGR of Utility and Outsourcing Expenses for the period FY 2011-12 to FY 2015-16 (i.e., First Control period) as compared with FY 2016-17 to FY 2019-20 (i.e., Second Control period excluding FY 2020-21-Covid Year) in correlation with per PAX has been presented in the tables and corresponding charts below:

**Table 35: Utility and Outsourcing Expenses in correlation with passenger traffic and terminal area**

Particulars	First Control Period							Second Control Period							
	FY 12	FY 13	FY 14	FY 15	FY 16	Total	CAGR (%) (FY12 - FY16)	FY 17	FY 18	FY 19	FY 20	Total	CAGR (%) (FY17 - FY20)	FY 21	Total
Traffic (MPPA)	2.81	2.84	2.93	3.17	3.47	15.23	5.38%	3.88	4.39	4.43	3.92	16.63	0.32%	0.94	17.56
Utility & Outsourcing expenses (Rs. in crores)	8.20	10.10	12.30	14.10	13.20	57.90	12.64%	13.64	16.55	16.44	18.97	65.60	11.62%	19.14	84.74
Utility & Outsourcing expenses per Pax (Rs.)	29.13	35.58	41.92	44.42	38.03			35.15	37.68	37.06	48.41			204.58	

**Figure 7: Utility and Outsourcing Expenses per pax and per sqm for the periods FY 2011-12 to FY 2015-16 and FY 2016-17 to FY 2019-20**

3.4.20.2 It can be observed from Table 31 and Figure 6, the CAGR of Utility and Outsourcing Expenses grew at a rate higher than the respective growth in Traffic of Passenger for both the First and Second Control Periods. However, it is observed that the CAGR of SCP (11.62%) is lower than the CAGR of FCP (12.64%) indicating a reduced growth rate in the expenses.

3.4.20.3 It was noted that Utility and Outsourcing expense per PAX for the both the control period seems to be in the range except in FY 2020-21 where the expense per PAX had increased due to the impact of the COVID-19 pandemic, which had caused a significant decrease in passenger traffic.

3.4.20.4 Based on the above analysis, it appears that the Utility and Outsourcing expenses for the SCP seem to be reasonable.

#### 3.4.21 Reallocation of Expenses

3.4.21.1 After adjustments in the Utility and Outsourcing expenses, the Study analysed the nature of each line item of Utility and Outsourcing Expenses to ascertain the cost allocated. AAI has allocated expenses based on actuals for which specific bifurcation towards aero, non-aero, ANS and common were available and for others and common expenses (remained after assigning specific to aero, non-aero and ANS), relevant ratios were applied.

3.4.21.2 However, the Study has undertaken a reclassification and reallocation of such Utility and Outsourcing Expenses based on the principles and revised ratio discussed in para 3.3.1 & 3.3.3 respectively. The following outlines the details of the reclassification and reallocation of expenses with the impact:

**Table 36: Reclassified and Reallocated Utility and Outsourcing Expenses for SCP as per the current Study**

Particulars (Rs. in crores)	Adjusted amount as per Table 34 (A)	AAI		Study		As per Study (B)	Impact (C = A - B)
		Classification	Allocation	Classification	Allocation		
Power Costs	46.49	Common	Electricity Ratio	Common	Electricity Ratio	46.49	-
Water Costs	1.37	Aeronautical	100%	Common	GBR	1.26	0.11
Consumption of Paper Glass	0.13	Aeronautical	100%	Aeronautical	100%	0.13	-

Particulars (Rs. in crores)	Adjusted amount as per Table 34 (A)	AAI		Study		As per Study (B)	Impact (C = A - B)
		Classification	Allocation	Classification	Allocation		
Consumption of Other Consumables	1.73	Actuals	Actuals	Actuals/Common	Actuals/TBLR (90:10)	1.72	0.01
Hire Charges of Car/Jeeps	1.71	Aeronautical	100%	Common	EHCR	1.60	0.10
Other Hire Charges.	2.66	Aeronautical	100%	Common	GBR	2.56	0.10
Consumption of Petrol, Oil, Lubricant (Car & Jeeps)	1.19	Aeronautical	100%	Common	EHCR	0.81	0.37
Watch & Ward Expense/Other Security Contracts	4.36	Common	TBLR	Common	TBLR (90:10)	4.34	0.02
Conservancy Charges/Cleaning Contracts (ESS)	8.35	Common	TBLR	Common	TBLR (90:10)	8.16	0.19
Upkeep (Mess)	13.89	Common	TBLR	Common	TBLR (90:10)	13.62	0.27
Inline Bag Manpower	2.85	Aeronautical	100%	Aeronautical	100%	2.85	-
<b>Total</b>	<b>84.74</b>					<b>83.56</b>	<b>1.18</b>
<b>Summary</b>							
<b>Utility &amp; Outsourcing Expenses submitted by AAI for SCP (Table 33) (D)</b>						<b>82.25</b>	
<b>Impact due to</b>							
Adjustments as per study (E)						2.49	
Reclassification and Reallocation (F)						-1.18	
<b>Total Impact (G = E + F)</b>						<b>1.31</b>	
<b>Utility &amp; Outsourcing Expenses as per the Study (H = D + G)</b>						<b>83.56</b>	

Note: Refer Annexure 2 for line-item wise reallocation and its impact of Utilities and Outsourcing Expenses.

3.4.21.3 As a result of the revision of Utility and Outsourcing Expenses as per the above table, the Aeronautical Utility and Outsourcing Expenses has been increased by Rs. 1.31 crores as compared to the expense submitted by AAI for true up.

#### 3.4.22 Summary

3.4.22.1 In para 3.4.19, it was observed that Utility and Outsourcing Expenses for SCP submitted by AAI was higher than the approved figure in the SCP order. On detailed analysis, it was observed that expenses incurred by AAI were necessary to spend and thus appears to be reasonable as compared to approved figure in the SCP Order and FCP actuals.

3.4.22.2 As per para 3.4.19.3, manpower cost for AAICLAS amounting to Rs.0.36 crores have been proposed to be excluded from the aeronautical expense.

3.4.22.3 As per para 3.4.19.6 of the Study, Inline Manpower cost has been reclassified from R&M expense to Utilities & Outsourcing expenses in line with the hiring of manpower.

3.4.22.4 From an external benchmarking perspective, the Utility and Outsourcing Expenses of AAI appear to be on par with the expenses incurred by other comparable airports (external benchmarking is detailed in para 5.7).

3.4.22.5 After considering the adjustments, the Utility and Outsourcing Expenses were reclassified and reallocated based on principle set in para 3.3.1. Due to such revision, the Aeronautical Utility and Outsourcing Expenses submitted by AAI for SCP was rationalized to Rs. 83.56 crores as per Table 36.

## 6. Other Outflows

#### 3.4.23 Reasonable assessment of Other Outflows (Comparison of Tariff Projections vs. Actuals)

**Table 37: Comparison of Other Outflows as per SCP Order vs Actuals**

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	Total
As per AAI submission						

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	Total
Collection charges on UDF (A)	0.12	0.63	0.88	0.53	0.03	2.18
Collection charges paid to IATA (Aero charges) (B)	1.19	1.78	1.84	2.50	0.42	7.72
Collection charges on PSF (C)	0.22	0.23	0.29	0.03	-	0.78
<b>Other outflows as submitted by AAI (D = A + B + C)</b>	<b>1.53</b>	<b>2.64</b>	<b>3.01</b>	<b>3.06</b>	<b>0.45</b>	<b>10.68</b>
<b>Other outflows as per SCP Order (E)</b>	<b>0.75</b>	<b>0.79</b>	<b>0.83</b>	<b>0.87</b>	<b>0.91</b>	<b>4.15</b>
<b>Difference (F = A - E)</b>	<b>0.78</b>	<b>1.85</b>	<b>2.18</b>	<b>2.19</b>	<b>-0.46</b>	<b>6.53</b>

- 3.4.23.1 From the above table, it can be observed that AAI has exceeded the approved amount of Rs. 4.15 crores specified in the SCP order for Other Outflows by incurring a total of Rs. 10.68 crores. It is important to note that the SCP Order only included projected figures for collection charges on UDF and PSF. However, the increase in cost compared to the approved figures in the SCP Order is mainly due to collection charges paid to IATA, which is the primary reason for the higher expenditure.
- 3.4.23.2 Further analysis reveals that in Table 19 of this Study in FY 2021-22 (Pre COD period), there were reversals of old Provision for IATA admin fees amounting to Rs. 0.51 crores. These reversals appear to be related to collection charges paid to IATA, but AAI was requested to provide details of the original cost booking. Unfortunately, no response has been received to date. In para 3.4.7.1 (7) it is proposed to consider the reversal entries from A&G expenses, as the expenses were incorrectly recognized in the previous periods.
- 3.4.23.3 Considering the analysis conducted, it can be concluded that the expenses incurred were necessary for the collection of aeronautical revenue and are based on actuals. Hence, the Other Outflows for TRV in the SCP order seem reasonable and appropriate, as submitted by AAI.
- 3.4.23.4 Furthermore, since the charges solely pertain to the collection of aeronautical revenues, there is no requirement for reclassification or reallocation of Other Outflows.

#### 3.4.24 Summary

- 3.4.24.1 The category of Other Outflows includes collection charges paid to airlines and IATA for UDF and PSF. The expenses incurred for SCP exceeded the approved figures in the SCP Order because the collection charges paid to IATA were not initially considered in the projections. However, these expenses were necessary for the collection of aeronautical revenue and were based on actual figures. Therefore, they are deemed reasonable and directly related to the collection of aeronautical revenues, eliminating the need for reclassification.

#### **Summary of O&M Expenses submitted by AAI and as per the Study for SCP**

##### 3.4.25 Allocation Ratios

- 3.4.25.1 The allocations ratios submitted by AAI and recomputed as per the Study are as follows:

**Table 38: Allocation Ratio's submitted by AAI and recomputed as per the current Study for SCP**

Particulars	FY 17	FY 18	FY 19	FY 20	FY 21
<b>Submitted by AAI</b>					
Employee Ratio (Aero : Non-Aero : ANS)	74.50% : 1.20% : 24.30%	72.31% : 1.24% : 26.45%	71.37% : 1.45% : 27.18%	70.21% : 1.06% : 28.72%	70.07% : 1.11% : 28.82%
Employee Ratio (Aero : Non-Aero)	98.41% : 1.59%	98.31% : 1.69%	98.01% : 1.99%	98.51% : 1.49%	98.44% : 1.56%
Terminal Building Ratio (Aero : Non-Aero)	92.34% : 7.66%	92.12% : 7.88%	92.21% : 7.79%	92.19% : 7.81%	93.29% : 6.71%
Electricity Ratio (Aero : Non-Aero : ANS)	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%
<b>Recomputed as per the Study</b>					

Particulars	FY 17	FY 18	FY 19	FY 20	FY 21
Employee Ratio (Aero : Non-Aero : ANS)	71.71% : 3.99% : 24.30%	69.23% : 4.32% : 26.45%	68.47% : 4.35% : 27.18%	66.90% : 4.38% : 28.72%	66.75% : 4.43% : 28.82%
Employee Ratio (Aero : Non-Aero)	94.73% : 5.27%	94.12% : 5.88%	94.02% : 5.98%	93.86% : 6.14%	93.78% : 6.22%
Terminal Building Ratio (Aero : Non-Aero)	90% : 10%	90% : 10%	90% : 10%	90% : 10%	90% : 10%
Electricity Ratio (Aero : Non-Aero : ANS)	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%
Gross Block Ratio (Aero : Non-Aero : ANS)	91.82% : 2.95% : 5.23%	91.68% : 2.93% : 5.39%	91.62% : 2.79% : 5.59%	91.89% : 2.6% : 5.51%	92.17% : 2.46% : 5.37%

### 3.4.26 O&M Expenses submitted by AAI and as per the current Study for SCP

#### Adjustment of O&M Expenses

3.4.26.1 Based on the analysis and rationale provided in paras 3.4.3, 3.4.7, 3.4.11, 3.4.15, 3.4.19 and 3.4.23 for each Head of O&M expenses, the expenses submitted by AAI for SCP has undergone adjustments. These adjustments are summarized in the table below to determine the adjusted figure for subsequent reclassification and reallocation:

**Table 39: Impact of Adjustments on the O&M Expenses submitted by AAI as per the current Study for SCP**

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	Total
<b>O&amp;M expenses as submitted by AAI (A)</b>	<b>111.01</b>	<b>136.60</b>	<b>152.05</b>	<b>169.01</b>	<b>127.64</b>	<b>696.30</b>
<b>Adjustment to</b>						
A&G Expenses (B)	-1.19	0.21	0.54	-0.42	-3.14	<b>-4.00</b>
CHQ/RHQ Expense (C)	-17.91	-25.49	-11.75	-8.84	-4.35	<b>-68.33</b>
Repair and Maintenance Costs (D)	-	-0.29	-0.65	-0.55	-2.33	<b>-3.82</b>
Utilities & Outsourcing Expenses (E)	-	-0.02	-0.08	0.29	2.30	<b>2.49</b>
<b>Total adjustments as per the Study (F = B + C + D + E)</b>	<b>-19.10</b>	<b>-25.58</b>	<b>-11.93</b>	<b>-9.52</b>	<b>-7.52</b>	<b>-73.66</b>
<b>Adjusted O&amp;M expenses as per the Study (G = A + F)</b>	<b>91.91</b>	<b>111.01</b>	<b>140.11</b>	<b>159.48</b>	<b>120.12</b>	<b>622.64</b>

#### Segregation of O&M Expenses

3.4.26.2 The table below presents the expense classification for aeronautical and common expenses, as well as the allocation ratio for each category and subcategory of O&M expenses related to the SCP submitted by AAI (Table 4) and as per the Study:

**Table 40: O&M expenses classification and allocation ratio adopted by AAI and as per the current Study for SCP**

Expense Category	Expense Sub-Category / Description	Expense Classification as per	
		AAI	Study
Payroll Costs	Salary, wages & bonus	Common (EHCR)	Common (EHCR)
A&G Expenses	Travelling Expenses; Expenditure on Seminar & Development Course; Freight Charges/Shifting Expenses; Insurance Costs	Aeronautical (100%)	Common (EHCR - Aero:Non-Aero)
	Municipal Tax; Rent, Rates & Taxes; Other Professional Fees & Expenses; Interest & Solatium Prior Period Expenses	Aeronautical (100%)	Common (GBR)
	Books, Journals & Periodicals; Telephone Charges; Office Expenses; Other Sundry Expenses; Expenditure on Rajbhasha	Common (EHCR - Aero:Non-Aero:ANS)	Common (EHCR - Aero:Non-Aero:ANS)

Expense Category	Expense Sub-Category / Description	Expense Classification as per	
		AAI	Study
R&M Expenses	Civil & Electrical works	Aeronautical (100%) / Common (TBLR)	Common (TBLR/GBR/EHCR)
	Furniture and Fittings	Common (EHCR)	Common (EHCR)
	Electronics	Aeronautical (100%) / Common (EHCR)	Common (TBLR/EHCR)
	Vehicle	Aeronautical (100%)	Common (EHCR)
Utility & Outsourcing Expenses	Hire Charges of Car/Jeeps; Consumption of Petrol Oil, Lubricant (Car & Jeeps)	Aeronautical (100%)	Common (EHCR - Aero:Non-Aero)
	Water Costs; Other Hire Charges	Aeronautical (100%)	Common (GBR)
	Consumption Of Other Consumables.	Actuals	Common (TBLR - 90:10)
	Watch & Ward Exp./Other Security Contracts; Conservancy Charges/Cleaning Contracts (ESS); Upkeep (MESS)	Common (TBLR)	Common (TBLR - 90:10)

### **Reclassification & Reallocation of O&M Expenses**

3.4.26.3 Based on the revised allocation ratios as presented in Table 38, the O&M expenses submitted by AAI after adjustments (Table 39) and reclassification (Table 40) has been reallocated. The impact of such reclassification and reallocation on each head of O&M expenses are summarized below:

**Table 41: Impact of Reclassification and Reallocation on the O&M expenses for SCP as per the current Study**

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	Total
<b>Adjusted O&amp;M Expense as per the Study (A)</b>	<b>91.91</b>	<b>111.01</b>	<b>140.11</b>	<b>159.48</b>	<b>120.12</b>	<b>622.64</b>
<b>Impact due to reclassification &amp; reallocation of</b>						
Employee Benefit Expenses (B)	-0.56	-0.86	-1.18	-1.09	-0.85	<b>-4.53</b>
A&G Expenses (C)	-0.21	-0.07	-0.12	-0.14	-0.08	<b>-0.62</b>
CHQ & RHQ Expenses (D)	-	-	-	-	-	-
R&M Expense (E)	-0.12	-0.05	-0.04	-0.05	-0.09	<b>-0.34</b>
Utility & Outsourcing Expenses (F)	-0.17	-0.20	-0.27	-0.24	-0.30	<b>-1.18</b>
Other Outflows (G)	-	-	-	-	-	-
<b>Total impact (G = B + C + D + E + F)</b>	<b>-1.05</b>	<b>-1.17</b>	<b>-1.60</b>	<b>-1.52</b>	<b>-1.32</b>	<b>-6.66</b>
<b>Revised O&amp;M expenses (H = A + G)</b>	<b>90.87</b>	<b>109.84</b>	<b>138.51</b>	<b>157.97</b>	<b>118.80</b>	<b>615.98</b>

### **Aeronautical O&M Expenses as per the Study for SCP**

3.4.26.4 The aeronautical O&M expenses of AAI as per the Study for SCP after taking into account the adjustments (Table 39), re-classification (Table 40) and re-allocation (Table 41) of O&M expenses is detailed in the following table:

**Table 42: Aeronautical O&M Expenses for AAI as per the current Study for SCP**

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	Total
<b>As per AAI Submission</b>						
Employee Benefit Expenses	48.71	60.58	74.97	78.42	58.01	<b>320.70</b>
A&G Expenses	2.61	1.90	2.56	3.92	5.59	<b>16.58</b>
CHQ & RHQ Expenses	32.58	43.44	42.45	52.47	31.11	<b>202.05</b>
R&M Expense	11.95	11.46	12.54	12.46	15.65	<b>64.05</b>
Utility & Outsourcing Expenses	13.64	16.57	16.52	18.68	16.83	<b>82.25</b>
Other Outflows	1.53	2.64	3.01	3.06	0.45	<b>10.68</b>
<b>Total Aeronautical O&amp;M Expenses (A)</b>	<b>111.01</b>	<b>136.60</b>	<b>152.05</b>	<b>169.01</b>	<b>127.64</b>	<b>696.30</b>
<b>As per the Study</b>						
Employee Benefit Expenses	48.15	59.73	73.80	77.33	57.16	<b>316.17</b>
A&G Expenses	1.21	2.05	2.98	3.35	2.37	<b>11.96</b>
CHQ & RHQ Expenses	14.67	17.96	30.70	43.63	26.76	<b>133.72</b>
R&M Expense	11.83	11.11	11.86	11.86	13.23	<b>59.89</b>



<b>Particulars (Rs. in crores)</b>	<b>FY 17</b>	<b>FY 18</b>	<b>FY 19</b>	<b>FY 20</b>	<b>FY 21</b>	<b>Total</b>
Utility & Outsourcing Expenses	13.47	16.36	16.16	18.73	18.83	<b>83.56</b>
Other Outflows	1.53	2.64	3.01	3.06	0.45	<b>10.68</b>
<b>Total Aeronautical O&amp;M Expenses (B)</b>	<b>90.87</b>	<b>109.84</b>	<b>138.51</b>	<b>157.97</b>	<b>118.80</b>	<b>615.98</b>
<b>Difference (C = A - B)</b>	<b>20.15</b>	<b>26.76</b>	<b>13.54</b>	<b>11.04</b>	<b>8.84</b>	<b>80.32</b>

### 3.5 Assessment of O&M Expenses and its allocation submitted by AAI and as per the current Study for Pre-COD Period

#### Estimated Pre-COD O&M Expenses in accordance with SCP Order: A Basis for Actual Comparison

#### 3.5.1 Background

3.5.1.1 As indicated in para 1.1.4 and 1.1.5 of this Study, TRV was concessioned out to TKIAL on 19th January 2021 by AAI to operate, manage, and develop the airport for a lease period of 50 years. TKIAL commenced operations on 14th October 2021, which is referred to as the Commencement Operation Date (COD).

3.5.1.2 According to Clause 28.1.1 of the Concession Agreement, it is stated that:

*“On and from COD and till the Transfer Date, the Concessionaire has the sole and exclusive right to demand, collect and appropriate Fees from the Users for the provision of the Aeronautical Services and Non-Aeronautical Services, including the airlines and passengers, in accordance with the provisions of the Regulatory Framework and this Agreement including the terms set out in Schedule R (Memorandum of Understanding), provided that the Concessionaire may determine and collect Fees at such lower rates as may be agreed with the Users or any category of Users in accordance with the Applicable Laws and Applicable Permits.”*

3.5.1.3 Based on the aforementioned details, AAI had the right to operate the airport until 13<sup>th</sup> October 2021.

#### 3.5.2 Approach for Estimating O&M Expenses for Pre-COD Period

3.5.2.1 In the context of the Control Period and true-up process, it is essential to highlight that the COD of the airport, which took place in FY 2021-22, falls outside the control of 5 years of the Second Control Period for true-up purposes. The true-up process involves reconciling the actual expenses with the figures approved by AERA.

3.5.2.2 However, in Public Notice No. 05/2022-23 issued on 20th June 2022, AERA has noted that the true-up for the period from 1st April 2021 to 31st March 2022 will be made during the determination of tariffs for the upcoming Third Control Period.

3.5.2.3 To accurately assess the expenses incurred during the pre-COD period, a comparison between actuals and estimated figures becomes necessary. The proposed approach involves extrapolating the approved figures of FY 2020-21 of the SCP order, to the Pre-COD period. This extrapolation will be based on the growth rate used to project expenses for FY 2020-21 in the SCP order.

3.5.2.4 By utilizing this methodology, the Study ensures an effective comparison and analysis of the O&M expenses for Pre-COD Period against the benchmark established in the SCP order.

**Table 43: O&M expenses for Pre-COD Period (196 days) extrapolated based on growth rates decided in the SCP Order for FY 2020-21**

Particulars (Rs. in crores)	FY 21	Growth %	FY 22	Pre COD*
Employee Benefit Expense	83.44	7.00%	89.28	47.94
A&G Expenses	3.89	10.00%	4.28	2.30
CHQ & RHQ Expense	27.59	5.00%	28.97	15.56
R&M Expenses	14.44	10.00%	15.88	8.53
Utilities and Outsourcing Expenses	14.79	3.00%	15.23	8.18
Other Outflows	0.91	5.00%	0.96	0.51
<b>Total O&amp;M Expenses</b>	<b>145.06</b>		<b>154.60</b>	<b>83.02</b>

\* Pre COD-Expense = FY22\*196/365 considering the number of days till COD

**Head wise assessment of O&M expenses submitted by AAI for Pre-COD Period**

3.5.3 The principles governing the segregation of expenses and the revised allocation ratio to be applied to Pre COD period expenses have been addressed in para 3.3.1 & 3.3.2. The next step is to review the true-up of O&M expenses submitted by AAI for the Pre COD period. To facilitate this process, the Study presents a comparison between the actual expenses reported by AAI and the Estimated O&M expenses calculated in Table 43 for the Pre COD period.

**Table 44: Comparison of Estimated v/s Actual O&M expenses for the Pre-COD Period**

Particulars (Rs. in crores)	Submitted by AAI (A)	Estimated as per the Study (Table 43) (B)	Difference (C = A - B)	Ref.
Employee Benefit Expense	33.30	47.94	-14.64	1
A&G Expenses	0.04	2.30	-2.26	2
CHQ & RHQ Expense	17.54	15.56	1.99	3
R&M Expenses	9.61	8.53	1.08	4
Utilities and Outsourcing Expenses	9.63	8.18	1.45	5
Other Outflows	0.66	0.51	0.14	6
<b>Total O&amp;M Expenses</b>	<b>70.78</b>	<b>83.02</b>	<b>-12.24</b>	

3.5.4 The subsequent paragraphs provide a comprehensive analysis and observations pertaining to the variances associated with specific head of O&M expenses. These variances are discussed in the same sequential order as presented in the above Table 44.

**1. Employee Benefit Expense**

3.5.5 **Reasonable assessment of Employee Benefit Expense (Comparison of Tariff Projections vs. Actuals)**

**Table 45: Comparison of Employee benefit expense as per Estimated vs Actuals**

Particulars (Rs. in crores)	Submitted by AAI (A)	Estimated as per the Study (B)	Difference (C = A - B)
Employee Benefit Expense	33.30	47.94	-14.64

3.5.5.1 Upon reviewing the above table, it is noted that AAI's Employee benefit expenses of Rs. 33.30 crores are lower than the estimated amount of Rs. 47.94 crores and therefore, the expenses have been reasonably incurred.

**3.5.6 Reallocation of Expenses**

3.5.6.1 During the analysis, it was observed that the retirement benefit expense of the selected employees (employees deployed to TKIAL during the Joint Management Period (1CY after COD) and Deemed Deputation Period (2CY after Joint Management Period (JMP)) amounting to Rs. 2.06 crores were considered as 100% aeronautical by AAI, which is inappropriate.

3.5.6.2 After reviewing the departments and nature of services provided by the selected employees, it was determined that there is a mix of aero, non-aero, and common employees. Therefore, to present a fair picture of aeronautical expenses, the revised EHCR (Employee Head Count Ratio) calculated in para 3.3.2 is be applied to such expenditure.

3.5.6.3 AAI has allocated the Common Employee Benefit Expenses based on the Employee Head Count ratio determined by them (refer Table 8). However, as explained in para 3.3.3.5 the EHCR has been revised as per the Study (refer Table 10).

- 3.5.6.4 Thus, on account of the revision in the EHCR, the Common Employee Benefit Expenses and Retirement benefits allocated by CHQ have been reallocated based on the ratio proposed as per the Study, thereby reducing the Aeronautical employee benefit expenses by Rs. 1.99 crores. The impact on account of the proposed reallocation is summarized below:

**Table 46: Impact on Aeronautical Employee Benefit Expenses**

Particulars (Rs. in crores)	Pre COD
<b>AAI's submission</b>	
Salaries and Wages	19.44
PF Contribution	2.00
Fringe Benefits, incl. Perks & Medical Exp.	8.51
Overtime	1.18
Allocation of Retirement Benefit provided at CHQ in r/o TRV Employees	2.18
<b>Grand Total</b>	<b>33.30</b>
Less: Common Employee Expenses pertains to ANS	-
Less: Common Employee Expenses pertains to Non-Aero	-
Less: Cost of Redeployment (DIAL/MIAL)	-
<b>Net Employee expenses (A)</b>	<b>33.30</b>
<b>Revision as per the Study</b>	
Salaries and Wages	18.29
PF Contribution	1.88
Fringe Benefits, incl. Perks & Medical Exp.	8.01
Overtime	1.11
Allocation of Retirement Benefit provided at CHQ in r/o TRV Employees	2.02
<b>Grand Total</b>	<b>31.31</b>
Less: Common Employee Expenses pertains to ANS	-
Less: Common Employee Expenses pertains to Non-Aero	-
Less: Cost of Redeployment (DIAL/MIAL)	-
<b>Net Employee expenses (B)</b>	<b>31.31</b>
<b>Downward adjustment in Aeronautical expenses (C = A – B)</b>	<b>1.99</b>

### 3.5.7 Summary

- 3.5.7.1 Based on the Reasonableness assessment in para 3.5.5, it was observed that employee expenses for the Pre COD period seems to be reasonable.
- 3.5.7.2 Due to revision in the allocation ratio as per the Study, the Aeronautical employee benefit expenses submitted by AAI for Pre-COD Period were reduced by Rs. 1.99 crores (Rs. 33.30 crores as per Table 44 to Rs. 31.31 crores as per Table 46).

## 2. Administration and General (A&G) Expense

- 3.5.8 **Reasonable assessment of Administration and General Expense (Comparison of Tariff Projections vs. Actuals)**

**Table 47: Comparison of A&G expenses as per Estimated vs Actuals**

Particulars (Rs. in crores)	Submitted by AAI (A)	Estimated as per the Study (B)	Difference (C = A - B)
A&G Expenses	0.04	2.30	-2.26

- 3.5.8.1 From the above table, it can be observed that the A&G expenses of Rs. 0.04 crores incurred by AAI is lower than the estimated amount of Rs. 2.30 crores. Upon analysis, it has been observed that the aforementioned decrease in expenses can be attributed to the following factors:

1. **Municipal Taxes:** After receiving clarifications from AAI regarding Municipal taxes during the analysis of expenses for the SCP in para 3.4.7.1(2), it was observed that even during the Pre COD period, the local authority had raised a demand of Rs. 0.20 crores to cover the liability of municipal tax for the period starting from FY 2016-17 to FY 2021-22 (half-year). The Study considers it as reasonable as the expenses have been incurred and booked based on the demand raised by the local Authority. Considering the analysis in para 3.4.7.1(2), the Study deems it reasonable that the expenses related to municipal taxes have been incurred and properly booked based on the demand raised by the local authority..
2. **Interest on Capex:** It has been noted that interest on Capex has been included in the admin expenses for the Pre COD period also. Upon analysis it was observed that the amount submitted by AAI is Rs. 0.23 crores, but according to the Trial Balance, the interest on term loan recorded for the Pre COD period is Rs. 0.83 crores. This discrepancy appears to be a linking error.

Considering the explanation and reasoning provided in para 3.4.7.1(6), noting that interest on Capex represents the financing cost incurred in acquiring capital assets, it is recommended that this cost should be capitalized and considered as part of the Regulatory Asset Base (RAB), rather than being categorized as an O&M expense.

3. **Prior Period Expenses:** During Pre-COD period, a negative figure of Rs. 1.19 crores were recorded, as shown in the table below. Further analysis revealed the following:

**Table 48: Observation related to Prior Period Expenses of Pre-COD Period**

Year	Particular	Amount (Rs. in crores)	Observations
FY22	PP Expense -Admin & other	-1.19	Reversal of old provisions for IATA administrative fees.

Based on the above observation, it is apparent that clarification is required regarding the original entry date of the cost booking and reversal entries. AAI was unable to provide the necessary information, making it challenging to accurately adjust the expenses recorded under the prior period expense category. Consequently, the Study proposes considering the reversals (refer para 3.4.7.1(7)) as submitted, as an adjustment in the Pre-COD Period.

4. **Interest on Finance Lease:** The detailed explanation and adjustment has been provided in para 3.4.7.1(8). Therefore, based on the adjustment as explained in the said para, the lease expense under A&G expenses for Pre-COD Period is considered as follows:

**Table 49: Lease Expense Adjustment as per the current Study for Pre-COD Period**

Particulars (Rs. in crores)	Pre COD
R&M BOT XBIS Lease (A)	-
Operational Lease payment as per adjustment (B)	0.35
<b>R&amp;M BOT XBIS LEASE (Adjustment) (C = A + B)</b>	<b>0.35</b>

- 3.5.8.2 The adjustments have been made to rectify , and revise the A&G expenses, which are presented below, appears to be reasonable as compared to figures estimated for Pre COD period (refer para 3.5.2):

**Table 50: A&G expenses after adjustments as per the current Study for Pre-COD Period**

Particulars (Rs. in crores)	Pre COD
<b>A&amp;G Expense as per AAI's submission (A)</b>	<b>0.04</b>
<b>Adjustments as per the Study</b>	
Telephone Charges (B)	-0.04
Interest & Solatium (C)	-

Particulars (Rs. in crores)	Pre COD
Other Sundry Expenses (D)	-
Int Capex Term Loan Axis (E)	-0.23
Int on Fin Leas XBIS (F)	-
PP Exp-Admin & other expenses (G)	-
R&M BOT XBIS Lease (H)	0.35
<b>Total adjustments as per the Study (I = Sum of B to H)</b>	<b>0.08</b>
<b>Adjusted A&amp;G Expense (J = A + I)</b>	<b>0.12</b>

### 3.5.9 Reclassification and Reallocation of Expenses

- 3.5.9.1 The analysis revealed that these expenses encompass a wide range of costs associated with various aspects, including travel, advertising, municipal taxes, rent, rates, insurances, and more. These costs may have a direct or indirect connection to employees, terminal buildings and the airport as a whole.
- 3.5.9.2 Consequently, the Study has undertaken a reclassification and reallocation of certain components of A&G expenses based on the principles and revised ratio discussed in para 3.3.1 & 3.3.3 respectively. The following outlines the details of the reclassification and reallocation of expenses with the impact:

**Table 51: Reclassification and Reallocation of A&G Expenses as per the current Study for Pre-COD Period**

Particulars (Rs. in crores)	Adjusted Amount as per Table 50 (A)	Classification		Allocation		As per Study (B)	Impact (C = A – B)
		AAI	Study	AAI	Study		
Travelling Expenses	0.26	Aeronautical	Common	100%	EHCR (Aero:Non-Aero)	0.25	0.01
Municipal Tax	0.20	Aeronautical	Common	100%	GBR	0.19	0.02
Rent, Rates & Taxes	0.00	Aeronautical	Common	100%	GBR	0.00	0.00
Other Fees Like Aerodrome Licencing	0.05	Aeronautical	Aeronautical	100%	100%	0.05	-
Advertisement-Inviting Tender.	0.01	Common	Common	Actuals	Actuals	0.01	-
Books, Journals & Periodicals.	0.00	Common	Common	EHCR (Aero:Non-Aero:ANS)	EHCR (Aero:Non-Aero:ANS)	0.00	0.00
Arbitration Exp.	0.03	Common	Common	Actuals	Actuals	0.03	-
Telephone Charges	0.08	Common	Common	EHCR (Aero:Non-Aero:ANS)	EHCR (Aero:Non-Aero:ANS)	0.08	0.00
Legal Charges	0.02	Common	Common	Actuals	Actuals	0.02	-
Other Professional Fees & Expense.	0.22	Aeronautical	Common	100%	GBR	0.20	0.02
Expenditure On Seminar & Development Course	-	Aeronautical	Common	100%	EHCR (Aero:Non-Aero)	-	-
Insurance Costs	0.01	Aeronautical	Common	100%	GBR/EHCR	0.01	-0.00
Office Expenses.	0.04	Common	Common	EHCR (Aero:Non-Aero:ANS)	EHCR (Aero:Non-Aero:ANS)	0.04	0.00
Interest & Solatium	-	Aeronautical	Common	100%	GBR	-	-
Other Sundry Expenses	0.04	Common	Common	EHCR (Aero:Non-Aero:ANS)	EHCR (Aero:Non-Aero:ANS)	0.04	0.00

Particulars (Rs. in crores)	Adjusted Amount as per Table 50 (A)	Classification		Allocation		As per Study (B)	Impact (C = A – B)
		AAI	Study	AAI	Study		
Freight Charges/Shifting Expenses.	0.00	Aeronautical	Common	100%	EHCR (Aero:Non-Aero)	0.00	0.00
Expenditure On Rajbhasha	0.01	Common	Common	EHCR (Aero:Non-Aero:ANS)	EHCR (Aero:Non-Aero:ANS)	0.01	0.00
INT. Capex term loan	-	Aeronautical		100%		-	-
Int On Fin Leas XBIS	-	Aeronautical		100%		-	-
PP Exp-Admin & Other exp	-1.19	Aeronautical		100%		-1.19	-
R&M BOT XBIS LEASE	0.35		Aeronautical		100%	0.35	-
<b>Total</b>	<b>0.12</b>					<b>0.06</b>	<b>0.05</b>
<b>Summary</b>							
<b>A&amp;G Expenses submitted by AAI for SCP (Table 47) (D)</b>						<b>0.04</b>	
<b>Impact due to</b>							
Adjustments as per study (E)						0.08	
Reclassification and Reallocation (F)						-0.05	
<b>Total Impact (G = E + F)</b>						<b>0.03</b>	
<b>A&amp;G Expenses as per the Study (H = D + G)</b>						<b>0.06</b>	

3.5.9.3 As a result of the revision of A&G expenses as per the above table, the Aeronautical A&G expenses have been increased by Rs. 0.03 crores as compared to the expenses submitted by AAI for true up of Pre-COD Period.

### 3.5.10 Summary

3.5.10.1 In para 3.5.8.1, it was observed that A&G expenses for Pre COD period submitted by AAI was lower than the estimated figure. On detailed analysis, it was observed that major reasons for decrease was reversals booked under the head Prior Period Expenses that has been considered as per the Study to reduce expenses that were overbooked or incorrectly recognized in previous periods. The Study has made adjustment of lease accounting provisions recorded by AAI for payment of lease by treating it as financial lease.

3.5.10.2 After adjustments, the A&G expenses seem to be reasonable as compared to the estimated amount.

3.5.10.3 A&G expenses were adjusted, reclassified and reallocated based on principle set in para 3.3.1. Due to such revision, the Aeronautical A&G expenses submitted by AAI for Pre-COD Period were increased by Rs. 0.03 crores (Rs. 0.04 crores as per Table 47 to Rs. 0.06 crores as per Table 51).

## 3. CHQ & RHQ Expense

### 3.5.11 Reasonable assessment of CHQ & RHQ Expense (Comparison of Tariff Projections vs. Actuals)

**Table 52: Comparison of CHQ & RHQ Expense as per Estimated vs Actuals**

Particulars (Rs. in crores)	Submitted by AAI (A)	Estimated as per the Study (B)	Difference (C = A - B)
CHQ & RHQ Expense	17.54	15.56	1.99

3.5.11.1 From the information provided in the table, it is evident that AAI's CHQ & RHQ Expense of Rs. 17.54 crores exceeded the estimated amount of Rs. 15.56 crores. This difference occurred due to a revision in the allocation of CHQ & RHQ Expenses by AAI. It is to be noted that, AAI has, for Pre-COD Period, calculated the expense

by applying a 5% growth rate (as approved in the SCP order) to the actual expenses of FY 2020-21 and proportionating it to 196 days, which covers the Pre COD period. Upon seeking clarification for not submitting the actuals, AAI responded that the working on CHQ/RHQ expenses for FY 2021-22 is still in progress and will be provided once it is completed.

3.5.11.2 It has been observed that AAI adopted a growth rate that was already decided by the Authority in the SCP Order, which appears reasonable. However, according to the analysis conducted in para 3.4.13, the base year cost, i.e., FY 2020-21, should be considered based on the revised figure obtained after rationalization of CHQ & RHQ Expense.

3.5.11.3 In para 3.4.13, the following rationalization was proposed for CHQ & RHQ expenses incurred in the SCP:

- i. Excluding 20% of CHQ and RHQ pay and allowances towards adjustment for support services to ANS, Cargo, Commercial at CHQ & RHQ and Officials of Directorate and Commercial.
- ii. Excluding the allocated costs of legal and arbitration expenses and interest and penalties paid to Government of India by AAI at CHQ & RHQ.

3.5.11.4 Based on the rationalization and allocation mentioned above, the CHQ & RHQ expense for FY 2020-21 has been revised to Rs. 26.76 crores (refer Table 27). Therefore, considering FY 2020-21 as the base and applying a growth rate of 5%, and proportionating it to the Pre-COD period, the CHQ & RHQ Expense for the Pre COD period will be Rs. 15.09 crores.

**Table 53: CHQ & RHQ Expense after rationalization and allocation for Pre-COD Period**

Particulars (Rs. in crores)	Pre COD
Allocation of CHQ/ RHQ – Administrative and other expenses by AAI (A)	17.54
Revised allocation of CHQ/ RHQ expenses as per Study (B)	15.09
<b>Amount not proposed to be considered as per Study (C = A – B)</b>	<b>2.45</b>

#### 3.5.12 Summary

3.5.12.1 It was observed that AAI reported higher CHQ & RHQ expenses for the Pre COD period compared to the estimated amount. The expense for the Pre COD period was calculated by applying a 5% growth rate to the actual expenses of FY 2020-21, as submitted by AAI, since the workings for CHQ & RHQ expenses for FY 2021-22 were not finalized.

3.5.12.2 Therefore, based on AAI's responses, the revised CHQ & RHQ expenses were calculated using the revised FY 2020-21 figures. Through this revision, the aeronautical CHQ & RHQ expenses submitted by AAI for the Pre COD period was reduced by Rs. 2.45 crores. This needs to be suitably reviewed based on actual information to be made available before the Order.

#### 4. Repairs and Maintenance (R&M) Expense

3.5.13 **Reasonable assessment of Repairs and Maintenance Expense (Comparison of Tariff Projections vs. Actuals)**

**Table 54: Comparison of R&M Expenses as per Estimated vs Actuals**

Particulars (Rs. in crores)	Submitted by AAI (A)	Estimated as per the Study (B)	Difference (C = A - B)
R&M Expenses	9.61	8.53	1.08



- 3.5.13.1 From the above table, it is noted that AAI has incurred Rs. 9.61 crores in R&M expenses, surpassing the estimated amount of Rs. 8.53 crores.
- 3.5.13.2 While reviewing the R&M expenses line-item wise, it is noted that AAI had incurred significant expenses in the electronic expenses for Pre-COD Period (increased by 122% as compared to FY 2020-21).
- 3.5.13.3 AAI was asked to justify the increase, to which AAI responded that in Pre COD period, expenses for trolley retrievers were incurred, and all security-related expenditures such as AMC of security equipment, ILBS, inline XBIS expenses of Rs. 1.87 crores were booked under this code.
- 3.5.13.4 Based on the clarification provided by AAI and detailed analysis of other expenses, it was observed that AAI had incurred reasonable R&M expenses compared to what was estimated.
- 3.5.13.5 Upon conducting a detailed analysis of the actual R&M expenses in relation to the Regulated Asset Base (RAB) as presented below, it is evident that these expenses consistently remain below 6% of the Opening RAB throughout all the years of the Second Control Period. This assessment aligns with the methodology employed by the Authority in similar airports.

**Table 55: R&M expense as a % of opening RAB**

Particulars (Rs. in crores)	Pre COD
R&M Expenses as submitted by AAI (A)	9.61
Opening RAB (as per Asset Allocation Report) (B)	496.28
<b>Repairs &amp; Maintenance expenses calculated at 6% on Opening RAB (C)</b>	<b>1.94%</b>

- 3.5.13.6 By comparing the R&M expenses to the Opening RAB, it is concluded that the expenses incurred are within reasonable limits. Consequently, there is no apparent need for any adjustment to be made in this regard.

#### 3.5.14 Reallocation of Expenses

- 3.5.14.1 The Study undertake reclassification and reallocation of R&M expenses based on the principles and revised ratio discussed in para 3.3.1 & 3.3.3 respectively. The following table outlines the details of the reclassification and reallocation of expenses with the impact:

**Table 56: Reclassified and Reallocated R&M expenses as per the current Study for Pre-COD Period**

Particulars (Rs. in crores)	Aeronautical R&M Expense		Impact (C = A - B)
	AAI (A)	Study (B)	
Civil Works	1.73	1.77	-0.04
Electrical works	4.35	4.29	0.06
Furniture and Fittings	0.00	0.00	0.00
Electronics	2.64	2.63	0.01
AOCC Expenses	0.78	0.78	-
Vehicle	0.10	0.10	0.00
<b>Total</b>	<b>9.61</b>	<b>9.58</b>	<b>0.03</b>

*Note: Refer Annexure 1 for line item was reallocation*

- 3.5.14.2 As a result of the revision of R&M Expenses as per the above table, the Aeronautical R&M Expenses have been reduced by Rs. 0.03 crores as compared to the cost submitted by AAI for true up.

#### 3.5.15 Summary

- 3.5.15.1 In Pre-COD Period, it was observed that R&M Expenses submitted by AAI was higher than the estimated figures. Upon detailed analysis, it was determined that the expenses incurred by AAI were necessary and reasonable.

3.5.15.2 By comparing the R&M expenses to the Opening RAB, it is concluded that the expenses incurred are within reasonable limits i.e., 6% of the Opening RAB (benchmark set by the Authority for most of the airports).

3.5.15.3 R&M Expenses for the Pre-COD Period was reclassified and reallocated based on principle set in 3.3.1. Due to such revision, the Aeronautical R&M Expenses submitted by AAI were reduced by Rs. 0.03 crores (Rs. 9.61 crores as per Table 54 to Rs. 9.58 crores as per Table 56) for Pre-COD Period

## 5. Utility and Outsourcing Expense

### 3.5.16 Reasonable assessment of Utility and Outsourcing Expense (Comparison of Tariff Projections vs. Actuals)

**Table 57: Comparison of Utility and Outsourcing Expenses as per Estimated vs Actuals**

Particulars (Rs. in crores)	Submitted by AAI (A)	Estimated as per the Study (B)	Difference (C = A - B)
Utilities and Outsourcing Expenses	9.63	8.18	1.45

3.5.16.1 From the above table, it can be observed that AAI has exceeded the estimated amount by Rs. 1.45 crores. Upon analysis, it was noticed that in Pre-COD Period, the major expense was towards hiring manpower for screening of ILBS for Rs. 1.01 crores and trolley retrieval of Rs. 0.23 crores.

3.5.16.2 Based on response provided by AAI, it is noted that expenses were incurred to maintain the facilities provided to the passengers and for proper functioning and maintenance of the airport as most of the services were related to improving security and maintaining the overall operational efficiency of the airport. Therefore, the utility expenses for Pre-COD Period appear to be reasonable.

### 3.5.17 Reallocation of Expenses

3.5.17.1 AAI has allocated expenses based on actuals for which specific bifurcation towards aero, non-aero, ANS and common were available and for others and common expenses (remained after assigning specific to aero, non-aero and ANS) relevant ratios were applied.

3.5.17.2 Based on the principles and revised ratio discussed in para 3.3.1 & 3.3.3 respectively, the following expenses were reclassified and reallocated:

**Table 58: Reclassified and Reallocated Utility and Outsourcing Expenses as per the current Study for Pre-COD Period**

Particulars (Rs. in crores)	Amount submitted by AAI (A)	AAI		Study		As per Study (B)	Impact (A - B)
		Classification	Allocation	Classification	Allocation		
Power Costs	3.97	Common	Electricity Ratio	Common	Electricity Ratio	3.97	-
Water Costs	0.12	Aeronautical	100%	Common	GBR	0.11	0.01
Consumption of Paper Glass	-	Aeronautical	100%	Aeronautical	100%	-	-
Consumption of Other Consumables	0.18	Actuals	Actuals	Actuals / Common	Actuals/TBLR (90:10)	0.18	0.00
Hire Charges of Car/Jeeps	0.21	Aeronautical	100%	Common	EHCR	0.19	0.02
Other Hire Charges.	1.56	Aeronautical	100%	Common	GBR	1.56	-0.00
Consumption of Petrol, Oil, Lubricant (Car & Jeeps)	0.18	Aeronautical	100%	Common	EHCR	0.11	0.06
Watch & Ward Expense/Other Security Contracts	0.75	Common	TBLR	Common	TBLR (90:10)	0.75	0.00
Conservancy Charges/Cleaning Contracts (ESS)	1.15	Common	TBLR	Common	TBLR (90:10)	1.13	0.03
Upkeep (Mess)	1.52	Common	TBLR	Common	TBLR (90:10)	1.51	0.01

Particulars (Rs. in crores)	Amount submitted by AAI (A)	AAI		Study		As per Study (B)	Impact (A - B)
		Classification	Allocation	Classification	Allocation		
In Line Bag Manpower	-	Aeronautical	100%	Aeronautical	100%	-	-
<b>Total</b>	<b>9.63</b>					<b>9.50</b>	<b>0.13</b>

*Refer Annexure 2 for line-item wise reallocation and its impact of Utilities and Outsourcing Expenses*

3.5.17.3 As a result of the revision of Utility and Outsourcing Expenses as per the above table, the Aeronautical Utility and Outsourcing Expenses has been reduced by Rs. 0.13 crores as compared to the cost submitted by AAI for true up.

### 3.5.18 Summary

3.5.18.1 It was observed that Utility and Outsourcing Expenses for Pre-COD Period submitted by AAI was higher than the estimated figure. On detailed analysis, it was found that expenses incurred by AAI were necessary to spend and thus appear to be reasonable.

3.5.18.2 After adjustments, the Utility and Outsourcing Expenses was reclassified and reallocated based on principle set in 3.3.1. Due to such revision, the Aeronautical Utility and Outsourcing Expenses submitted by AAI for Pre COD was reduced by Rs. 0.13 crores (Rs. 9.63 crores as per Table 57 to Rs. 9.50 crores as per Table 58)

## 6. Other Outflows

### 3.5.19 Reasonable assessment of Other Outflows (Comparison of Tariff Projections vs. Actuals)

**Table 59: Comparison of Other Outflows as per Estimated vs Actuals**

Particulars (Rs. in crores)	Submitted by AAI (A)	Estimated as per the Study (B)	Difference (C = A - B)
Other Outflows	0.66	0.51	0.14

3.5.19.1 It can be observed from the table that AAI has exceeded the estimated figure by Rs. 0.14 crores. This increase in cost is mainly due to the collection charges paid to IATA, which were not initially included in the projected figures for collection charges on UDF and PSF as per the SCP Order.

3.5.19.2 Based on this information, it can be concluded that the expenses incurred for the collection of aeronautical revenue are necessary and justified. The expenses are based on actuals and therefore the Other Outflows for the Pre-COD period appear to be reasonable and appropriate, as submitted by AAI.

3.5.19.3 Since the charges are specifically related to the collection of aeronautical revenues, there is no need for reclassification or reallocation of Other Outflows.

### 3.5.20 Summary

3.5.20.1 The category of Other Outflows includes collection charges paid to airlines and IATA for UDF and PSF. The expenses incurred for the Pre-COD Period exceeded the estimated figures because the collection charges paid to IATA were initially not considered in the projections. However, these expenses were necessary for the collection of aeronautical revenue and were based on actual figures. Therefore, they are deemed reasonable and directly related to the collection of aeronautical revenues, eliminating the need for reclassification.

### **Summary of O&M Expenses submitted by AAI and as per the Study for Pre-COD Period**

#### 3.5.21 O&M Expenses submitted by AAI and as per the current Study for Pre-COD Period

3.5.21.1 The O&M expenses of Pre COD period submitted by AAI have been adjusted with rationalization of CHQ/RHQ cost, prior period adjustments, errors etc. The revised O&M expense after adjustments amounts to Rs. 63.04 crores. The same has been presented below:

**Table 60: Impact of Adjustments on the O&M Expenses submitted by AAI as per the current Study for Pre-COD Period**

Particulars (Rs. in crores)	Pre COD
<b>O&amp;M expenses as submitted by AAI (A)</b>	<b>70.78</b>
<b>Adjustment to</b>	
Admin & Other Expenses (B)	0.08
CHQ & RHQ Expenses (C)	-2.45
Repair and Maintenance Costs (D)	-
Utilities & Outsourcing Expenses (E)	-
<b>Total adjustments as per the Study (F = B + C + D + E)</b>	<b>-2.37</b>
<b>Adjusted O&amp;M expenses as per the Study (G = A + F)</b>	<b>68.40</b>

3.5.21.2 Based on a detailed analysis of the O&M expenses for the Pre-COD Period, necessary adjustments have been made. The expenses, after these adjustments, have been reclassified according to the principle defined in para 3.3.1 and reallocated using the revised ratios provided in Table 13. The following table summarizes the impact of such reclassification and reallocation on each head of O&M expenses:

**Table 61: Impact of Reclassification and Reallocation on the O&M expenses as per the current Study for Pre-COD Period**

Particulars (Rs. in crores)	Pre COD
<b>Adjusted O&amp;M Expense as per the Study (A)</b>	<b>68.40</b>
<b>Impact due to reclassification &amp; reallocation of</b>	
Employee Benefit Expenses (B)	-1.99
A&G Expenses (C)	-0.05
CHQ & RHQ Expenses (D)	-
R&M Expense (E)	-0.03
Utility & Outsourcing Expenses (F)	-0.13
Other Outflows (G)	-
<b>Total impact (H = B + C + D + E + F + G)</b>	<b>-2.20</b>
<b>Revised O&amp;M expenses (I = A + H)</b>	<b>66.20</b>

3.5.21.3 The aeronautical O&M expenses of AAI as per the Study for Per COD Period after taking into account the adjustments, re-classification and re-allocation of O&M expenses is as detailed below:

**Table 62: Aeronautical O&M Expenses for AAI as per the current Study for Pre-COD Period**

Particulars (Rs. in crores)	Pre COD
<b>As per AAI Submission</b>	
Employee Benefit Expenses	33.30
A&G Expenses	0.04
CHQ & RHQ Expenses	17.54
R&M Expense	9.61
Utility & Outsourcing Expenses	9.63
Other Outflows	0.66
<b>Total Operating Expenditure (A)</b>	<b>70.78</b>
<b>As per the Study</b>	
Employee Benefit Expenses	31.31
A&G Expenses	0.06
CHQ & RHQ Expenses	15.09

Particulars (Rs. in crores)	Pre COD
R&M Expense	9.58
Utility & Outsourcing Expenses	9.50
Other Outflows	0.66
<b>Total Operating Expenditure (B)</b>	<b>66.20</b>
<b>Difference (C = A - B)</b>	<b>4.57</b>

### 3.6 Overall Summary of O&M Expenses for SCP and Pre-COD Period as submitted by AAI and as per the current Study

#### 3.6.1 Summary of Assessment of allocation ratios as per the current Study

3.6.1.1 The Study has outlined the principle for allocating expenses into the categories of aeronautical, non-aeronautical common, and ANS in para 3.3.1.1. Based upon these principles, the Study has reclassified the expenses submitted by AAI for SCP and Pre COD period into their respective categories.

3.6.1.2 The allocations ratios submitted by AAI and recomputed as per the Study are as follows:

**Table 63: Allocation Ratios submitted by AAI and recomputed as per the current Study**

Particulars	FY 17	FY 18	FY 19	FY 20	FY 21	Pre-COD Period
<b>Submitted by AAI</b>						
Employee Ratio (Aero : Non-Aero : ANS)	74.50% : 1.20% : 24.30%	72.31% : 1.24% : 26.45%	71.37% : 1.45% : 27.18%	70.21% : 1.06% : 28.72%	70.07% : 1.11% : 28.82%	68.02% : 1.19% : 30.79%
Employee Ratio (Aero : Non-Aero)	98.41% : 1.59%	98.31% : 1.69%	98.01% : 1.99%	98.51% : 1.49%	98.44% : 1.56%	98.28% : 1.72%
Terminal Building Ratio (Aero : Non-Aero)	92.34% : 7.66%	92.12% : 7.88%	92.21% : 7.79%	92.19% : 7.81%	93.29% : 6.71%	91.59% : 8.41%
Electricity Ratio (Aero : Non-Aero : ANS)	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%
<b>Recomputed as per the Study</b>						
Employee Ratio (Aero : Non-Aero : ANS)	71.71% : 3.99% : 24.30%	69.23% : 4.32% : 26.45%	68.47% : 4.35% : 27.18%	66.90% : 4.38% : 28.72%	66.75% : 4.43% : 28.82%	64.02% : 5.19% : 30.79%
Employee Ratio (Aero : Non-Aero)	94.73% : 5.27%	94.12% : 5.88%	94.02% : 5.98%	93.86% : 6.14%	93.78% : 6.22%	92.5% : 7.5%
Terminal Building Ratio (Aero : Non-Aero)	90% : 10%	90% : 10%	90% : 10%	90% : 10%	90% : 10%	90% : 10%
Electricity Ratio (Aero : Non-Aero : ANS)	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%	80.44% : 0.01% : 19.55%
Gross Block Ratio (Aero : Non-Aero : ANS)	91.82% : 2.95% : 5.23%	91.68% : 2.93% : 5.39%	91.62% : 2.79% : 5.59%	91.89% : 2.6% : 5.51%	92.17% : 2.46% : 5.37%	92.29% : 2.42% : 5.29%

#### 3.6.2 Summary of Head wise assessment of O&M expenses submitted by AAI for SCP as per the current Study

AAI has classified O&M expenses into six categories, and the assessment results for each category conducted as per the Study are presented below:

##### 3.6.2.1 Employee Benefit Expense

3.6.2.1.1 According to the Reasonableness assessment and trend analysis detailed in paras 3.4.3 & 3.4.4, it was noted that employee expenses witnessed an increase in FY 2017-18 and FY 2018-19. This rise can be attributed to

pay revisions and provisions made for retirement benefit costs. Furthermore, the implementation of a three-year pension plan, covering the period from January 2017 to March 2019, also contributed to the rise in employee costs. Upon comparison with the approved figures of SCP and FCP actuals, the analysis of employee benefit expenses appears to be reasonable.

- 3.6.2.1.2 Due to revision in the allocation ratio as per the Study, the Aeronautical employee benefit expenses submitted by AAI for SCP were rationalized to Rs. 316.17 crores as per Table 17.

#### 3.6.2.2 **Administration and General (A&G) Expense**

- 3.6.2.2.1 In the assessment, it was observed that the Administration and General (A&G) expenses for the SCP submitted by AAI were higher than the approved figure mentioned in the SCP order. On detailed analysis, it was observed that major reasons for the increase were interest and penalties payments and inconsistencies such as treating ANS expenses as aeronautical expense. These have been adjusted appropriately. Also, the Study has made adjustment of accounting treatment recorded by AAI for payment of lease by treating it as financial lease.

- 3.6.2.2.2 After adjustments, the A&G expenses seem to be reasonable as compared to SCP Order approved amount.

- 3.6.2.2.3 A&G expenses were adjusted, reclassified and reallocated based on principle set in para 3.3.1. Due to such revision, the Aeronautical A&G expenses submitted by AAI for SCP were rationalized to Rs. 11.96 crores as per Table 24.

#### 3.6.2.3 **CHQ/RHQ Expense**

- 3.6.2.3.1 In para 3.4.11, it was noted that the CHQ & RHQ expense reported by AAI for the SCP were significantly higher than the approved amount specified in the SCP order. A comprehensive analysis was carried out as per the Study to examine and justify these expenses. As a result, the CHQ & RHQ expenses were rationalized and reallocated. Through this revision, the aeronautical CHQ & RHQ expense submitted by AAI for the SCP has been rationalized to its optimum level and allowed it to the tune of Rs. 133.72 crores (Table 27).

#### 3.6.2.4 **Repairs and Maintenance (R&M) Expense**

- 3.6.2.4.1 In para 3.4.15.4, it was observed that R&M Expenses for SCP submitted by AAI was in the range that was approved in the SCP order. Upon detailed analysis, it was determined that the expenses incurred by AAI were reasonable when compared to the approved figure in the SCP order and the actual FCP expenses.

- 3.6.2.4.2 The Study has made adjustment in R&M expenses by re-categorizing Inline Manpower cost to Utilities & Outsourcing expenses head and R&M-BOT XBIS lease to A&G expense head (refer para 3.4.7.1(8)(1)).

- 3.6.2.4.3 However, from an external benchmarking perspective, the R&M Expenses of AAI appear to be on par with the expenses incurred by other comparable airports (external benchmarking is detailed in para 5.5).

- 3.6.2.4.4 By comparing the R&M expenses to the Opening RAB, it is concluded that the expenses incurred are within reasonable limits i.e., 6% of the Opening RAB (benchmark set by the Authority for most of the airports).

- 3.6.2.4.5 After considering adjustments, R&M Expenses were reclassified and reallocated based on principle set in 3.3.1. Due to such revision, the Aeronautical R&M Expenses submitted by AAI for SCP was rationalized to Rs. 59.89 crores as per Table 32.

#### 3.6.2.5 **Utility and Outsourcing Expense**

- 3.6.2.5.1 In para 3.4.19, it was observed that Utility and Outsourcing Expenses for SCP submitted by AAI was higher than the approved figure in the SCP order. On detailed analysis, it was observed that expenses incurred by AAI were necessary to spend and thus appears to be reasonable as compared to approved figure in the SCP Order and FCP actuals.
- 3.6.2.5.2 As per para 3.4.19.3, manpower cost for AAICLAS amounting to Rs.0.36 crores have been proposed to be excluded from the aeronautical expense.
- 3.6.2.5.3 As per para 3.4.19.6 of the Study, Inline Manpower cost has been reclassified from R&M expense to Utilities & Outsourcing expenses in line with the hiring of manpower.
- 3.6.2.5.4 From an external benchmarking perspective, the Utility and Outsourcing Expenses of AAI appear to be on par with the expenses incurred by other comparable airports (external benchmarking is detailed in para 5.7).
- 3.6.2.5.5 After considering the adjustments, the Utility and Outsourcing Expenses were reclassified and reallocated based on principle set in para 3.3.1. Due to such revision, the Aeronautical Utility and Outsourcing Expenses submitted by AAI for SCP was rationalized to Rs. 83.56 crores as per Table 36.

### 3.6.2.6 Other Outflow

- 3.6.2.6.1 The category of Other Outflows includes collection charges paid to airlines and IATA for UDF and PSF. The expenses incurred for SCP exceeded the approved figures in the SCP Order because the collection charges paid to IATA were not initially considered in the projections. However, these expenses were necessary for the collection of aeronautical revenue and were based on actual figures. Therefore, they are deemed reasonable and directly related to the collection of aeronautical revenues, eliminating the need for reclassification.

### 3.6.2.7 Aeronautical O&M Expenses as per the current Study for SCP

- 3.6.2.7.1 Based on the analysis of the submission of AAI for SCP, the aeronautical O&M expenses of AAI as per the Study for SCP was determined to be Rs. 615.98 crores after taking into account the adjustments (Table 39), re-classification (Table 40) and re-allocation (Table 41). The break-up of O&M expenses is given below:

**Table 64: Aeronautical O&M Expenses for AAI as per the current Study for SCP**

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	Total
Employee Benefit Expenses	48.15	59.73	73.80	77.33	57.16	<b>316.17</b>
A&G Expenses	1.21	2.05	2.98	3.35	2.37	<b>11.96</b>
CHQ & RHQ Expenses	14.67	17.96	30.70	43.63	26.76	<b>133.72</b>
R&M Expense	11.83	11.11	11.86	11.86	13.23	<b>59.89</b>
Utility & Outsourcing Expenses	13.47	16.36	16.16	18.73	18.83	<b>83.56</b>
Other Outflows	1.53	2.64	3.01	3.06	0.45	<b>10.68</b>
<b>Total Operating Expenditure (A)</b>	<b>90.87</b>	<b>109.84</b>	<b>138.51</b>	<b>157.97</b>	<b>118.80</b>	<b>615.98</b>

### 3.6.3 Summary of Head wise assessment of O&M expenses submitted by AAI for Pre-COD Period as per the current Study

- 3.6.3.1 The Pre COD period for AAI starts from 1st April 2021 to 13th October 2021. On and after the COD, which is 14th October 2021, the TRV operations were undertaken and managed by the concessionaire, TKIAL. To reconcile the expenses incurred during the Pre COD period, which fall outside the scope of the SCP, the Study has proposed an approach. The proposed approach involves extrapolating the approved figures of FY 2020-21 from the SCP order to the Pre-COD period. This extrapolation is based on the growth rate utilized for projecting expenses in the SCP order for FY 2020-21. By employing this methodology, the Study ensures a

meaningful comparison and analysis of the O&M expenses during the Pre COD period with the benchmark set in the SCP order.

3.6.3.2 Following this approach, the O&M expenses submitted by AAI for the Pre COD period have been assessed, and the results for each category of O&M expense are provided below:

#### 3.6.3.3 **Employee Benefit Expense**

3.6.3.3.1 Based on the Reasonableness assessment carried out for Employee Benefit Expense, it was observed that employee expenses for the Pre COD period seem to be reasonable.

3.6.3.3.2 Due to revision in the allocation ratio as per the Study, the Aeronautical employee benefit expenses submitted by AAI for Pre-COD Period were reduced by Rs. 1.99 crores (Rs. 33.30 crores as per Table 44 to Rs. 31.31 crores as per Table 46).

#### 3.6.3.4 **Administration and General (A&G) Expense**

3.6.3.4.1 It was observed that A&G expenses for Pre-COD period submitted by AAI was lower than the estimated figure. On detailed analysis, it was observed that major reasons for decrease was reversals booked under the head Prior Period Expenses that has been considered as per the Study to reduce expenses that were overbooked or incorrectly recognized in previous periods. The Study has made adjustment of lease accounting provisions recorded by AAI for payment of lease by treating it as financial lease.

3.6.3.4.2 After adjustments, the A&G expenses seem to be reasonable as compared to estimated amount.

3.6.3.4.3 A&G expenses were adjusted, reclassified and reallocated based on principle set in para 3.3.1. Due to such revision, the Aeronautical A&G expenses submitted by AAI for Pre-COD Period were increased by Rs. 0.03 crores (Rs. 0.04 crores as per Table 47 to Rs. 0.06 crores as per Table 51).

#### 3.6.3.5 **CHQ/RHQ Expense**

3.6.3.5.1 It was observed that AAI reported higher CHQ & RHQ expenses for the Pre COD period compared to the estimated amount. The expense for the Pre COD period was calculated by applying a 5% growth rate to the actual expenses of FY 2020-21, as submitted by AAI, since the workings for CHQ & RHQ expenses for FY 2021-22 were not finalized.

3.6.3.5.2 Therefore, based on AAI's responses, the revised CHQ & RHQ expenses were calculated using the revised FY21 figures. Through this revision, the aeronautical CHQ & RHQ expenses submitted by AAI for the Pre COD period were reduced by Rs. 2.45 crores. This needs to be suitably reviewed based on actual information to be made available before the Order.

#### 3.6.3.6 **Repairs and Maintenance (R&M) Expense**

3.6.3.6.1 In Pre-COD Period, it was observed that R&M Expenses submitted by AAI were higher than the estimated figures. Upon detailed analysis, it was determined that the expenses incurred by AAI were necessary and reasonable.

3.6.3.6.2 By comparing the R&M expenses to the Opening RAB, it is concluded that the expenses incurred are within reasonable limits i.e., 6% of the Opening RAB (benchmark set by the Authority for most of the airports).

3.6.3.6.3 R&M Expenses for the Pre-COD Period were reclassified and reallocated based on principle set in 3.3.1. Due to such revision, the Aeronautical R&M Expenses submitted by AAI were reduced by Rs. 0.03 crores (Rs. 9.61 crores as per Table 54 to Rs. 9.58 crores as per Table 56) for Pre-COD Period.



### 3.6.3.7 Utility and Outsourcing Expense

3.6.3.7.1 It was observed that Utility and Outsourcing Expenses for Pre-COD Period submitted by AAI was higher than the estimated figure. On detailed analysis, it was found that expenses incurred by AAI were necessary to spend and thus appears to be reasonable.

3.6.3.7.2 After adjustments, the Utility and Outsourcing Expenses were reclassified and reallocated based on principle set in 3.3.1. Due to such revision, the Aeronautical Utility and Outsourcing Expenses submitted by AAI for Pre COD were reduced by Rs. 0.13 crores (Rs. 9.63 crores as per Table 57 to Rs. 9.50 crores as per Table 58).

### 3.6.3.8 Other Outflow

3.6.3.8.1 The category of Other Outflows includes collection charges paid to airlines and IATA for UDF and PSF. The expenses incurred for the Pre-COD Period exceeded the estimated figures because the collection charges paid to IATA were initially not considered in the projections. However, these expenses were necessary for the collection of aeronautical revenue and were based on actual figures. Therefore, they are deemed reasonable and directly related to the collection of aeronautical revenues, eliminating the need for reclassification.

### 3.6.3.9 Aeronautical O&M Expenses as per the current Study for Pre-COD Period

3.6.3.10 Based on the analysis of the submission of AAI for Pre-COD Period, the aeronautical O&M expenses of AAI as per the Study for Pre COD period was determined to be Rs. 66.20 crores after taking into account the necessary adjustments, re-classification and re-allocation. The break-up of O&M expenses is given below:

**Table 65: Aeronautical O&M Expenses for AAI as per the current Study for Pre-COD Period**

Particulars (Rs. in crores)	Pre COD
Employee Benefit Expenses	31.31
A&G Expenses	0.06
CHQ & RHQ Expenses	15.09
R&M Expense	9.58
Utility & Outsourcing Expenses	9.50
Other Outflows	0.66
<b>Total Operating Expenditure (B)</b>	<b>66.20</b>

## 3.7 Conclusion

### 3.7.1 Aeronautical O&M expenses submitted by AAI and as per the current Study for SCP and Pre-COD Period

3.7.1.1 The aeronautical expenses submitted by AAI and as per the Study amounted to Rs. 767.08 crores & 682.18 crores respectively. As can be seen, there is an impact of Rs. 84.90 crores on the O&M expenses due to adjustments, rationalization, reclassification and re-allocation of expenses. The table below demonstrates the comparison of O&M expenses, categorized head wise, as per AAI and as per the Study for both the SCP and Pre COD periods:

**Table 66: Aeronautical O&M Expenses submitted by AAI and as per the current Study for SCP and Pre-COD Period**

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	SCP Total (A)	Pre-COD (B)	Total (A+B)
<b>As per AAI Submission</b>								
Employee Benefit Expenses	48.71	60.58	74.97	78.42	58.01	<b>320.70</b>	33.30	<b>354.00</b>

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	SCP Total (A)	Pre-COD (B)	Total (A+B)
A&G Expenses	2.61	1.90	2.56	3.92	5.59	16.58	0.04	16.62
CHQ & RHQ Expenses	32.58	43.44	42.45	52.47	31.11	202.05	17.54	219.59
R&M Expense	11.95	11.46	12.54	12.46	15.65	64.05	9.61	73.66
Utility & Outsourcing Expenses	13.64	16.57	16.52	18.68	16.83	82.25	9.63	91.88
Other Outflows	1.53	2.64	3.01	3.06	0.45	10.68	0.66	11.33
<b>Total Operating Expenditure (A)</b>	<b>111.01</b>	<b>136.60</b>	<b>152.05</b>	<b>169.01</b>	<b>127.64</b>	<b>696.30</b>	<b>70.78</b>	<b>767.08</b>
<b>As per the Study</b>								
Employee Benefit Expenses	48.15	59.73	73.80	77.33	57.16	316.17	31.31	347.48
A&G Expenses	1.21	2.05	2.98	3.35	2.37	11.96	0.06	12.02
CHQ & RHQ Expenses	14.67	17.96	30.70	43.63	26.76	133.72	15.09	148.80
R&M Expense	11.83	11.11	11.86	11.86	13.23	59.89	9.58	69.47
Utility & Outsourcing Expenses	13.47	16.36	16.16	18.73	18.83	83.56	9.50	93.07
Other Outflows	1.53	2.64	3.01	3.06	0.45	10.68	0.66	11.33
<b>Total Operating Expenditure (B)</b>	<b>90.87</b>	<b>109.84</b>	<b>138.51</b>	<b>157.97</b>	<b>118.80</b>	<b>615.98</b>	<b>66.20</b>	<b>682.18</b>
<b>Difference (C = A - B)</b>	<b>20.15</b>	<b>26.76</b>	<b>13.54</b>	<b>11.04</b>	<b>8.84</b>	<b>80.32</b>	<b>4.57</b>	<b>84.90</b>

*Note – The difference in Utility & Outsourcing Expenses between AAI submission and as per study is on account of reclassification of Inline Baggage Manpower expenses from R&M Expenses to Utility & Outsourcing Expenses (refer para 3.4.19.6)*

#### 4. ASSESSMENT OF O&M EXPENSES OF TKIAL FOR POST COD TILL 31<sup>ST</sup> MARCH 2022

##### 4.1 Background

4.1.1 As stated in para 1.1.4 and 1.1.5 of this Study, TRV was concessioned out to TKIAL on 19<sup>th</sup> January 2021 by AAI to operate, manage, and develop the airport for a lease period of 50 years. TKIAL commenced operations on 14<sup>th</sup> October 2021, which is referred to as the Commencement Operation Date (COD).

4.1.2 According to Clause 28.1.1 of the Concession Agreement, it is stated that:

*On and from COD and till the Transfer Date, the Concessionaire has the sole and exclusive right to demand, collect and appropriate Fees from the Users for the provision of the Aeronautical Services and Non-Aeronautical Services, including the airlines and passengers, in accordance with the provisions of the Regulatory Framework and this Agreement including the terms set out in Schedule R (Memorandum of Understanding), provided that the Concessionaire may determine and collect Fees at such lower rates as may be agreed with the Users or any category of Users in accordance with the Applicable Laws and Applicable Permits.*

4.1.3 As per the above, TKIAL (Airport Operator) has the authority to impose and collect fees from the COD which began on 14<sup>th</sup> October 2021. During FY 2021-22, the operation of the airport was divided between AAI and TKIAL. AAI operated the airport for a total of 196 days, while TKIAL took charge for 169 days.

4.1.4 The first period is referred to as the Pre COD period starting from 1<sup>st</sup> April 2021 to 13<sup>th</sup> October 2021. The second period is termed as the post COD period, which extends from the COD (14<sup>th</sup> October 2021) to 31<sup>st</sup> March 2022.

4.1.5 The utilization of the terms "Pre COD" and "Post COD" period is mentioned in para 1.1.7 of the Study to clearly differentiate the submissions and details provided by both operators regarding their respective periods of operation and financial implications.

4.1.6 TKIAL vide letter dated 21<sup>st</sup> February 2023, submitted the MYTP for true up period from 14<sup>th</sup> October 2021(COD) till 31<sup>st</sup> March 2022 based on the Authority's decision to consider the true up for FY 2021-22 at the time of determination of tariff for the Third Control Period which was published in the Public Notice No. 05/2022-23 dated 20<sup>th</sup> June 2022.

##### 4.2 O&M Expenses submitted by TKIAL for Post COD Period

4.2.1 TKIAL has submitted the following O&M expenses for true up of Post COD period:

**Table 67: O&M expenses submitted by TKIAL for Post COD Period**

Particulars (Rs. in crores)	Post COD	% Share
Manpower expenses - AAI employees	28.08	42.68%
Manpower expenses - Adani employees	4.20	6.38%
Utility expenses	5.60	8.51%
IT expenses	0.88	1.34%
Security expenses	3.76	5.72%
CSS Expenses	7.01	10.66%
Collection Charges on UDF	0.11	0.17%
Administrative Expenses – Others	2.93	4.45%
Insurance	0.76	1.16%
R&M	5.96	9.06%
Others	4.46	6.78%
Bank and finance charges	0.37	0.56%

Particulars (Rs. in crores)	Post COD	% Share
Independent Engineer's Fees	1.67	2.54%
<b>Total</b>	<b>65.79</b>	<b>100%</b>

### 4.3 Assessment of Allocation ratios submitted by TKIAL and as per the current Study for Post COD Period

#### TKIAL's Submission

- 4.3.1 According to TKIAL's submission, it has been noted that they have not considered any specific ratio for the allocation of O&M expenses. TKIAL has considered all expenses as 100% aeronautical without providing categorization of expenses into aeronautical and non-aeronautical expenses.

#### Principles for allocating expenses as per the study

- 4.3.2 The Study has addressed this issue and established principles for allocating various expenses into categories such as aeronautical, non-aeronautical, common, and ANS activities. Additionally, the Study has determined the appropriate proportion of common expenses that should be included under aeronautical expenses. These principles are outlined in para 3.3.1.1. This ensures that costs are appropriately assigned to the relevant cost centers.
- 4.3.3 Considering TKIAL's approach of considering all expenses as 100% aeronautical, it is necessary to analyze each expense on a case-by-case basis. By doing so, a more comprehensive understanding of the expenses incurred by TKIAL can be obtained, taking into account the principles established in the Study. This approach facilitates accurate allocation of expenses and enables better understanding of financial operations in relation to the different activities and services provided at the Airport.

#### Assessment of allocation ratios as per the Study for Post COD Period

- 4.3.4 The following ratios have been computed and considered in this Study report for appropriate segregation of Common assets between Aeronautical and Non-aeronautical assets for Post COD period.

#### Terminal Building ratio

- 4.3.5 It was observed that TKIAL has classified the entire area of the terminal building as aeronautical. Upon enquiry, TKIAL stated that this was done in accordance with the AERA Act. It was also noted that there has been no increase in the area of the terminal building from the date of Commercial Operations (COD) until 31<sup>st</sup> March 2022.
- 4.3.6 TKIAL has incorrectly classified the entire area of the terminal building as aeronautical without providing proper justification. Considering that there has been no expansion or increase in the area of the terminal building, the Study proposes to consider the ratio 90:10 (Aeronautical: Non-aeronautical) as decided by the Authority in Order No. 03 /2017-18 dated 2<sup>nd</sup> June 2017 (refer para 3.3.3.2 for detail) for the expenses incurred by TKIAL in Post COD period and for the Third Control Period, which is in line with the recommendation of the IMG norms and in line with the ratio considered by AERA for other similar airports.

#### Gross Block Ratio

- 4.3.7 To determine the allocation of expenses that apply to the entire airport but need to be bifurcated, the Study will utilize the Gross Block ratio. This ratio is calculated by dividing the aeronautical gross block by the total gross block. Based on the outcome of the independent study on allocation of assets, the ratio of aeronautical assets to total assets is determined as follows.

**Table 68: Allocation of Gross Block as per the current Study**

Particulars	As on 31st March 2022
Aero Gross Block %	99.38%
Non-Aero Gross Block %	0.62%

**Employee Head Count Ratio (EHCR)**

- 4.3.8 The department-wise breakup of employees for Post COD period, along with the basis of computing EHCR for TKIAL is summarized in the table below:

**Table 69: Employee details submitted by TKIAL**

Department	Classification	AAI employees	TKIAL employees	Total Employee Head Count
Aviation Rescue and Fire Fighting (ARFF)	Aeronautical	96		96
Terminal Ops, Airside Ops & Chief Airport Officer (CAO) Office	Aeronautical	25	7	32
Engineering & Maintenance	Aeronautical	85	2	87
Land department	Aeronautical	1		1
Security	Aeronautical	1	3	4
Information Technology	Aeronautical	14	1	15
Human Resources and Admin	Aeronautical	62	2	64
Finance	Aeronautical	7	2	9
Commercial	Aeronautical	2	1	3
Legal	Aeronautical		1	1
Quality	Aeronautical		1	1
Environment, health and safety (EHS)	Aeronautical		1	1
Techno Commercial	Aeronautical		2	2
Corporate Affairs	Aeronautical		1	1
Corporate communication	Aeronautical		1	1
<b>Total</b>		<b>293</b>	<b>25</b>	<b>318</b>
<b>EHCR</b>	<b>Aeronautical</b>	<b>100%</b>	<b>100%</b>	

- 4.3.9 It is observed that TKIAL has categorized all employees, irrespective of their department, as aeronautical employees. However, the services rendered by these employees are to both aeronautical and non-aeronautical areas of the Airport.
- 4.3.10 Based on the details and clarifications provided by TKIAL, the Study has carefully examined employee allocation of TKIAL and made certain adjustments and reclassifications as given below:

**Table 70: Reclassifications of departments at TKIAL as per the current Study**

Department	As per TKIAL		Classification as per the Study		Remarks
	AAI employees	TKIAL employees	AAI employees	TKIAL employees	
Aviation Rescue and Fire Fighting (ARFF)	Aero	Aero	Aero	Aero	
Terminal Ops, Airside Ops & CAO Office	Aero	Aero	Aero	Aero	
Engineering & Maintenance	Aero	Aero	Aero	Aero	

Department	As per TKIAL		Classification as per the Study		Remarks
	AAI employees	TKIAL employees	AAI employees	TKIAL employees	
Land department	Aero	Aero	Non-Aero	Non-Aero	Considered to be used for development of airport land for the commercial purposes.
Security	Aero	Aero	Common	Common	Security department performs various activities such as CISF Documentation, Airport Security Program, Kerb Side Management, Traffic Management, Airport Operator Security Control Room, Tour Management, Security System Maintenance, Encroachment outside and perimeter area, Intelligence and Vigilance Gathering, Avsec Training and Compliances, Landside Operations, Bureau of Civil Aviation Security (BCAS) Compliance requirements. As can be seen, Security services are not limited to Terminal area only but to whole airport. Therefore, the Study has considered security employees as common.
Information Technology	Aero	Aero	Common	Common	IT is a backbone of the Aviation, and all the critical systems need to be running with zero downtime. Critical systems include Flight Information Display System (FIDS), Systems Applications and Products in Data Processing (SAP), Business Analytics, Integration with ATC, Radio Sets, Desktops, Laptops, Billing Software, Document Management System, Access Control System etc. As can be seen IT services are not limited to Terminal area only but to whole airport. Therefore, the Study has considered IT employees as common.
Human Resources and Admin (HRA)	Aero	Aero	Common	Common	Provides services to all the employees and supports the overall functioning of the airport by providing various administrative services. Therefore, the Study has considered HRA as common.
Finance	Aero	Aero	Common	Common	Finance team supports the overall operations of an airport by providing a range of financial services. Therefore, the Study has considered Finance as common.
Commercial	Aero	Aero	Non-Aero	Non-Aero	Considered as Non-aero, as they provide services for commercial purposes.
Legal		Aero		Common	The Study recognizes the legal department as the primary entity is responsible for managing all compliances, regulations, statutory matters, and other relevant aspects associated with any activity

Department	As per TKIAL		Classification as per the Study		Remarks
	AAI employees	TKIAL employees	AAI employees	TKIAL employees	
					conducted within an airport. Therefore, the legal department is considered a common component within the Study.
Quality		Aero		Aero	
EHS		Aero		Aero	
Techno Commercial (Procurement department)		Aero		Common	Provides service to all operations of the Airport, hence considered Common
Corporate Affairs		Aero		Common	Corporate Affairs department interacts with various state government, local municipalities, utility boards, local police, land department etc. on a day-to-day basis related to the airport. Therefore, the Corporate Affairs department is considered as common.
Corporate communication		Aero		Common	Corporate Communication department includes public relation officer who will interface with various stakeholders and media relations related to the airport. Therefore, the Corporate communication department is considered as common.

4.3.11 Based on the above reclassifications, EHCR of TKIAL was recomputed as shown in the following table.

**Table 71: Employee Head Count Ratio of TKIAL for AAI-Select Employees and TKIAL employees as per the current Study**

Department	Classification	AAI employees	TKIAL employees	Total Employee Head Count
Aviation Rescue and Fire Fighting (ARFF)	Aero	96		96
Terminal Ops, Airside Ops & CAO Office	Aero	25	7	32
Engineering & Maintenance	Aero	85	2	87
Land department	Non-Aero	1		1
Security	Common	1	3	4
Information Technology	Common	14	1	15
Human Resources and Admin	Common	62	2	64
Finance	Common	7	2	9
Commercial	Non-Aero	2	1	3
Legal	Common		1	1
Quality	Aero		1	1
EHS	Aero		1	1
Techno Commercial	Common		2	2
Corporate Affairs	Common		1	1
Corporate communication	Common		1	1
<b>Total</b>		<b>293</b>	<b>25</b>	<b>318</b>
<b>Department</b>				
Direct Aeronautical employees		206	11	217
Direct Non-Aeronautical employees		3	1	4
Common employees		84	13	97
<b>Total</b>		<b>293</b>	<b>25</b>	<b>318</b>
<b>Common employee's Allocation</b>				

Department	Classification	AAI employees	TKIAL employees	Total Employee Head Count
Common Aeronautical employees		83	12	95
Common Non-Aeronautical employees		1	1	2
Total Common employees		84	13	97
<b>Head Count after allocation of Common employees</b>				
Total Aeronautical employees		289	23	312
Total Non-Aeronautical employees		4	2	6
<b>Total employees</b>		<b>293</b>	<b>25</b>	<b>318</b>
EHCR		98.56% : 1.44%	91.67% : 8.33%	98.19% : 1.81%

### Summary

4.3.12 The Study has outlined the principle for allocating expenses into the categories of aeronautical, non-aeronautical common, and ANS in para 3.3.1.1. Building upon these principles, the Study has reclassified the expenses submitted by TKIAL into their respective categories in the subsequent paragraphs.

4.3.13 The Allocations ratios recomputed as per the Study for TKIAL are as follows:

**Table 72: Allocation Ratios recomputed as per the current Study for TKIAL**

Particulars	Ratio
Employee Head Count Ratio - AAI Employees	98.56% : 1.44%
Employee Head Count Ratio - TKIAL Employees	91.67% : 8.33%
Employee Head Count Ratio - All Employees	98.19% : 1.81%
Terminal Building Ratio	90.00% : 10.00%
Gross Block Ratio	99.38% : 0.62%

## 4.4 Assessment of O&M Expenses and its allocation submitted by TKIAL and as per the current Study for Post COD Period

4.4.1 TKIAL has classified its O&M expenses into distinct categories. The nature of each expense is elaborated in para 2.2.2, and a comprehensive assessment of each expense category is provided in the following paragraphs.

### Employee Expenses

#### Reasonable assessment of Employee Expenses

4.4.2 In FY 2021-22, TKIAL had operated TRV for a period of 5.5 months post COD within which they had incurred an amount of Rs. 32.28 crores.

4.4.3 Based on the headcount data shared by TKIAL, it is observed that the salaries of TKIAL employees are generally higher than those of AAI employees. The comparison is given in the table below.

**Table 73: Analysis of employee cost incurred by TKIAL towards AAI and TKIAL employees post COD**

Particulars (Rs. in crores)	AAI	TKIAL
Aeronautical Payroll Expenditure (For 5 Months)	28.08	4.20
Number of Employees	293	25
Per Employee Cost (Rs. In Crores) for the year	0.23	0.40

4.4.4 As can be seen from the table above, the average salary per TKIAL employee is higher than that of AAI by more than ~75%. Upon enquiry, TKIAL informed that the “AAI has 293 employees which are inclusive of all grade of employees from Assistant General Manager (AGM) to Supervisor. The average cost of Rs 0.21 crores is weighted average for all employees. Out of 293 Select Employees, there are approx. 10 AGMs (middle



management positions) with annual cost of Rs. 4 crores, i.e. Rs. 0.40 crores per employee. The Select Employees does not include Salaries for Airport Director and other positions above AGM as per Concession Agreement. If the cost of these employees are added then cost for Senior + Middle Management (i.e. AGM and above) will be more than Rs. 0.40 crores p.a.

FY 2021-22 is the initial year post transition of Airport from AAI to TKIAL, the TKIAL has employed largely head of departments and senior management. Hence the cost for FY 2021-22 is Rs. 0.37 crores per annum per employee. As and when TKIAL will employ more people as per plan which includes all categories senior management, middle management, lower management, non-executive the weighted average cost per employee will be rationalized.”

- 4.4.5 It is observed that, the cost of “Select Employees” of AAI deputed at TKIAL are being reimbursed to AAI by TKIAL on a monthly basis and therefore included under the Manpower expenses claimed by TKIAL. It is pertinent to note here that, as per Clause 6.5 read with Clause 28.4.3 of the Concession Agreement entered between AAI and TKIAL, the cost of “Select Employees” (deputed employees) of AAI have been considered to be eligible for pass-through in the determination of Aeronautical charges. Based on the same, the cost of deputed employees of AAI claimed by the TKIAL is considered to be an allowable expense, as per the Study.

#### **Reallocation of Employee Expenses**

- 4.4.6 As already mentioned in para 4.3.9, the employee cost of AAI Select employees and TKIAL were categorized as Aeronautical expenses by TKIAL. However, according to the Study, these expenses should be reallocated based on EHCR, as proposed in Table 71.
- 4.4.7 As a result of the reallocation of expenses, there has been a revision in the Aeronautical Manpower expenses. This revision has led to a decrease of Rs. 0.75 crores in the overall employee expenses. The revised figures can be seen in the table below.

**Table 74: Adjustment made as per the current Study to the employee expense submission of TKIAL**

Sl. No.	Particulars (Rs. in crores)	As per TKIAL			As per the Study		
		Total	Allocation (% aero)	Aero	Allocation (% aero)	Aero	Impact
		A	B	C = A × B	D	E = A × D	C – E
1	Manpower expenses - AAI Select employees	28.08	100%	28.08	98.56%	27.68	0.40
2	Manpower expenses - TKIAL employees	4.20	100%	4.2	91.67%	3.85	0.35
	<b>Total</b>	<b>32.28</b>		<b>32.28</b>		<b>31.53</b>	<b>0.75</b>

#### **Utility Expenses**

##### **Reasonable assessment of Utility Expense**

- 4.4.8 Since TKIAL has operated TRV for a period of only 5.5 months in FY 2021-22, no major change has been observed in the utility expenses as there has not been any considerable change to the airport infrastructure. The expenses levels have more or less remained consistent when compared to the period prior to COD. Thus, the utility expenses of Rs. 5.6 crores incurred by TKIAL appears to be reasonable.

##### **Reallocation of Utility Expenses**

- 4.4.9 After analyzing the various expense heads, it was found that water charges amounting to Rs. 0.08 crores was included under the administrative expenses of TKIAL. However, it is considered that this expense should be

categorized under utility expenses. Also, water is being used by everyone in the airport, including employees and other departments.

4.4.10 Although TKIAL had previously treated these expenses as 100% aeronautical, the Study recommends that the expenses be allocated based on the gross block ratio, which would provide a more equitable distribution of the costs among the different departments and users of the airport.

4.4.11 TKIAL was asked to clarify whether the recoveries from concessionaires have been netted off before considering the utility expenses as purely aeronautical. TKIAL confirmed that:

*“Yes, it is confirmed that Utility expenses for FY 2021-22 are accounted after net off of recoveries. Total expense during the period was Rs. 5.82 crores, whereas recoveries was Rs. 0.22 crores. Hence net expenses in P&L is Rs. 5.6 crores.”*

4.4.12 The analysis reveals that the percentage recovery of total utility expenses at TKIAL stands at approximately 3.78%. However, upon comparing this figure with the expense recovery rate by AAI for the same period, which amounts to approximately 4.70% (or 5.45% for 196 days), it is noted that the latter is slightly higher.

**Table 75: Utility expenses as per the current Study for TKIAL**

Particulars (Rs. in crores)	Total Expenses	Recoveries	Ratio	Aero expense
	A	B	C	D = (A + B) * C
Utility expenses (power & Fuel)	5.82	(0.22)	100.00%	5.60
Water Charges	0.08	-	99.38%	0.08
<b>Total</b>	<b>5.90</b>	<b>(0.22)</b>		<b>5.68</b>

4.4.13 Consequently, the analysis indicates that the utility expenses incurred by TKIAL are justifiable. The change in classification and the application of the appropriate ratio have resulted in an accurate representation of the aeronautical expenses.

### **Security Expenses**

#### **Reasonable assessment of Security Expense**

4.4.14 It has been observed that TKIAL has incurred Rs. 3.76 crores for a period of 5.5 months in FY 2021-22. TKIAL was requested to share the breakup of Security Expenses. TKIAL was also asked to justify the reasons for incurring the each of the expense items included under this expense and state if they were recurring in nature to which they submitted the following response:

**Table 76: Breakup of Security Expense incurred by TKIAL and reasons for expenditure**

Particulars (Rs. in crores)	Post COD (14th Oct'21 to 31st Mar'22)	Reason for expenditure
Contractual Manpower-General & Admin	1.72	These are recurring expenses. This manpower is deployed for Kerbside traffic management. Their overall role includes Kerbside management, traffic marshalling, traffic management, landside security, patrolling, Billing & accounting for National Aviation Security Fee Trust (NASFT), Co-ordination with CISF/Policy, Emergency Response etc.
Security Automation Expenses	2.04	These are majorly related to R&M expenses of security equipment and AMCs of Mechanical Equipment, Bosch Closed Circuit Television (CCTV), XBIS, etc.
<b>Total</b>	<b>3.76</b>	

4.4.15 The expenses amounting to Rs. 2.04 crores related to the repairs and maintenance of security equipment should be recategorized under the "Repairs and Maintenance" head for the following reasons:

- **Ensuring Proper Functioning:** The expenses incurred for repairing and maintaining security equipment are essential to ensure their proper functioning and reliability. By allocating these expenses to the "Repairs and Maintenance" head, it highlights the purpose of these expenditures in maintaining the effectiveness and operational readiness of security equipment.
- **Consistency in Expense Classification:** Categorizing these expenses under the "Repairs and Maintenance" head maintains consistency within the expense classification framework. It follows standard accounting practices where similar expenses related to repairs and maintenance are grouped together. This consistent categorization provides a clear and comprehensive view of the costs associated with maintaining and sustaining various assets, including security equipment.

4.4.16 Based on the above explanation, the Study recategorizes the above expense to R&M expense; this has been further analysed in para 4.4.34. The remaining expenses were found to be reasonable.

#### **Reallocation of Security Expenses**

4.4.17 All the expenses of TKIAL have been classified as 100% Aeronautical. However, the Study considered these expenses as common, as they were used for the overall operations of the TRV. To bifurcate the expenses into aeronautical and non-aeronautical, the gross block ratio was used.

4.4.18 As a result of this reallocation, there was a revision in the security expenses. The revision led to a reduction of Rs. 2.05 crores in the overall security expenses. The revised figures are shown in the below table.

**Table 77: Adjustment made as per the current Study to the Security expense submission of TKIAL**

Particulars (Rs. in crores)	Total Expenses	Re-Categorization	Allocation (% Aero)	Aero expense	Impact
	A	B	C	D = (A + B) * C	(A - D)
Contractual Manpower-General & Admin	1.72	-	99.38%	1.71	0.01
Security Automation Expenses	2.04	-2.04	99.38%	-	2.04
<b>Total</b>	<b>3.76</b>	<b>-2.04</b>		<b>1.71</b>	<b>2.05</b>

#### **Corporate Support Service (CSS) Expenses**

##### **Reasonable assessment of Corporate Support Service Expense**

4.4.19 As per the MYTP submission of TKIAL, the following can be observed regarding Corporate Support Services:

- *TKIAL is a step-down subsidiary of Adani Enterprises Limited (AEL). AEL and Adani Airport Holdings Ltd (AEL holds 51% directly and 49% indirectly through Adani Airport Holdings Ltd (AAHL)) have developed the various capabilities, infrastructure and processes in various areas ("Corporate Support Services"). It includes strategic guidance, business support and professional expertise in the areas of Finance, Procurement, Regulatory, Legal, Security, Operations, Master Planning, Green Initiatives, ESG and Information Technology.*
- *AEL provides Corporate Support Services which are common for all businesses promoted by Adani Group. AAHL provides Corporate Support Services which are specialised subject matter expertise in Aviation sector. The cost is incurred by AEL and AAHL on overall basis to provide these services and*

*support to various group companies (including Airports) by AEL and to various Airport companies in case of AAHL respectively.*

- *TKIAL receives these Corporate Support Services from its parents (AEL and AAHL) and is required to pay for costs allocated to it for having availed the above services on arms lengths basis.*

4.4.20 For further analysis, TKIAL was requested to clarify the nature and the purpose of this expense. TKIAL shared a note on corporate cost allocation (refer Annexure 4 for the Note on Corporate cost allocation study report) explaining the rationale behind corporate cost allocation. It was observed that TKIAL had engaged an independent consultant, to conduct a study on Corporate Cost allocation and based on the study Report, they have submitted the following in support of their claim for corporate cost allocation:

- *AEL has consolidated various strategic functions/activities like corporate finance, legal, central procurement, green initiative, ESG, Information technology, taxation, management assurance, internal audit, shared service for financial transactions. human resource management. AEL also includes various strategic and leadership functions like Chairman office, Group CFO office, Corporate Communication and Branding etc. AEL provides support on these functions to all group companies including but not limited to Power, Renewable, Ports, Logistics, Airports, Data Center, Défense etc.*
- *AEL and AAHL incur costs at the corporate level to provide these services and support to various Group Companies (including Airports) and Airport companies. The major composition of these costs includes salaries and administrative costs. These costs (except shareholders services and non-Aeronautical services) are recovered by AEL and AAHL through a predetermined, appropriate allocation method.*
- *It has been a common practice across all the industries operated by big business houses including private Airport entities and AAI, whereby cost allocation process is prevalent. The similar corporate cost allocation practice is used by aviation companies For e.g., GMR Infrastructure Limited (GIL) and GMR airports Limited (GAL) provides services to Delhi International Airport Limited (DIAL) and GMR Hyderabad International Airport Limited (GHIAL) and their costs are allocated based on suitable drivers. Similar practice is followed by AAI as well in allocating its Central Head Quarters (CHQ) / Regional Head Quarters (RHQ) costs to various airports.*

4.4.21 The break-up of corporate costs submitted by TKIAL for Post COD Period is as follows:

**Table 78: Breakup of CSS expenses as per TKIAL**

Particulars (Rs. in crores)	Post COD
Corporate Cost Allocation from AAHL	4.57
Corporate Cost Allocation from AEL	2.44
<b>Total</b>	<b>7.01</b>

**Table 79: CSS Expense allocation from AAHL for FY 2021-22 (i.e., from COD to 31<sup>st</sup> March 2022) as per TKIAL**

Department (Rs. in crores)	Allocation Key (Basis)	Admin Cost	Salary Cost	Total
Human Resources & Admin	Ratio of Number of Employees of a Special Purpose Vehicle (SPV) to Total Adani Group Employees	0.05	0.22	<b>0.27</b>
Finance	Ratio of Debt raised for a SPV to total Debt raised for Airport Group	0.04	0.14	<b>0.18</b>
Operations (Airline Marketing, Operation, Security, HSE, Regulatory)	Ratio of Per Pax Revenue of SPV to total Per Pax Revenue	0.21	0.86	<b>1.07</b>

Department (Rs. in crores)	Allocation Key (Basis)	Admin Cost	Salary Cost	Total
Information Technology	Ratio of Number of IT users in a SPV to total IT users in all airports	0.03	0.13	<b>0.16</b>
Inhouse Legal Team	Ratio of Legal Budget of a SPV to Total Legal Budget of all airports	0.00	0.01	<b>0.01</b>
Cargo Development	Ratio of Per Pax Revenue of a SPV to total Per Pax Revenue of all airports	0.00	0.00	<b>0.00</b>
C.E.O Office	Ratio of Per Pax Revenue of SPV to total Per Pax Revenue	0.57	2.30	<b>2.87</b>
<b>Total</b>		<b>0.91</b>	<b>3.65</b>	<b>4.57</b>

**Table 80: CSS Expense allocation from AEL for FY 2021-22 (i.e., from COD to 31<sup>st</sup> March 2022) as per TKIAL**

Department (Rs. in crores)	Allocation Key (Basis)	Admin Cost	Salary Cost	Total
HR & Admin	Ratio of Number of Employees of a SPV to Total Adani Group Employees	0.31	0.62	<b>0.93</b>
Finance, Tax & Internal Audit	Ratio of Debt raised for a SPV to total Debt raised for Adani Group, Ratio of Turnover of a SPV to Total Group Turnover and Ratio of Full Time Equivalents (FTE) allocated to a SPV to total FTEs	0.05	0.11	<b>0.16</b>
IT	Ratio of Number of IT users in a SPV to total Group users	0.19	0.39	<b>0.59</b>
Legal	Ratio of Legal Budget of a SPV to Total Legal Budget of all airports	0.01	0.02	<b>0.03</b>
CMD Office & Support Staff	Ratio of a SPV Profit Before Tax (PBT) to Group PBT and Airport budgeted expenditure to Total budgeted expenditure	0.23	0.48	<b>0.71</b>
Procurement	Ratio of Turnover of a SPV to Total Group Turnover	0.00	0.00	<b>0.01</b>
Land & Estate	Ratio of a SPV PBT to Group PBT	0.01	0.01	<b>0.02</b>
<b>Total</b>		<b>0.81</b>	<b>1.64</b>	<b>2.44</b>

4.4.22 It is observed that the activities of certain Functions such as Finance, HR & Admin and IT are performed both centrally at Corporate (AEL, AAHL) and at individual Airports. The same has been detailed as follows:

Activities performed at corporate level: These are strategic, decision-making activities that are carried out across the Group such as:

- Designing policies and procedures, benchmarking and standardization of processes across the Group
- Monitoring annual budgeting process
- Implementation of ERP for the Group (particularly Finance and HR functions)
- Reviewing performance of the Group and providing guidance to Group Companies
- Maintaining Adani Airports Information Repository, standards in software development and networking.
- Identifying new revenue generating IT services, technologies, and solutions.

Activities performed at the Airport: These are operational in nature which includes:

- Recording of Financial data in ERP
- Preparation of monthly Management Information System (MIS) for presenting it to corporate team
- Financial due diligence of various proposals.
- Conducting interviews at site level for hiring of manpower and managing manpower at the site.
- Executing Performance appraisal process and providing feedback to corporate team.

- Executing day-to-day IT requirements at the Airport.
- Maintaining airport related IT assets such as Airport Operational Data Base (AODB), FIDS, software used in AOCC, etc.
- Support HO/Corporate IT team in the areas of IT Strategy, delivery, and Governance.

4.4.23 It is noted that AEL on an overall basis, extends support and guidance to various Group Companies and AAHL provides expertise and specialist domain knowledge to the Airport Companies, which are essential for the sustainable operations of the business. The major composition of the costs of these services includes salaries and administrative costs that are recovered by AEL and AAHL through an appropriate allocation method. Further, this process is consistent with the approach followed by other PPP airports such as Delhi International Airport Limited (DIAL), GMR Hyderabad International Airport Limited (GHIAL) etc. for allocation of corporate costs to the Airports. Based on the above factors, the Study considers the apportionment of costs of AEL and AAHL to TKIAL as reasonable.

4.4.24 It is noted that in-house legal team cost of Rs. 0.04 crores included in the Corporate Cost allocation for Post COD Period. However, the employee expenses towards the in-house legal team of TKIAL have already been allowed under employee expense and therefore, providing additional expenses towards legal department at the corporate level would result in redundancy. Hence, the Study has excluded the same from the determination of Aeronautical charges, as shown in the following table.

**Table 81: CSS expenses post the exclusion of legal costs as per the current Study**

Particulars (Rs. in crores)	Total Expenses	Re-Categorization	Total Expenses
	A	B	(A + B)
Corporate Cost Allocation from AAHL	4.57	-0.01	4.56
Corporate Cost Allocation from AEL	2.44	-0.03	2.41
<b>Total</b>	<b>7.01</b>	<b>-0.04</b>	<b>6.97</b>

#### **Reallocation of CSS expenses**

4.4.25 TKIAL has considered Corporate Support Service Expense as 100% aeronautical. However, the basis for allocation of the costs towards Aeronautical and Non-aeronautical activities has not been provided in their consultant's report. Therefore, in the absence of an appropriate basis, the corporate costs can be allocated in the ratio of Employee Headcount of TKIAL. Accordingly, the Study has recomputed the aeronautical Corporate Cost Allocation as follows:

**Table 82: Adjustment made as per the current Study to the CSS expense submission of TKIAL**

Particulars (Rs. in crores)	Total Expenses	Re-Categorization	Allocation (% Aero)	Aero expenses	Impact
	A	B	C	D = (A + B) * C	(A - D)
Corporate Cost Allocation from AAHL	4.57	-0.01	91.67%	4.18	0.39
Corporate Cost Allocation from AEL	2.44	-0.03	91.67%	2.21	0.23
<b>Total</b>	<b>7.01</b>	<b>-0.04</b>		<b>6.39</b>	<b>0.62</b>

4.4.26 As per the submission of TKIAL, the aeronautical Corporate Support Service expense is Rs. 7.01 crores. However, the Study has made certain adjustment to this expense which led to an overall reduction of Rs. 0.62 crores in the CSS expense.

#### **A&G Expenses**

##### **Reasonable assessment of A&G Expense**

4.4.27 During the analysis of TKIAL's O&M expenses for the Post COD Period, it was observed that the expenses submitted were categorized into different groups. Certain expenses such as insurance, IT, and bank charges were identified separately. It is important to note that Administrative and General (A&G) expenses typically encompass a wide range of costs that are crucial for the day-to-day operations and management of a business. This category typically includes expenses related to insurance, IT, and bank charges, as they play an integral role in supporting administrative functions and ensuring the efficient functioning of the organization. Therefore, to present a more accurate representation of the expenses, the Study consolidated these costs into the Administrative and General (A&G) expenses category.

4.4.28 It was observed that during the 5.5-month period following the COD, TKIAL incurred Rs. 4.94 crores towards administrative activities such as printing and stationery, traveling, consultancy fees, and other related expenses. When comparing TKIAL's Administrative and General (A&G) expenses with those of other airports like Pune, Goa, Calicut and Chandigarh airport (refer Table 92), it appears that TKIAL's expenses are within reasonable levels.

4.4.29 TKIAL was requested to share the breakup of A&G expenses to which they listed the following table:

**Table 83: Breakup of Administrative expenses as per TKIAL**

Particulars (Rs. in crores)	Post COD	Nature/Purpose
Professional & Consultancy Fees	2.29	Outsourcing of IT Application and Infrastructure Management, Consultancy charges for survey, membership & subscription, Manpower recruitment consultancy.
Travelling & Conveyance	0.12	Travelling & Conveyance expenses of staff
Printing, Stationery & Other Misc. Exp	0.40	Décor expenses for various events / festivals / participation in Expo, Stationery and Printing Expenses
Water Charges	0.08	Water charges for operations (incl. reimbursement to AAI)
Audit Fees	0.02	
<b>Sub-total</b>	<b>2.92</b>	
IT expenses	0.88	Rs. 0.22 crores relate to Licence fee for various software/applications incl. SAP, Rs. 0.62 crores relate to Maintenance & Upkeeping of IT hardware and applications incl. AODB, FIDS, Rs. 0.04 crores relate to Landline, Mobile & Data Card Expenses
Insurance	0.76	Rs. 0.60 crores relate to Cost of insurance coverage for Property, Rs. 0.17 crores relate to Cost of insurance for Airport Operators Liability
Bank & Finance Charges	0.37	Bank Charges of Rs 0.37 crores includes the following: - Rs. 0.30 crores - fees for Performance Bank Guarantee Rs. 0.06 crores - Stamp duty charges for executing various financing documents. Rs 0.01 crores - various bank charges.
<b>Total</b>	<b>4.93</b>	

#### Reallocation of A&G Expenses

4.4.30 TKIAL has considered all the A&G expenses as 100% aeronautical. The Study has reclassified and reallocated the A&G expenses based on the information and clarification provided by TKIAL. The following table shows the adjustment made as per the Study to the A&G Expense submission of TKIAL.

**Table 84: Adjustment made as per the current Study to the A&G expense submission of TKIAL**

Particulars (Rs. in crores)	Total Expenses	Re-Categorization	Allocation Methodology as per the Study	Allocation (% Aero)	Aero expenses	Impact
	A	B		C	D = (A + B) * C	(A - D)
Professional & Consultancy Fees	2.29	-	Gross Block Ratio (99.38% : 0.62%)	99.38%	2.28	0.01

Particulars (Rs. in crores)	Total Expenses	Re-Categorization	Allocation Methodology as per the Study	Allocation (% Aero)	Aero expenses	Impact
	A	B		C	D = (A + B) * C	(A - D)
Travelling & Conveyance	0.12	-	EHCR (98.19% : 1.81%)	98.19%	0.12	0.00
Printing, Stationery & Other Misc. Exp	0.40	-	EHCR (98.19% : 1.81%)	98.19%	0.39	0.01
Water Charges	0.08	-0.08	-	-	-	0.08
Audit Fees	0.02	-	Gross Block Ratio (99.38% : 0.62%)	99.38%	0.01	0.00
IT expenses	0.88	-	Gross Block Ratio (99.38% : 0.62%)	99.38%	0.87	0.01
Insurance	0.76	-	Gross Block Ratio (99.38% : 0.62%)	99.38%	0.76	0.00
Bank & Finance Charges	0.37	-	Gross Block Ratio (99.38% : 0.62%)	99.38%	0.37	0.00
<b>Total</b>	<b>4.93</b>	<b>-0.08</b>			<b>4.81</b>	<b>0.12</b>

4.4.31 According to TKIAL's submission, the aeronautical A&G expenses amount to Rs. 4.93 crores. However, the Study has conducted a reclassification of expenses based on the principles outlined in para 3.3.1.1 and utilized appropriate allocation ratios to accurately determine the cost related to aeronautical activities exclusively. As a result of this reallocation, the Study has determined that the aeronautical A&G expenses amount to Rs. 4.81 crores. This adjustment has resulted in an overall reduction of Rs. 0.12 crores in the A&G expenses.

### **Repairs and Maintenance Expenses**

#### **Reasonable assessment of Repairs and Maintenance Expense**

4.4.32 In FY 2021-22, TKIAL operated TRV for a period of 5.5 months post COD, during which they incurred an amount of Rs. 5.96 crores towards Aeronautical Repairs & Maintenance. These expenses encompassed the maintenance of various assets, including Constant Current Regulators, Airfield Lighting System & Power Supply System, Electrical & Mechanical Installations of Terminal Buildings, Central Air Conditioning System of Terminal Buildings, Baggage Conveyors, Water Coolers/Water Purifiers, Water Treatment Plant, AC Plant, Civil Works at Terminal Buildings/Ancillary Buildings, Civil Works at CISF Barracks/Admin Building, Painting of Runway, and Apron Marking among others.

4.4.33 As per the explanation provided in para 4.4.15, the R&M expense related to security equipment amounting to Rs. 2.04 crores has been reclassified under the overall "Repairs and Maintenance" (R&M) expenses. The analysis indicates that these expenses are primarily associated with the repairs and maintenance of security equipment, as well as the Annual Maintenance Contracts (AMCs) of Mechanical Equipment such as Bosch CCTV, XBIS, and others.

4.4.34 When comparing these expenses to other PPP (Public-Private Partnership) airports (refer Table 95), it can be observed that the R&M expenses incurred by TKIAL for the post COD period fall within the expected range. Furthermore, these expenses align with the cost incurred by AAI for TRV in the Pre COD period, providing further justification for their reasonableness.

4.4.35 The analysis of these expenses, in comparison to benchmarks and historical data, indicates that the R&M expense submitted by TKIAL is reasonable.

4.4.36 In order to understand the nature of works undertaken, TKIAL has shared the following breakup of R&M expenses:



**Table 85: Breakup of R&M expenses submitted by TKIAL**

Particulars (Rs. in crores)	Post COD (14th Oct'21 to 31st Mar'22)	Nature/Purpose
Consumption of Stores & Spares-Domestic	0.18	Includes expenses related to paper cups, tube cutter, potentiometer, vehicle tires & tubes, water dispenser, drive motor, etc.
Consumption of Operating Supplies-Domestic	0.07	Includes office & stationary items, Firework/Flares/Firecracker, dry chemical powder for fire extinguisher, etc.
Repairs & Maintenance-Buildings	1.38	Includes expenses related to the supply of automatic sensor taps, urinal sensors, battery, paint, maintenance charges, AMCs, etc.
Repairs & Maintenance-Plant & Machinery	1.32	Relates to Annual Comprehensive Maintenance Contracts (ACMCs) of lifts, Bukaka make PBBs, escalator, etc., maintenance charges, etc.
Electric works	2.83	Includes AMCs, maintenance charges, installation of Heating Ventilation and Air Conditioning (HVAC) system etc.
Repairs & Maintenance-Others	0.18	Includes expenses related to Gaskets, slat conveyor system, roller conveyor, AMCs of fire tenders, maintenance of firefighting system, etc.
<b>Total</b>	<b>5.96</b>	

**Reallocation of R&M Expenses**

- 4.4.37 As seen in the table above, TKIAL has initiated several maintenance activities post taking over the operations of the Airport.
- 4.4.38 It is to be noted that R&M expenses for the Post COD period have been considered 100% aeronautical by TKIAL. However, the Study has conducted a reclassification of expenses based on the principles outlined in para 3.3.1.1 and utilized appropriate allocation ratios to accurately determine the R&M cost related to aeronautical activities exclusively.
- 4.4.39 However, certain maintenance expenses such as Constant Current Regulators, Airfield lighting system & Power supply system, Painting of runway and Apron marking, Security machines i.e., XBIS Baggage Conveyors, etc. are proposed to be considered as Aeronautical. The impact of such a difference is an adjustment i.e., increase of Rs. 1.94 crores as shown in the table below:

**Table 86: Impact of revision in Aeronautical Repairs & Maintenance expenses of TKIAL**

Particulars (Rs. in crores)	As per TKIAL			As per the Study			Impact
	Total Expenses	Allocation (% Aero)	Aero Expenses	Re-Categorization	Allocation (% Aero)	Aero Expenses	
	A	B	C = A * B	D	E	F = (A + D) * E	C - F
Consumption of Stores & Spares-Domestic	0.18	100%	0.18	-0.07	99.38%	0.12	0.07
Consumption of Operating Supplies-Domestic	0.07	100%	0.07	-0.00	99.38%	0.06	0.00
Repairs & Maintenance-Buildings	1.38	100%	1.38	-	99.43%	1.37	0.01
Repairs & Maintenance-Plant & Machinery	1.32	100%	1.32	2.04	99.83%	3.35	-2.03
Electric works	2.83	100%	2.83	-	99.40%	2.81	0.02
Repairs & Maintenance-Others	0.18	100%	0.18	-	99.57%	0.18	0.00
<b>Total</b>	<b>5.96</b>		<b>5.96</b>	<b>1.97</b>		<b>7.89</b>	<b>-1.94</b>

\*Rs. 2.04 crores relate to the R&M expense recategorized from the Security Expenses as seen in Table 77

Note: Refer Annexure 3 for line-item wise reallocation of R&M expense for Post COD period

### **Other Operating Expenses**

#### **Reasonable assessment of Other Operating Expense**

4.4.40 It is observed that the Other Operating expenses totaling to Rs. 4.46 crores include amount incurred towards housekeeping, deployment of medical staff, outsourced manpower for trolley and data entry operations, machines on rent hired for airside operations etc. The detailed nature of expenses has been explained below:

**Table 87: Break up of Other Operating expenses of TKIAL**

Particulars (Rs. in crores)	Post COD	Nature/Purpose
Factory & Office Expenses	0.25	Deployment of doctors, Misc. charges to AAI
Contractual Manpower-Operations	1.04	Deployment of various manpower for Trolley Retrieval, and Data Entry Operators
Equipment Rentals-Operations	0.20	Charges for Friction Testing and Rubber Removal machines
House Keeping Expenses	2.79	Housekeeping of Terminal, Airside Area, Offices and other Ancillary buildings, Solid Waste Management, Pest Control Etc
Vehicle Hiring Charges	0.19	Hiring of vehicles for operations
<b>Total</b>	<b>4.46</b>	

4.4.41 The expenses mentioned above were subject to a detailed analysis and comparison with the expenses incurred by other PPP airports. Based on this analysis, it was determined that the expenses are reasonable and within expected levels.

#### **Reallocation of Other Operating Expenses**

4.4.42 Furthermore, it was observed that TKIAL had considered all expenses as 100% Aeronautical. However, the Study has conducted a reclassification of expenses based on the principles outlined in para 3.3.1.1 and utilized appropriate allocation ratios to accurately determine the other operating cost related to aeronautical activities exclusively. The reclassification and reallocation of expenses along with the impact of such difference is as shown in the table below:

**Table 88: Impact of revision in Aeronautical Other Operating expenses of TKIAL**

Particulars (Rs. in crores)	As per TKIAL			Re- Categoriz ation	As per the Study			Impact
	Total Expenses	Allocation (% Aero)	Aero Expenses		Allocation Methodology as per the Study	Allocation (% Aero)	Aero Expenses	
	A	B	C = A * B			E	F = (A + D) * E	
Factory & Office Expenses	0.25	100%	0.25	-	EHCR (98.19% : 1.81%)	98.19%	0.24	0.00
Contractual Manpower- Operations	1.04	100%	1.04	-	Terminal Building Ratio (90% : 10%)	90.00%	0.93	0.10
Equipment Rentals- Operations	0.20	100%	0.20	-	Aeronautical (100%)	100.00%	0.20	-
House Keeping Expenses	2.79	100%	2.79	-	Terminal Building Ratio (90% : 10%)	90.00%	2.51	0.28
Vehicle Hiring Charges	0.19	100%	0.19	-	Terminal Building Ratio (90% : 10%)	90.00%	0.17	0.02
<b>Total</b>	<b>4.46</b>		<b>4.46</b>	-			<b>4.05</b>	<b>0.41</b>

### **Collection Charges on UDF**

#### **Reasonable assessment of Collection Charges on UDF**

- 4.4.43 It is observed that the collection charges totaling Rs. 0.11 crores include amount incurred towards payment to airlines for collection of UDF from the passengers. The collection charges have more or less remained consistent when compared to the period prior to COD. Thus, the collection charge on UDF of Rs. 0.11 crores incurred by TKIAL appears to be reasonable.

### **Independent Engineer Fees**

#### **Reasonable assessment of Independent Engineer Fees**

- 4.4.44 It is observed that TKIAL in the O&M expenses has submitted a cost of Rs. 1.67 crores in respect of fees payment to the Independent Engineer. It is to be noted that the independent engineer is appointed by AAI for a period of 3 years for a fee of Rs. 11.35 crores starting from 22<sup>nd</sup> October 2021.

- 4.4.45 As per Clause 24 of the Concession Agreement, an Independent Engineer has to be appointed by AAI and remuneration shall be paid by AAI which in turn shall be reimbursed by TKIAL to AAI.

Further, as per Clause 24.3.1 of the Concession Agreement, this cost has to be considered as a passthrough by the Regulator. Clause 24.3.1 states that:

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

- 4.4.46 Based on a comprehensive review of the relevant clauses in the Concession Agreement, it is evident that the remuneration of the Independent Engineer must be treated as a pass-through expense by AERA (Airports Economic Regulatory Authority). Consequently, the Study considers the fee of Rs. 1.67 crores as an O&M expense for the Post COD period.

### **4.5 Overall Summary of O&M Expenses for Post COD Period as submitted by TKIAL and as per the current Study**

- 4.5.1 The total impact on various heads under O&M expenses as a result of the proposed reallocation stated in the above paragraphs are shown below.

**Table 89: Summary of adjustment made as per the current Study to the O&M expenses submitted by TKIAL**

Expense Category	Expense Sub-Category / Description	Expenses classification		Impact (Rs. in crores)
		TKIAL	Study	
Manpower expenses	Payroll expenditure – AAI employees	Aeronautical (100%)	EHCR (98.56% : 1.44%)	0.40
	Payroll expenditure – TKIAL employees	Aeronautical (100%)	EHCR (91.67% : 8.33%)	0.35
A&G Expenses	Professional & Consultancy Fees	Aeronautical (100%)	Gross Block Ratio (99.38% : 0.62%)	0.01
	Travelling & Conveyance	Aeronautical (100%)	EHCR (98.19% : 1.81%)	0.002
	Printing, Stationery & Other Misc. Exp	Aeronautical (100%)	EHCR (98.19% : 1.81%)	0.01

Expense Category	Expense Sub-Category / Description	Expenses classification		Impact (Rs. in crores)
		TKIAL	Study	
	Water Charges	Aeronautical (100%)	-	0.08
	Audit Fees	Aeronautical (100%)	Gross Block Ratio (99.38% : 0.62%)	0.00
	IT expenses	Aeronautical (100%)	Gross Block Ratio (99.38% : 0.62%)	0.01
	Insurance	Aeronautical (100%)	Gross Block Ratio (99.38% : 0.62%)	0.005
	Bank Charges	Aeronautical (100%)	Gross Block Ratio (99.38% : 0.62%)	0.002
R&M Expenses	Consumption of Stores & Spares-Domestic	Aeronautical (100%)	Terminal Building Ratio (90% : 10%)	0.07
	Consumption of Operating Supplies-Domestic	Aeronautical (100%)	Terminal Building Ratio (90% : 10%)	0.004
	Repairs & Maintenance-Buildings	Aeronautical (100%)	Aeronautical (100%), Terminal Building Ratio (90% : 10%) & Gross Block Ratio (99.38% : 0.62%)	0.01
	Repairs & Maintenance-Plant & Machinery	Aeronautical (100%)	Aeronautical (100%) & Terminal Building Ratio (90% : 10%)	-2.03
	Electric works	Aeronautical (100%)	Aeronautical (100%) & Terminal Building Ratio (90% : 10%)	0.02
	Repairs & Maintenance-Others	Aeronautical (100%)	Aeronautical (100%) & Terminal Building Ratio (90% : 10%)	0.001
CSS Expenses	Corporate Cost Allocation	Aeronautical (100%)	EHCR (91.67% : 8.33%)	0.62
Utility Expenses	Utility expenses (power & Fuel)	Aeronautical (100%)	Terminal Building Ratio (90% : 10%)	-
	Water Charges	Aeronautical (100%)	Gross Block Ratio (99.38% : 0.62%)	-0.08
Security Expenses	Security Agency charges	Aeronautical (100%)	Gross Block Ratio (99.38% : 0.62%)	0.01
	Security Equipment	Aeronautical (100%)		2.04
Other outflow expenses	Factory & Office Expenses	Aeronautical (100%)	EHCR (98.19% : 1.81%)	0.004
	Contractual Manpower-Operations	Aeronautical (100%)	Terminal Building Ratio (90% : 10%)	0.10
	Equipment Rentals-Operations	Aeronautical (100%)	Aeronautical (100%)	-
	House Keeping Expenses	Aeronautical (100%)	Terminal Building Ratio (90% : 10%)	0.28
	Vehicle Hiring Charges	Aeronautical (100%)	Terminal Building Ratio (90% : 10%)	0.02
Independent Engineer Fee		Aeronautical (100%)	Aeronautical (100%)	-
<b>Total</b>				<b>1.93</b>

- 4.5.2 According to TKIAL's submission, the aeronautical O&M expense is Rs. 65.79 crores. However, the Study has conducted various reclassifications and revisions as outlined in Table 89 resulting in the aeronautical O&M expense of Rs. 63.84 crores. This adjustment has led to an overall reduction of Rs. 1.93 crores from the O&M expense initially submitted by TKIAL. The breakdown of the expenses is as provided below:

**Table 90: Aeronautical expenses for TKIAL for post COD period as per the current Study**

Heads	Sub Heads	Post COD (Rs. in crores)
Employee Benefit Expenses	Manpower expenses - AAI employees	27.68
	Manpower expenses - Adani employees	3.85
Utility & Outsourcing Expenses	Utility expenses	5.68
	Security expenses	1.71
CSS Expenses	Corporate Cost Allocation	6.39
A&G Expenses	Independent Engineer Fee*	1.67
	Administrative Expenses – Others	4.81
R&M Expenses	R&M	7.89
Other Outflows	Collection Charges on UDF	0.11
	Others	4.05
	<b>Total</b>	<b>63.84</b>

\* Refer para 4.4.44 for Independent Engineer Fee

## 4.6 Conclusion

- 4.6.1 In FY 2021-22, TKIAL operated the airport for a period of 5.5 months post COD in which they had incurred an amount of Rs. 65.79 crores towards O&M expenses. The employee expenses of AAI, Corporate cost allocation and R&M expenses primarily contribute towards this amount. However, all the expenses were analysed separately to ascertain their reasonableness.
- 4.6.2 The average salary per TKIAL employee is higher than that of the Select Employees (of AAI) by more than ~ 75%. The Study has considered the Select employees of AAI and TKIAL as common and bifurcated the employee expenses towards them in EHCR of 98.56% and 91.67% respectively. The adjustments in the Study led to an overall reduction of Rs. 0.75 crores on the employee expenses.
- 4.6.3 Utility Expense incurred by TKIAL for the Post COD period does not reflect major change as compared to the cost incurred by AAI for Pre COD period, as there has not been any considerable change to the airport infrastructure. The utility expenses with water charges (Rs. 5.68 crores) incurred by TKIAL seems to be reasonable after netting off the recoveries from the concessionaires.
- 4.6.4 The Security expenses, as per TKIAL is Rs. 3.76 crores. The expense related to R&M of security equipment amounting to Rs. 2.04 crores were recategorized to R&M head and analysed there. The Study has further reclassified the expense as common and applied Gross Block ratio which led to an overall reduction of Rs. 2.05 crores in the Security expense.
- 4.6.5 The Corporate Support Service expense, as per the MYTP submission of TKIAL, is Rs. 7.01 crores. However, the Study has made certain adjustments to this expense which led to an overall reduction of Rs. 0.62 crores in the CSS expense.
- 4.6.6 As per the submission of TKIAL, the aeronautical A&G expenses including insurance, IT expense and Bank charges amounts to is Rs. 4.94 crores. Certain reclassifications have been carried out in the Study, resulting in the revised aeronautical A&G expenses to be Rs. 4.81 crores. This led to an overall reduction of Rs. 0.12 crores in the A&G expenses.

- 4.6.7 The R&M expenses of TKIAL were included with R&M of Security equipment in the Study and found reasonable and in the range of cost incurred by other PPP Airports. The Study has reclassified the expenses and led to the increase of R&M expenses by Rs. 1.94 crores. The R&M expense post reclassification as per the Study were lower than 6% of the opening RAB of TKIAL. Therefore, this expense does not require any rationalization.
- 4.6.8 As per the submission of TKIAL, the other outflow expenses as per TKIAL is Rs. 4.46 crores. Certain reclassifications have been carried out in the Study, because of which, other outflow expenses revised to Rs. 4.05 crores. This led to an overall reduction of Rs. 0.41 crores in the other outflow expenses.
- 4.6.9 TKIAL has submitted a cost of Rs. 1.67 crores in respect of fees payment to the Independent Engineer appointed by AAI for a period of 3 years for a fee of Rs. 11.35 crores starting from 22<sup>nd</sup> October 2021. As per Clause 24.3.1 of the Concession Agreement, this cost has to be considered as a pass-through expense by AERA. Consequently, the Study considers the fee of Rs. 1.67 crores as an O&M expense for the Post COD period.
- 4.6.10 As per the submission of TKIAL, the aeronautical O&M expenses for the Post COD Period amounts to Rs. 65.79 crores. Certain reclassifications have been carried out in the Study, because of which, the aeronautical O&M expense as per the Study is Rs. 63.84 crores. This led to an overall reduction of Rs. 1.93 crores in the aeronautical O&M expenses.
- 4.6.11 It is important to consider that TKIAL operated the airport for only 5.5 months during the Second Control Period. In such cases, it is common to have one-time expenses associated with repairs, modifications, or refurbishments when a new operator takes over the operations of an airport. To assess the reasonableness of these expenses, it is necessary to analyze trends over a longer period of time.
- 4.6.12 Drawing conclusions about the efficiency of TKIAL based on just five months of data would be premature. However, based on a broad-level assessment, there are no deviations from the trends observed at TRV in the past. While a longer timeframe would provide a more comprehensive understanding of the operator's performance, the initial analysis does not indicate any significant concerns.

## 5. EXTERNAL BENCHMARKING OF EXPENSES OF AAI

### 5.1 Background

5.1.1 In this Chapter, the benchmarking of O&M expenses across airports has been done to ascertain the reasonableness of the O&M expenses being incurred by AAI at TRV. However, it must be noted that, in general, benchmarking is a complex exercise on account of the following factors:

- Passenger traffic
- Passenger mix (i.e., Domestic vs International Passenger)
- Level and extent of automation varies across airports.
- Concessioned out airports vs those operated by Airports Authority of India (AAI)
- Extent of outsourcing of various activities
- Local labor conditions (e.g., Minimum wages)
- Age of the airport
- Physical size of the airport infrastructure
- Type of existing services at airports (e.g., Availability of aerobridges)
- Weather conditions that can impact facilities such as extent of air-conditioning/heating.
- Sharing with other entities (e.g., Indian Army / Navy)

5.1.2 Nevertheless, and notwithstanding the challenges, a benchmarking exercise has been carried out in this report among select airports in India including TRV. The exercise has been carried out across ten airports in Ahmedabad, Bangalore, Calicut, Chandigarh, Chennai, Cochin, Goa, Hyderabad, Kolkata and Pune.

5.1.3 The following assumptions/considerations have been considered while carrying out the benchmarking exercise:

- All the figures considered are either average or total expense during FY 2017-20, in order to avoid distortions due to the COVID-19 pandemic which may not be comparable.
- All expenses are related to aeronautical activities.

5.1.4 Also, it would be pertinent to highlight here that the benchmarking has been carried out based on suitable parameters such as PAX traffic, number of aeronautical employees, average salary of the aeronautical employees, total revenue, gross block and aeronautical operating expenditure depending on the nature of the expense.

### 5.2 Analysis of O&M expenses

5.2.1 The following table summarizes the average traffic (in million) from FY 2016-17 to FY 2019-20, Terminal Area, Closing RAB of FY 2019-20 and total revenue from FY 2017-20 across select airports considered in this Study.

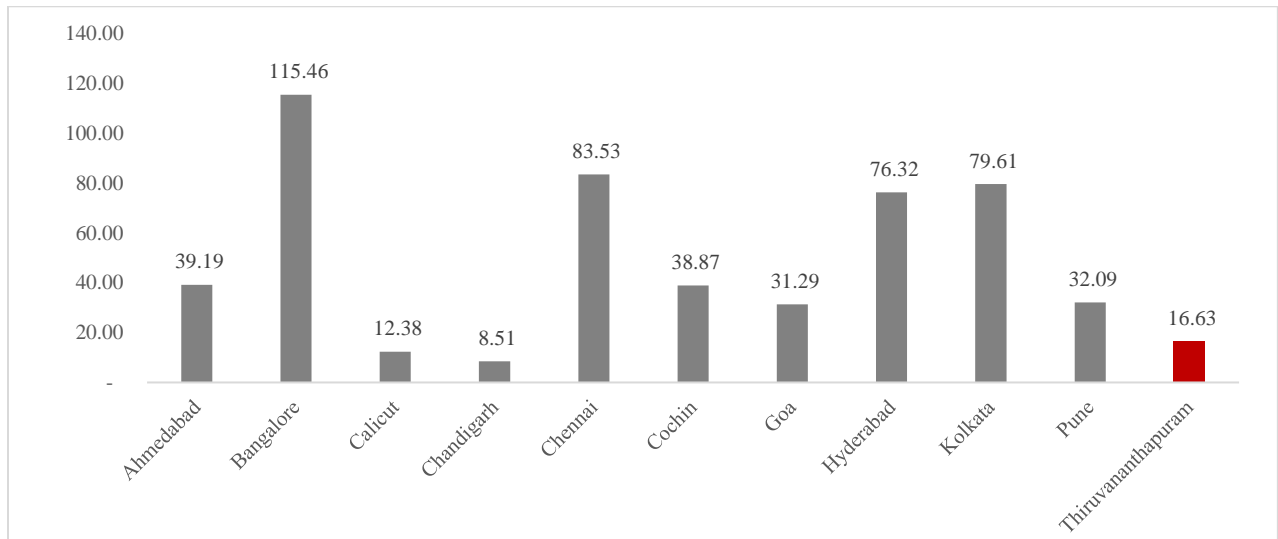
**Table 91: Various parameters across select domestic airports**

Airport location	Traffic (FY17-FY20) (Mn)	Terminal Area (lakh sqm)	Closing RAB of FY20 (Rs. in crores)	Total Revenue (FY17-FY20) (Rs. in crores)
Ahmedabad	39.19	0.70	328.92	1,068.58
Bangalore	115.46	1.63	4,086.69	7,817.62
Calicut	12.38	0.57	280.06	1,864.36

Airport location	Traffic (FY17-FY20) (Mn)	Terminal Area (lakh sqm)	Closing RAB of FY20 (Rs. in crores)	Total Revenue (FY17-FY20) (Rs. in crores)
Chandigarh	8.51	0.24	364.42	1,584.11
Chennai	83.53	1.75	1,840.12	3,725.24
Cochin	38.87	2.21	1,517.64	2,268.90
Goa	31.29	0.62	401.38	297.02
Hyderabad	76.32	1.17	1,937.87	5,688.30
Kolkata	79.61	2.24	2,173.86	3,992.70
Pune	32.09	0.24	102.09	681.92
Thiruvananthapuram	16.63	0.46	485.12	1,130.07

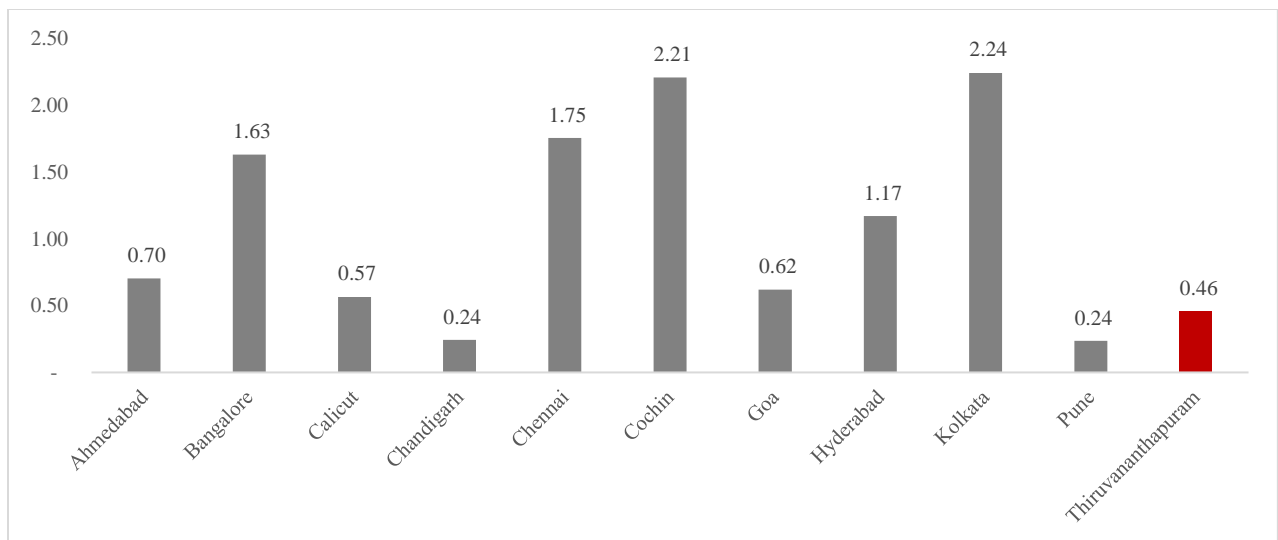
Note: Pune and Goa airports are civil enclaves, so their cost structure may not be comparable to that of typical AAI airports

**Figure 8: PAX traffic across the select airports (Mn)**



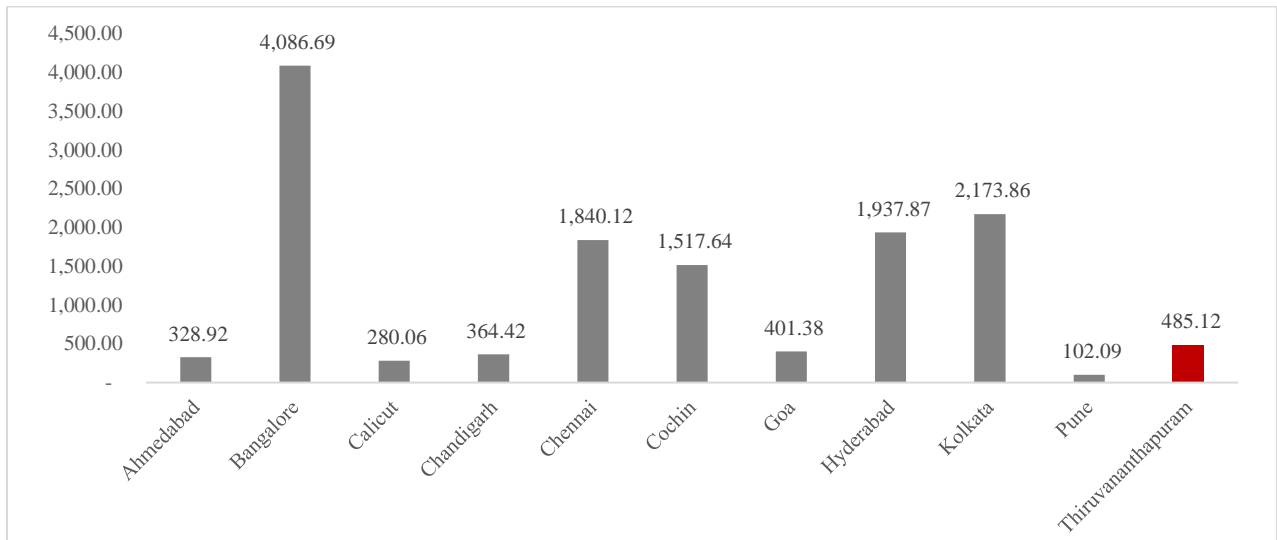
5.2.2 The comparable airports in terms of passenger traffic are Goa, Chandigarh, Calicut, Pune and Ahmedabad.

**Figure 9: Terminal area across the select airports (Lakh SQM)**

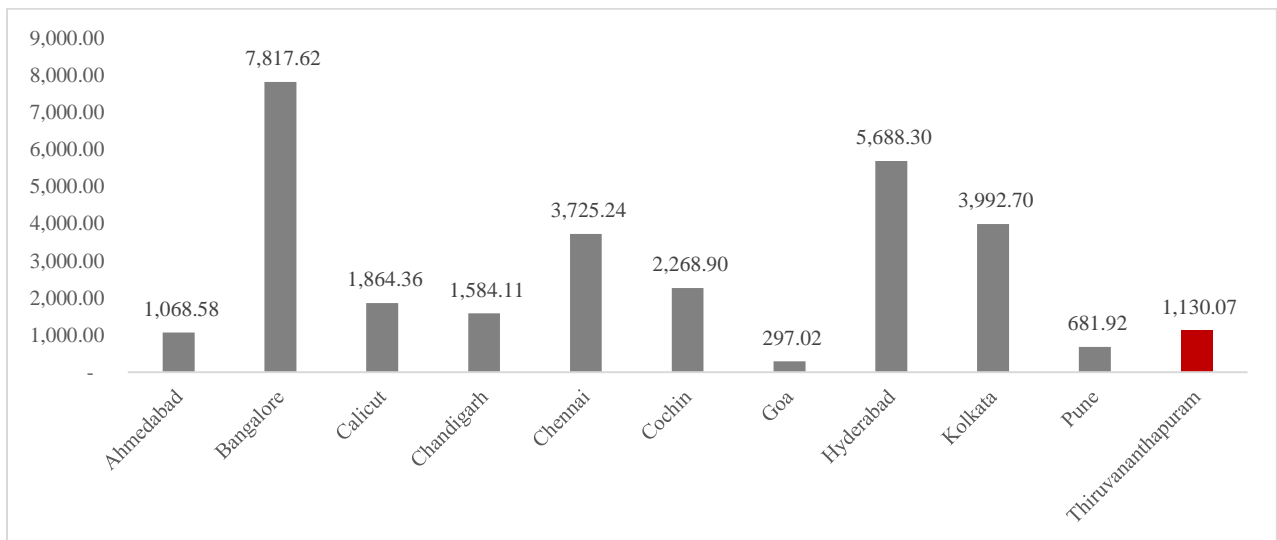


5.2.3 In terms of terminal area (size), Ahmedabad, Goa, Calicut, Chandigarh and Pune are comparable airports.



**Figure 10: Closing RAB of FY 2019-20 across the domestic airports**

5.2.4 The comparable airports in the peer group in terms of the aeronautical assets managed are Ahmedabad, Calicut, Chandigarh and Goa.

**Figure 11: Total revenue during FY 2017-20 across the select airports (Rs. in crores)**

5.2.5 The comparable airports in the peer group in terms of total revenue are Ahmedabad, Calicut, Chandigarh, Pune and Goa.

5.2.6 The major expense items from FY 2017-20 under Aeronautical O&M expenses across the select airports considered above are summarized in the table below:

**Table 92: Major expense items comparison across select domestic airports**

Particulars (Rs. in crores)	Employee		R&M		Utilities		A&G		CHQ/RHQ		Total
	Value	%	Value	%	Value	%	Value	%	Value	%	Value
Ahmedabad	124.57	25%	97.67	19%	79.43	16%	62.60	12%	134.21	27%	501.19
Bangalore	529.50	36%	396.02	27%	147.45	10%	407.15	28%	-	0%	1,480.12

Particulars (Rs. in crores)	Employee		R&M		Utilities		A&G		CHQ/RHQ		Total
	Value	%	Value	%	Value	%	Value	%	Value	%	Value
Calicut	125.27	43%	38.37	13%	33.17	11%	25.02	9%	67.47	23%	293.45
Chandigarh	17.65	20%	17.94	21%	35.17	40%	14.85	17%	-	0%	87.49
Chennai	591.52	39%	338.61	23%	344.40	23%	35.59	2%	110.20	7%	1,499.63
Cochin	257.19	38%	83.34	12%	149.38	22%	148.11	22%	-	0%	668.75
Goa	53.33	21%	45.08	18%	48.14	19%	13.42	5%	84.51	34%	249.05
Hyderabad	315.70	27%	169.44	14%	262.29	22%	398.62	34%	-	0%	1,172.38
Kolkata	638.38	44%	301.10	21%	258.24	18%	95.61	7%	138.56	10%	1,438.14
Pune	122.98	44%	19.72	7%	37.90	14%	13.55	5%	80.67	29%	279.45
Thiruvananthapuram	262.69	46%	48.41	9%	48.37	9%	28.03	5%	170.93	30%	568.66

5.2.7 From the above table and figures the following observations are noted:

5.2.8 Among the comparable airports in terms of PAX traffic (i.e., Goa, Chandigarh, Pune, Ahmedabad and Calicut), TRV has the highest O&M expenses in the Second Control Period. Among these airports, the employee expenses of TRV are also high but in comparison to Cochin airport where traffic of Cochin airport is high. Therefore, the employee expenses and total O&M expenses need to be further examined.

5.2.9 The A&G expenses of TRV are higher than Goa, Chandigarh and Pune but similar to Calicut and lower than all the other airports. The closest airport in terms of total O&M expenses is Ahmedabad, however, the A&G expenses of Ahmedabad are higher than those of TRV even though the total O&M expenses at Ahmedabad are lower than those for TRV. Hence, it is not possible to conclude on the reasonableness of A&G expenses of TRV without further scrutiny.

5.2.10 A preliminary analysis of the R&M & Utility expense of TRV indicate that they are reasonable when compared to other airports. Goa airport was identified as the closest airport to TRV in terms of the aeronautical assets managed. The analysis revealed that Goa airport has a similar R&M & Utility expense when compared to TRV. In contrast, Ahmedabad airport, which is the next closest airport to TRV in terms of aeronautical assets managed, was found to have a higher R&M & Utility expense compared to TRV. Specifically, Ahmedabad's R&M & Utility expense represents 30% and 24% of its closing RAB, while TRV's R&M & Utility expense represents only 10%. Overall, TRV's R&M & Utility expenses are reasonable when compared to other airports.

5.2.11 With respect to CHQ/RHQ expenses, the expenses of TRV are much higher than Pune, Calicut, Chennai and Goa Airport but in comparable range of Ahmedabad. In fact, the CHQ/RHQ expenses for TRV are the highest among all the comparable airports. Therefore, the CHQ/RHQ expenses would require further study.

5.2.12 The major expense items have been analysed in greater detail in the following paragraphs.

### 5.3 Analysis of Employee expenses

5.3.1 Employee expenses are driven primarily by two factors. The first being the employee utilization levels and the second being the competitiveness of wages. Therefore, the employee expenses have been compared with respect to two parameters:

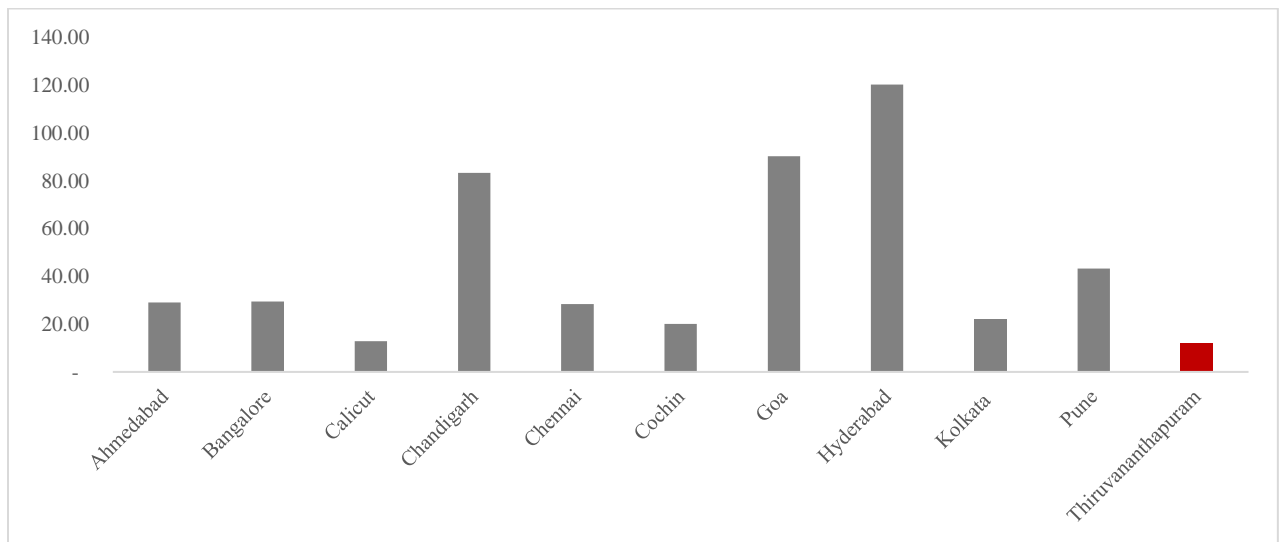
- Number of passengers per employee
- Average salary per employee

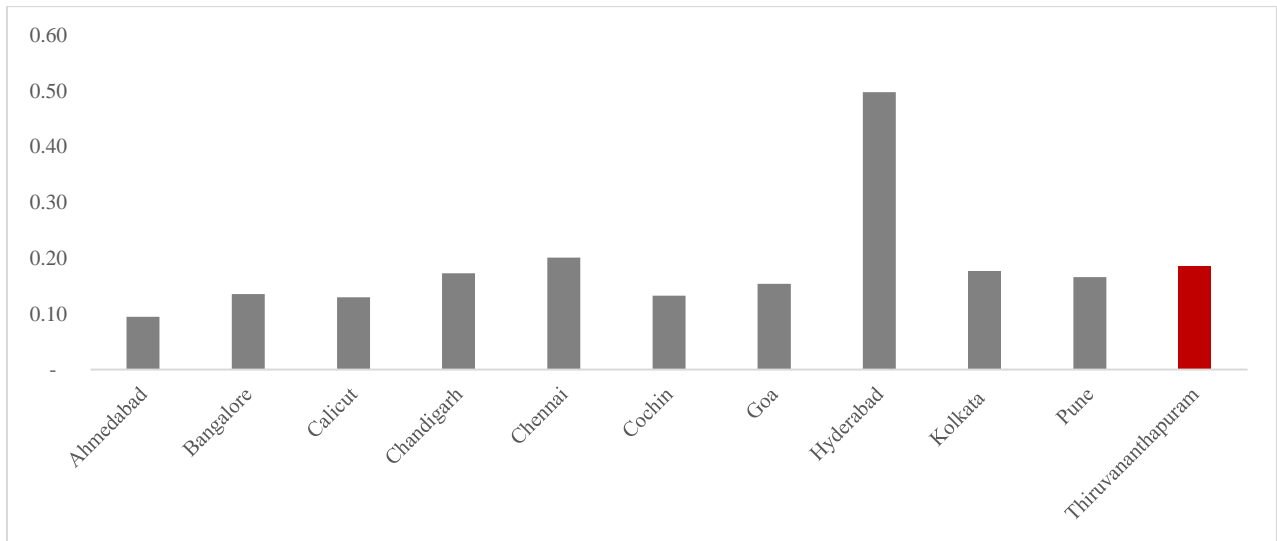
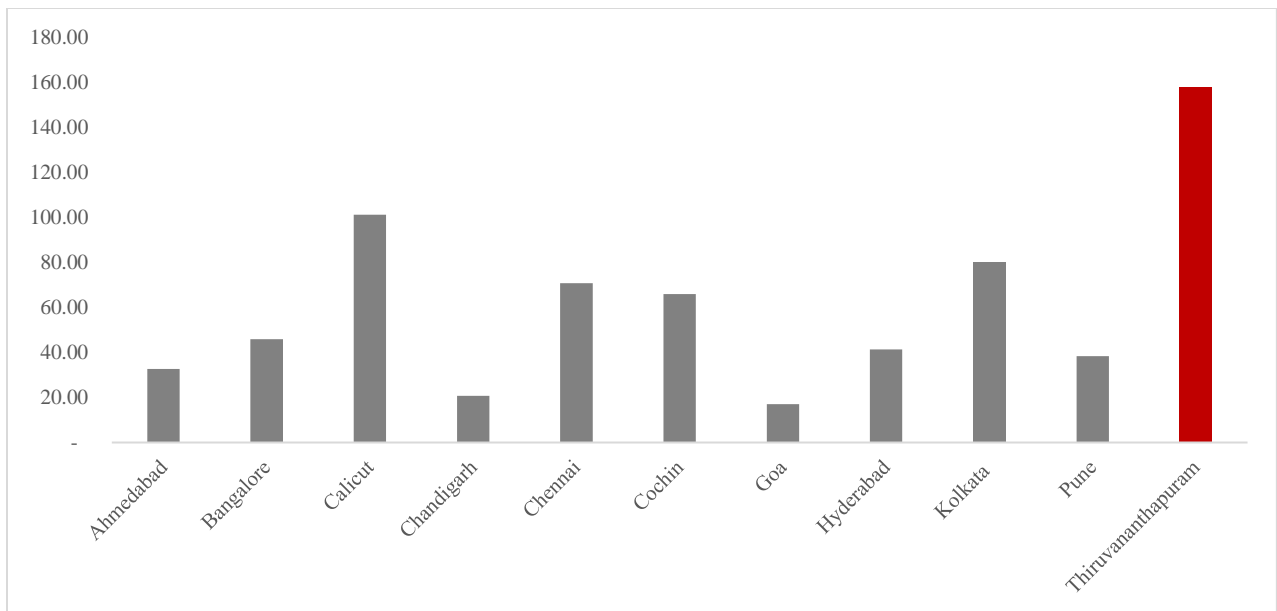
5.3.2 The following table summarizes the employee expenses with reference to the above-mentioned parameters for the period FY 2017-20 across select airports considered in this Study:

**Table 93:Employee expense comparison across select domestic airports**

Airport location	No of passengers per employee (in '000)	Salary per employee (Rs. in crores)	Employee expense per PAX (Rs.)
Ahmedabad	29.84	0.09	31.79
Bangalore	29.53	0.14	45.86
Calicut	12.82	0.13	101.18
Chandigarh	83.43	0.17	20.74
Chennai	28.41	0.20	70.82
Cochin	20.09	0.13	66.17
Goa	90.43	0.15	17.05
Hyderabad	120.38	0.50	41.37
Kolkata	22.02	0.18	80.19
Pune	43.36	0.17	38.32
Thiruvananthapuram	11.75	0.19	157.97

**Figure 12: No of passengers per employee (in '000)**



**Figure 13: Average salary per employee (Rs. in crores)****Figure 14: Employee expenses per PAX (in Rs.)**

5.3.3 From the above figures and table, the following observations may be gathered:

- TRV has the lowest number of passengers per employee (11.75 in '000) compared to all other airports, indicating higher employment per passenger. Also, TRV also has the highest salary per employee (Rs. 0.19 crores), which is more than the average of most other airports, except for Hyderabad and Chennai airport. As a result, TRV has the highest employee expense per passenger (Rs. 157.97) among all the airports.
- Despite TRV's high employee expenses per passenger, it ranks fifth in terms of overall employee expenses after Bangalore, Hyderabad, Kolkata, and Chennai airports. This implies that while TRV

spends more on its staff per passenger, its overall employee expenses are still lower than some of the other airports with higher passenger traffic.

- Additionally, TRV has relatively lower passenger traffic than most other airports, which could explain its higher employee expenses per passenger. The lower passenger traffic may lead to less revenue for the airport, making it difficult to spread its costs across more passengers.
- Despite this, it is important to note that TRV's overall employee expenses in the Second Control Period are well within the projections approved by the Authority in the Tariff Order for the Second Control Period. This means that the airport is operating within the set budget, despite its high employee expenses per passenger.
- In conclusion, TRV high employee expenses per passenger is a result of lower passenger traffic than most of the other airports and TRV's strategy of prioritizing customer service and quality staff leads to a higher cost structure. However, TRV still manages to operate within its budget.
- Based on the above, there is no evidence to suggest that the employee expenses for TRV are unreasonable.

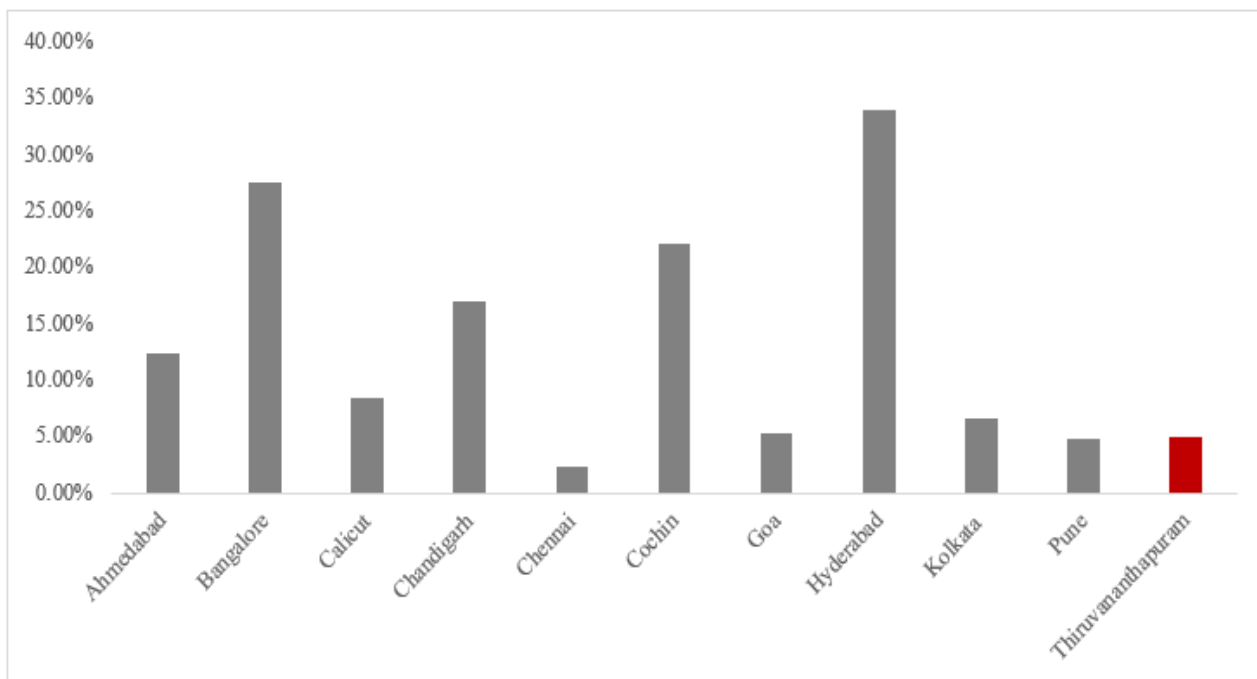
## 5.4 Analysis of A&G expenses

5.4.1 The A&G expenses are generally seen to grow with the overall expenses; hence, this has been analysed as a percentage of the total expenses.

5.4.2 The following table elaborates the comparison based on the above-mentioned parameter.

**Table 94: A&G comparison across select domestic airports**

Airport location	A&G expenses per total expenses (FY17-FY20) (%)	A&G expenses per total PAX (FY17-FY20) (%)
Ahmedabad	12.49%	15.98
Bangalore	27.51%	35.26
Calicut	8.53%	20.21
Chandigarh	16.97%	17.45
Chennai	2.37%	4.26
Cochin	22.15%	38.11
Goa	5.39%	4.29
Hyderabad	34.00%	52.23
Kolkata	6.65%	12.01
Pune	4.85%	4.22
Thiruvananthapuram	4.93%	16.86

**Figure 15: A&G expenses as percentage of the total expenses (%)**

5.4.3 From the above figures and table, following observations may be gathered:

- A&G expenses of TRV (4.93% of total expenses) when compared as a % of the total expenses, is slightly higher than Pune.
- The closest airport in terms of total O&M expenses is Ahmedabad and A&G expenses of TRV (4.93% of total expenses) when compared as a % of the total expenses, are lower than that of Ahmedabad. Further, the expenses are the second lowest among all the airports.
- Based on the above, the A&G expenses are moderate in comparison to the other airports.

## 5.5 Analysis of R&M expenses

5.5.1 Repair and maintenance (R&M) expenses tend to increase in proportion to the number of assets being operated. As assets age, the costs of maintaining and repairing them also rise, which further adds to the R&M expenses. Additionally, external factors such as exposure to weather and the level of asset utilization can also impact R&M costs. To better understand the impact of R&M expenses, they are typically analyzed as a percentage of the average regulatory asset base (RAB), which provides a measure of the value of the assets being operated. By tracking R&M expenses as a percentage of RAB, it becomes possible to monitor trends and identify potential areas for improvement in asset maintenance and utilization.

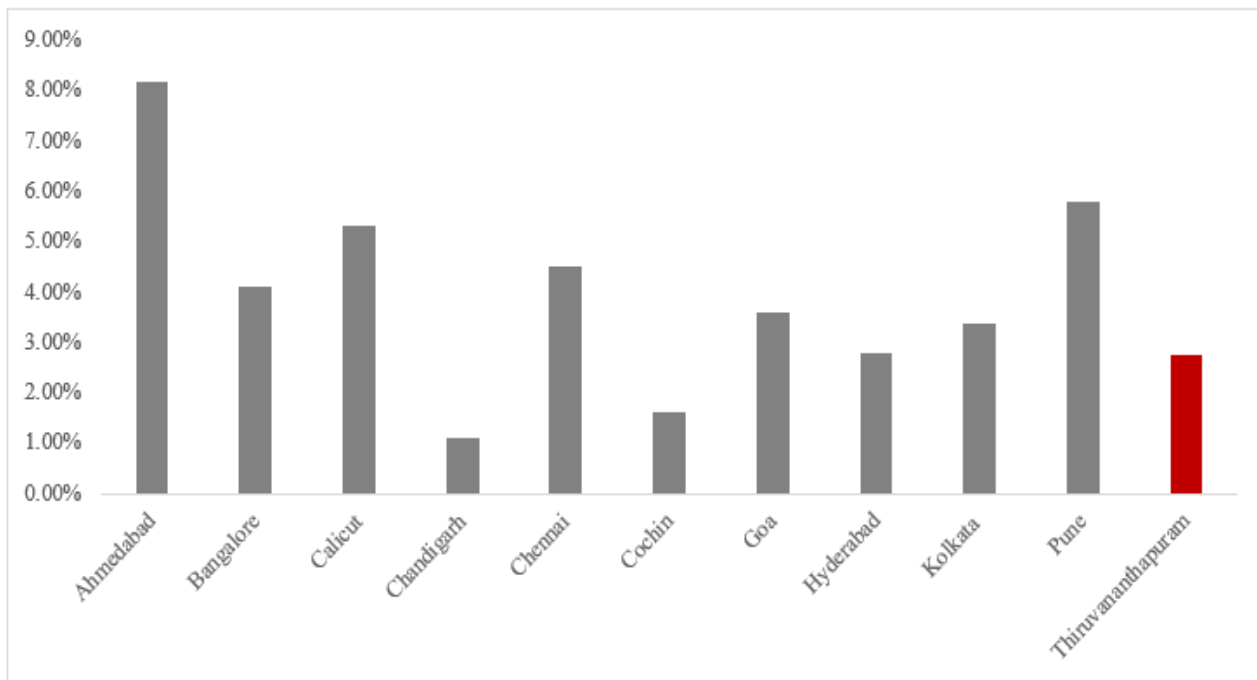
5.5.2 The following table elaborates the comparison based on the above-mentioned parameter.

**Table 95: R&M comparison across select domestic airports**

Airport location	R&M expenses per average RAB (FY17-FY20) (%)
Ahmedabad	8.18%
Bangalore	4.11%
Calicut	5.33%

Airport location	R&M expenses per average RAB (FY17-FY20) (%)
Chandigarh	1.11%
Chennai	4.52%
Cochin	1.61%
Goa	3.61%
Hyderabad	2.80%
Kolkata	3.38%
Pune	5.81%
Thiruvananthapuram	2.74%

**Figure 16: R&M expenses per average RAB (%)**



5.5.3 From the above figures and table, following observations are noted:

- TRV has lower R&M expenses per average RAB as compared to most of the airports in the table. TRV's R&M expenses per average RAB stands at 2.74%, which is lower than the R&M expenses per average RAB of Bangalore, Chennai, Calicut, Ahmedabad, Kolkata, Pune, and Goa. Only Chandigarh and Hyderabad have lower R&M expenses per average RAB than TRV.
- Therefore, from the given data, it can be inferred that TRV's R&M expenses per average RAB are lower than most airports in the table, indicating that TRV is maintaining its assets efficiently.
- From an external benchmarking point of view, it can be concluded that the R&M expenses incurred by AAI are reasonable. These expenses are discussed in detail in para 3.4.17.

## 5.6 Analysis of CHQ/RHQ expenses

5.6.1 In the Tariff Order for the Second Control Period, the Authority had directed AAI to allocate the CHQ/RHQ expenses on revenue basis, considering that the allocation must account for the ability of the entities to absorb such costs. Therefore, the CHQ/RHQ expenses has been analysed with respect to two parameters:

- Average CHQ/RHQ cost for FY 2017-20 and

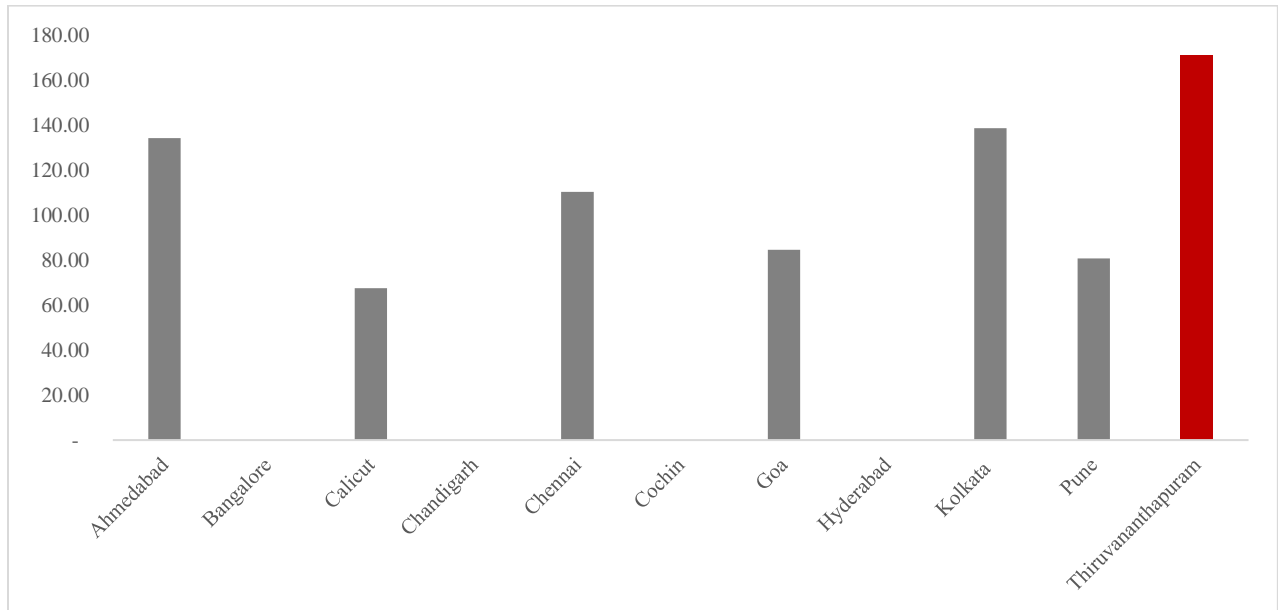
- Total CHQ/RHQ expenses as percentage of total revenue for FY 2017-20

5.6.2 The following table elaborates the comparison based on the above-mentioned parameters.

**Table 96: CHQ/RHQ expense comparison across select domestic airports**

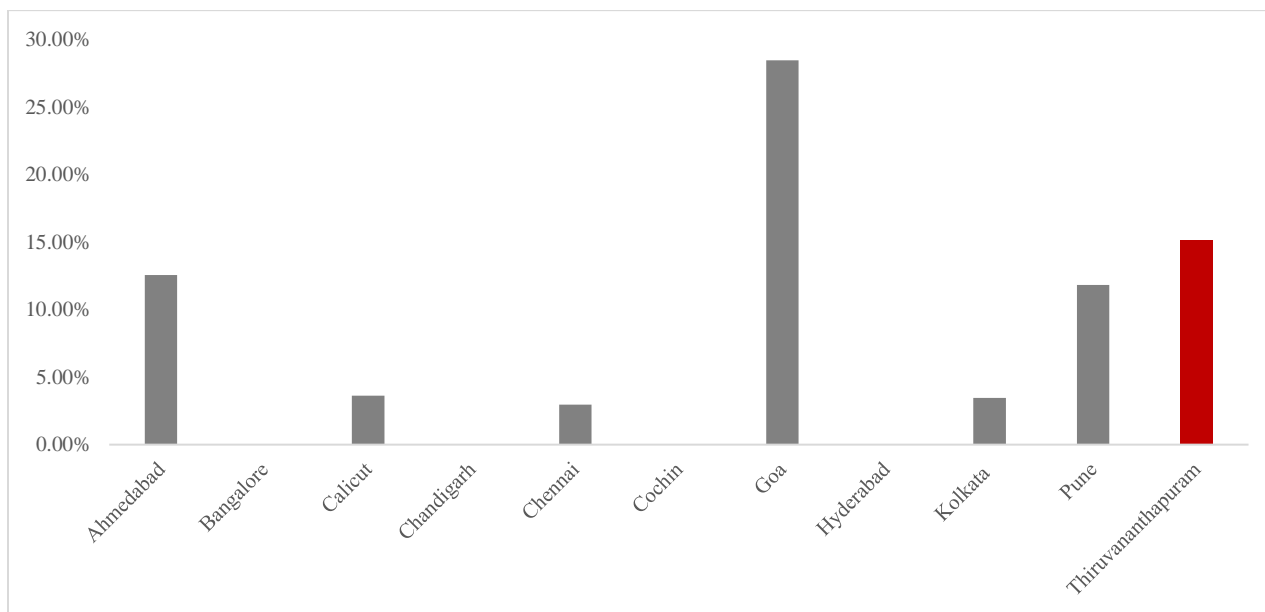
Airport location	CHQ/RHQ (FY17-FY20) (Rs. in crores)	CHQ/RHQ expenses per total revenue (FY17-FY20) (%)
Ahmedabad	134.21	12.56%
Bangalore	-	-
Calicut	67.47	3.62%
Chandigarh	-	-
Chennai	110.20	2.96%
Cochin	-	-
Goa	84.51	28.45%
Hyderabad	-	-
Kolkata	138.56	3.47%
Pune	80.67	11.83%
Thiruvananthapuram	170.93	15.13%

**Figure 17: Average CHQ/RHQ expenses for FY 2017-20 (Rs. in crores)**





**Figure 18: Total CHQ/RHQ expenses for FY 2017-20 as percentage of total revenue for FY 2017-20 (%)**



5.6.3 From the above figures and table, following observations may be gathered:

- TRV has the highest CHQ/RHQ (Corporate Headquarter/Regional Headquarter) expenses when compared to its peer group of airports. It is also noted that TRV has the second highest CHQ/RHQ expenses as a percentage of its total revenue when compared to its peer group.
- External benchmarking of TRV's CHQ/RHQ expenses further supports the observation that TRV is incurring unreasonably high expenses. AAI has provided justifications for these expenses, as detailed in para 3.4.11.2. However, despite these justifications, the high expenses compared to other airports and external benchmarks raise concerns.
- Additionally, it was submitted by AAI that CHQ/RHQ expenses are allocated on a revenue basis. Therefore, it is not reasonable for TRV's expenses as a percentage of revenue to be alarmingly high when compared to other airports. However, these expenses have been readjusted (refer to para 3.4.13). Since TRV was concessioned out during the Second Control Period, these expenses would not appear as part of the O&M expenses in future Control Periods.
- However, it is important to note that TKIAL does incur corporate support service expenses towards its parent companies. Therefore, if these expenses seem unreasonable, the Study may consider capping the allowable expenses based on suitable global/regional benchmarks at the time of determination of tariffs for future Control Periods.

## 5.7 Analysis of Utility expenses

5.7.1 The utility expenses depend on the capacity of the airport and on certain externalities such as weather. The utility expenses have been analysed with respect to the average utility expense per SQM of the terminal area.

5.7.2 The following table shows the terminal area of the selected airports.

**Table 97: Average PAX and terminal area of the selected airports**

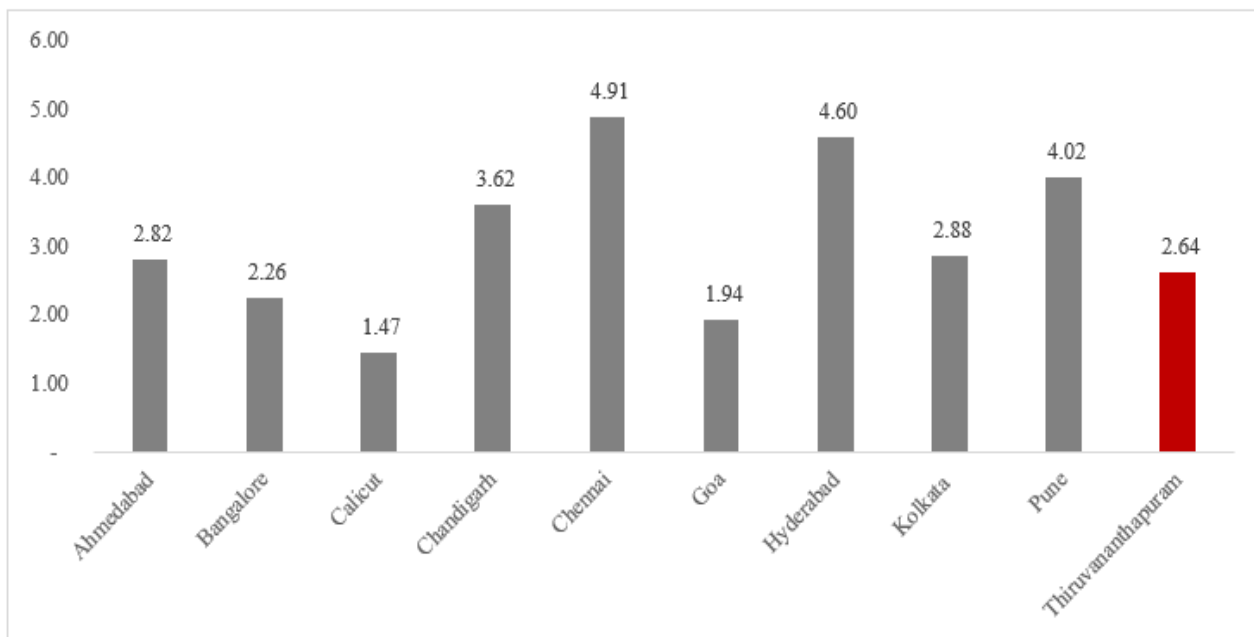
Airport location	PAX Traffic (Avg. of FY17-FY20) (Mn)	Terminal Area (lakh sqm)
Ahmedabad	39.19	0.70
Bangalore	115.46	1.63
Calicut	12.38	0.57
Chandigarh	8.51	0.24
Chennai	83.53	1.75
Cochin	38.87	2.21
Goa	31.29	0.62
Hyderabad	76.32	1.17
Kolkata	79.61	2.24
Pune	32.09	0.24
Thiruvananthapuram	16.63	0.46

5.7.3 As can be seen from the table above, given the level of traffic at Cochin, the terminal area is quite high as the new international terminal is yet to achieve optimum utilization levels. Therefore, it would not be fair to compare the other airports with Cochin on this parameter. Hence, Cochin Airport has been excluded from the analysis.

5.7.4 The following table elaborates the comparison based on the utility expense per terminal area:

**Table 98: Utility expense per unit terminal area for the selected airports**

Airport location	Utility expense per terminal area (Rs. per 1000 sqm)
Ahmedabad	2.82
Bangalore	2.26
Calicut	1.47
Chandigarh	3.26
Chennai	4.91
Goa	1.94
Hyderabad	4.60
Kolkata	2.88
Pune	4.02
Thiruvananthapuram	2.64

**Figure 19: Utility expense per terminal area (Rs. per SQM)**

5.7.5 From the above figures and table, following observations may be gathered:

- TRV's utilities expense per terminal area is higher than Calicut, despite the fact that both airports have similar power rates. Specifically, TRV incurs a cost of Rs. 2.64 per square meter of terminal area, while Calicut incurs only Rs. 1.47 per square meter. On the other hand, TRV's utilities' expense per terminal area is lower than airports such as Pune and Chandigarh, even though these airports have a terminal area that is half the size of TRV's.
- Although the utilities expenses at TRV are observed to be on the higher side, the cost is determined based on the tariff fixed by the electricity department, which is a third-party utility vendor. Thus, these expenses are considered reasonable.

## 5.8 Summary of External Benchmarking

- 5.8.1 It is observed that, based on a per pax basis, TRV seems to have higher operational expenses with respect to select comparable peers. However, this is primarily due to the CHQ/RHQ expenses and Employee expenses that are quite high for TRV.
- 5.8.2 The employee expenses per passenger of TRV are higher than most of the other airports due to lower passenger traffic and TRV's strategy of prioritizing customer service and quality staff leads to a higher cost structure. However, it is within the budget approved in the SCP order. Thus, the employee expenses for TRV seems to be reasonable.
- 5.8.3 The A&G expenses of TRV (4.93% of total expenses) when compared as a % of the total expenses, is slightly higher than Pune. But lower than that of Ahmedabad. Further, the expenses are the second lowest among all the airports. Thus, the A&G expenses are moderate in comparison to the other airports.

- 5.8.4 TRV's R&M expenses per average RAB are lower than most airports, even from an external benchmarking point of view, it can be concluded that the R&M expenses incurred by AAI are reasonable. These expenses were discussed in detail in the fifth chapter (Refer Para 5.5).
- 5.8.5 TRV is incurring the highest CHQ/RHQ expenses among its peer group and the expenses seem unreasonable. However, these expenses have been readjusted in Table 27. Since TRV was concessioned during the Second Control Period, these expenses would not appear as part of the O&M expenses in future Control Periods. However, TKIAL does incur corporate support service expenses towards its parent companies. If it is observed that such expenses do not seem reasonable, the Study may consider capping the allowable expenses based on suitable global/regional benchmarks at the time of determination of tariffs for future Control Periods.
- 5.8.6 Based on external benchmarking, there is no evidence to suggest that the utility expenses for TRV are unreasonable.

## **5.9 Conclusion**

- 5.9.1 Based on the observations from external benchmarking, it can be concluded that the operations and maintenance expenses at TRV are reasonable except for CHQ/RHQ expenses which seems to be high and is driving the overall costs up. Though the cost structure may evolve as TRV transforms to a PPP regime, the Study may still consider capping the allowable expenses based on suitable regional benchmarks at the time of determination of tariffs for future Control Periods.

## 6. OVERALL SUMMARY OF THE STUDY

### 6.1 Assessment of O&M Expenses and its allocation submitted by AAI and as per the current Study for SCP & Pre-COD Period

#### Allocation Ratios

6.1.1 The allocations ratios submitted by AAI and recomputed as per the Study are as follows:

**Table 99: Allocation Ratio's submitted by AAI and recomputed as per the current Study for SCP & Pre-COD Period**

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	Pre-COD Period
<b>Submitted by AAI</b>						
Employee Ratio	74.50% :	72.31% :	71.37% :	70.21% :	70.07% :	68.02% :
(Aero : Non-Aero :	1.20% :	1.24% :	1.45% :	1.06% :	1.11% :	1.19% :
ANS)	24.30%	26.45%	27.18%	28.72%	28.82%	30.79%
Employee Ratio	98.41% :	98.31% :	98.01% :	98.51% :	98.44% :	98.28% :
(Aero : Non-Aero)	1.59%	1.69%	1.99%	1.49%	1.56%	1.72%
Terminal Building Ratio (Aero : Non-Aero)	92.34% : 7.66%	92.12% : 7.88%	92.21% : 7.79%	92.19% : 7.81%	93.29% : 6.71%	91.59% : 8.41%
Electricity Ratio	80.44% :	80.44% :	80.44% :	80.44% :	80.44% :	80.44% :
(Aero : Non-Aero :	0.01% :	0.01% :	0.01% :	0.01% :	0.01% :	0.01% :
ANS)	19.55%	19.55%	19.55%	19.55%	19.55%	19.55%
<b>Recomputed as per the Study</b>						
Employee Ratio	71.71% :	69.23% :	68.47% :	66.9% : 4.38%	66.75% :	64.02% :
(Aero : Non-Aero :	3.99% :	4.32% :	4.35% :	: 28.72%	4.43% :	5.19% :
ANS)	24.3%	26.45%	27.18%		28.82%	30.79%
Employee Ratio	94.73% :	94.12% :	94.02% :	93.86% :	93.78% :	92.5% : 7.5%
(Aero : Non-Aero)	5.27%	5.88%	5.98%	6.14%	6.22%	
Terminal Building Ratio (Aero : Non-Aero)	90% : 10%	90% : 10%	90% : 10%	90% : 10%	90% : 10%	90% : 10%
Electricity Ratio	80.44% :	80.44% :	80.44% :	80.44% :	80.44% :	80.44% :
(Aero : Non-Aero :	0.01% :	0.01% :	0.01% :	0.01% :	0.01% :	0.01% :
ANS)	19.55%	19.55%	19.55%	19.55%	19.55%	19.55%
Gross Block Ratio	91.82% :	91.68% :	91.62% :	91.89% :	92.17% :	92.29% :
(Aero : Non-Aero :	2.95% :	2.93% : 5.39%	2.79% : 5.59%	2.60% : 5.51%	2.46% : 5.37%	2.42% : 5.29%
ANS)	5.23%					

### 6.1.2 Summary of Head wise assessment of O&M expenses submitted by AAI for SCP as per the current Study

#### 6.1.2.1 Employee Benefit Expense

6.1.2.1.1 According to the Reasonableness assessment and trend analysis detailed in paras 3.4.3 & 3.4.4, it was noted that employee expenses witnessed an increase in FY 2017-18 and FY 2018-19. This rise can be attributed to pay revisions and provisions made for retirement benefit costs. Furthermore, the implementation of a three-year pension plan, covering the period from January 2017 to March 2019, also contributed to the rise in employee costs. Upon comparison with the approved figures of SCP and FCP actuals, the analysis of employee benefit expenses appears to be reasonable.

6.1.2.1.2 Due to revision in the allocation ratio as per the Study, the Aeronautical employee benefit expenses submitted by AAI for SCP were rationalized to Rs. 316.17 crores as per Table 17.

#### 6.1.2.2 Administration and General (A&G) Expense

- 6.1.2.2.1 In the assessment, it was observed that the Administration and General (A&G) expenses for the SCP submitted by AAI were higher than the approved figure mentioned in the SCP order. On detailed analysis, it was observed that major reasons for the increase were interest and penalties payments and inconsistencies such as treating ANS expenses as aeronautical expense. These have been adjusted appropriately. Also, the Study has made adjustment of accounting treatment recorded by AAI for payment of lease by treating it as financial lease.
- 6.1.2.2.2 After adjustments, the A&G expenses seem to be reasonable as compared to SCP Order approved amount.
- 6.1.2.2.3 A&G expenses were adjusted, reclassified and reallocated based on principle set in para 3.3.1. Due to such revision, the Aeronautical A&G expenses submitted by AAI for SCP were rationalized to Rs. 11.96 crores as per Table 24.

#### 6.1.2.1 CHQ/RHQ Expense

- 6.1.2.1.1 In para 3.4.11, it was noted that the CHQ & RHQ expense reported by AAI for the SCP were significantly higher than the approved amount specified in the SCP order. A comprehensive analysis was carried out as per the Study to examine and justify these expenses. As a result, the CHQ & RHQ expenses were rationalized and reallocated. Through this revision, the aeronautical CHQ & RHQ expense submitted by AAI for the SCP has been rationalized to its optimum level and allowed it to the tune of Rs. 133.72 crores (Table 27).

#### 6.1.2.2 Repairs and Maintenance (R&M) Expense

- 6.1.2.2.1 In para 3.4.15.4, it was observed that R&M Expenses for SCP submitted by AAI was in the range that was approved in the SCP order. Upon detailed analysis, it was determined that the expenses incurred by AAI were reasonable when compared to the approved figure in the SCP order and the actual FCP expenses.
- 6.1.2.2.2 The Study has made adjustment in R&M expenses by re-categorizing Inline Manpower cost to Utilities & Outsourcing expenses head and R&M-BOT XBIS lease to A&G expense head (refer para 3.4.7.1(8)(1)).
- 6.1.2.2.3 However, from an external benchmarking perspective, the R&M Expenses of AAI appear to be on par with the expenses incurred by other comparable airports (external benchmarking is detailed in para 5.5).
- 6.1.2.2.4 By comparing the R&M expenses to the Opening RAB, it is concluded that the expenses incurred are within reasonable limits i.e., 6% of the Opening RAB (benchmark set by the Authority for most of the airports).
- 6.1.2.2.5 After considering adjustments, R&M Expenses were reclassified and reallocated based on principle set in 3.3.1. Due to such revision, the Aeronautical R&M Expenses submitted by AAI for SCP was rationalized to Rs. 59.89 crores as per Table 32.

#### 6.1.2.3 Utility and Outsourcing Expense

- 6.1.2.3.1 In para 3.4.19, it was observed that Utility and Outsourcing Expenses for SCP submitted by AAI was higher than the approved figure in the SCP order. On detailed analysis, it was observed that expenses incurred by AAI were necessary to spend and thus appears to be reasonable as compared to approved figure in the SCP Order and FCP actuals.
- 6.1.2.3.2 As per para 3.4.19.3, manpower cost for AAICLAS amounting to Rs.0.36 crores have been proposed to be excluded from the aeronautical expense.

- 6.1.2.3.3 As per para 3.4.19.6 of the Study, Inline Manpower cost has been reclassified from R&M expense to Utilities & Outsourcing expenses in line with the hiring of manpower.
- 6.1.2.3.4 From an external benchmarking perspective, the Utility and Outsourcing Expenses of AAI appear to be on par with the expenses incurred by other comparable airports (external benchmarking is detailed in para 5.7).
- 6.1.2.3.5 After considering the adjustments, the Utility and Outsourcing Expenses were reclassified and reallocated based on principle set in para 3.3.1. Due to such revision, the Aeronautical Utility and Outsourcing Expenses submitted by AAI for SCP was rationalized to Rs. 83.56 crores as per Table 36.

#### 6.1.2.4 Other Outflow

- 6.1.2.4.1 The category of Other Outflows includes collection charges paid to airlines and IATA for UDF and PSF. The expenses incurred for SCP exceeded the approved figures in the SCP Order because the collection charges paid to IATA were not initially considered in the projections. However, these expenses were necessary for the collection of aeronautical revenue and were based on actual figures. Therefore, they are deemed reasonable and directly related to the collection of aeronautical revenues, eliminating the need for reclassification.

#### 6.1.2.5 Aeronautical O&M Expenses as per the current Study for SCP

- 6.1.2.5.1 Based on the analysis of the submission of AAI for SCP, the aeronautical O&M expenses of AAI as per the Study for SCP was determined to be Rs. 615.98 crores after taking into account the adjustments (Table 39), re-classification (Table 40) and re-allocation (Table 41). The break-up of O&M expenses is given below:

**Table 100: Aeronautical O&M Expenses for AAI as per the current Study for SCP**

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	Total
Employee Benefit Expenses	48.15	59.73	73.80	77.33	57.16	<b>316.17</b>
A&G Expenses	1.21	2.05	2.98	3.35	2.37	<b>11.96</b>
CHQ & RHQ Expenses	14.67	17.96	30.70	43.63	26.76	<b>133.72</b>
R&M Expense	11.83	11.11	11.86	11.86	13.23	<b>59.89</b>
Utility & Outsourcing Expenses	13.47	16.36	16.16	18.73	18.83	<b>83.56</b>
Other Outflows	1.53	2.64	3.01	3.06	0.45	<b>10.68</b>
<b>Total Operating Expenditure (A)</b>	<b>90.87</b>	<b>109.84</b>	<b>138.51</b>	<b>157.97</b>	<b>118.80</b>	<b>615.98</b>

#### 6.1.3 Summary of Head wise assessment of O&M expenses submitted by AAI for Pre-COD Period as per the current Study

- 6.1.3.1 The Pre COD period for AAI starts from 1<sup>st</sup> April 2021 to 13<sup>th</sup> October 2021. On and after the COD, which is 14<sup>th</sup> October 2021, the TRV operations were undertaken and managed by the concessionaire, TKIAL. To reconcile the expenses incurred during the Pre COD period, which fall outside the scope of the SCP, the Study has proposed an approach. The proposed approach involves extrapolating the approved figures of FY 2020-21 from the SCP order to the Pre-COD period. This extrapolation is based on the growth rate utilized for projecting expenses in the SCP order for FY 2020-21. By employing this methodology, the Study ensures a meaningful comparison and analysis of the O&M expenses during the Pre COD period with the benchmark set in the SCP order.

Following this approach, the O&M expenses submitted by AAI for the Pre COD period have been assessed, and the results for each category of O&M expense are provided below:

#### 6.1.3.2 Employee Benefit Expense

6.1.3.2.1 Based on the Reasonableness assessment carried out for Employee Benefit Expense, it was observed that employee expenses for the Pre COD period seem to be reasonable.

6.1.3.2.2 Due to revision in the allocation ratio as per the Study, the Aeronautical employee benefit expenses submitted by AAI for Pre-COD Period were reduced by Rs. 1.99 crores (Rs. 33.30 crores as per Table 44 to Rs. 31.31 crores as per Table 46).

#### 6.1.3.3 **Administration and General (A&G) Expense**

6.1.3.3.1 It was observed that A&G expenses for the Pre-COD period submitted by AAI were lower than the estimated figure. On detailed analysis, it was observed that major reasons for decrease was reversals booked under the head Prior Period Expenses that has been considered as per the Study to reduce expenses that were overbooked or incorrectly recognized in previous periods. The Study has made adjustment of lease accounting provisions recorded by AAI for payment of lease by treating it as financial lease.

6.1.3.3.2 After adjustments, the A&G expenses seem to be reasonable as compared to the estimated amount.

6.1.3.3.3 A&G expenses were adjusted, reclassified and reallocated based on principle set in para 3.3.1. Due to such revision, the Aeronautical A&G expenses submitted by AAI for Pre-COD Period were increased by Rs. 0.03 crores (Rs. 0.04 crores as per Table 47 to Rs. 0.06 crores as per Table 51).

#### 6.1.3.4 **CHQ/RHQ Expense**

6.1.3.4.1 It was observed that AAI reported higher CHQ & RHQ expenses for the Pre COD period compared to the estimated amount. The expense for the Pre COD period was calculated by applying a 5% growth rate to the actual expenses of FY 2020-21, as submitted by AAI, since the workings for CHQ & RHQ expenses for FY 2021-22 were not finalized.

6.1.3.4.2 Therefore, based on AAI's responses, the revised CHQ & RHQ expenses were calculated using the revised FY21 figures. Through this revision, the aeronautical CHQ & RHQ expenses submitted by AAI for the Pre COD period were reduced by Rs. 2.45 crores. This needs to be suitably reviewed based on actual information to be made available before the Order.

#### 6.1.3.5 **Repairs and Maintenance (R&M) Expense**

6.1.3.5.1 In the Pre-COD Period, it was observed that R&M Expenses submitted by AAI were higher than the estimated figures. Upon detailed analysis, it was determined that the expenses incurred by AAI were necessary and reasonable.

6.1.3.5.2 By comparing the R&M expenses to the Opening RAB, it is concluded that the expenses incurred are within reasonable limits i.e., 6% of the Opening RAB (benchmark set by the Authority for most of the airports).

6.1.3.5.3 R&M Expenses for the Pre-COD Period were reclassified and reallocated based on principle set in 3.3.1. Due to such revision, the Aeronautical R&M Expenses submitted by AAI were reduced by Rs. 0.03 crores (Rs. 9.61 crores as per Table 54 to Rs. 9.58 crores as per Table 56) for Pre-COD Period.

#### 6.1.3.6 **Utility and Outsourcing Expense**

6.1.3.6.1 It was observed that Utility and Outsourcing Expenses for the Pre-COD Period submitted by AAI were higher than the estimated figure. On detailed analysis, it was found that expenses incurred by AAI were necessary to spend and thus appear to be reasonable.



6.1.3.6.2 After adjustments, the Utility and Outsourcing Expenses were reclassified and reallocated based on principle set in 3.3.1. Due to such revision, the Aeronautical Utility and Outsourcing Expenses submitted by AAI for Pre COD were reduced by Rs. 0.13 crores (Rs. 9.63 crores as per Table 57 to Rs. 9.50 crores as per Table 58).

#### 6.1.3.7 Other Outflow

6.1.3.7.1 The category of Other Outflows includes collection charges paid to airlines and IATA for UDF and PSF. The expenses incurred for the Pre-COD Period exceeded the estimated figures because the collection charges paid to IATA were initially not considered in the projections. However, these expenses were necessary for the collection of aeronautical revenue and were based on actual figures. Therefore, they are deemed reasonable and directly related to the collection of aeronautical revenues, eliminating the need for reclassification.

#### 6.1.3.8 Aeronautical O&M Expenses as per the current Study for Pre-COD Period

6.1.3.8.1 Based on the analysis of the submission of AAI for Pre-COD Period, the aeronautical O&M expenses of AAI as per the Study for Pre COD period was determined to be Rs. 66.20 crores after taking into account the necessary adjustments, re-classification and re-allocation. The break-up of O&M expenses is given below:

**Table 101: Aeronautical O&M Expenses for AAI as per the current Study for Pre-COD Period**

Particulars (Rs. in crores)	Pre COD
Employee Benefit Expenses	31.31
A&G Expenses	0.06
CHQ & RHQ Expenses	15.09
R&M Expense	9.58
Utility & Outsourcing Expenses	9.50
Other Outflows	0.66
<b>Total Operating Expenditure (B)</b>	<b>66.20</b>

#### 6.1.4 Aeronautical O&M expenses submitted by AAI and as per the current Study for SCP and Pre-COD Period

6.1.4.1 The aeronautical expenses submitted by AAI and as per the Study amounted to Rs. 767.08 crores & 682.18 crores respectively. As can be seen, there is an impact of Rs. 84.90 crores on the O&M expenses due to adjustments, rationalization, reclassification and re-allocation of expenses. The table below demonstrates the comparison of O&M expenses, categorized head wise, as per AAI and as per the Study for both the SCP and Pre COD periods:

**Table 102: Aeronautical O&M Expenses submitted by AAI and as per the current Study for SCP and Pre-COD Period**

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	SCP Total (A)	Pre-COD (B)	Total (A+B)
<b>As per AAI Submission</b>								
Employee Benefit Expenses	48.71	60.58	74.97	78.42	58.01	<b>320.70</b>	33.30	<b>354.00</b>
A&G Expenses	2.61	1.90	2.56	3.92	5.59	<b>16.58</b>	0.04	<b>16.62</b>
CHQ & RHQ Expenses	32.58	43.44	42.45	52.47	31.11	<b>202.05</b>	17.54	<b>219.59</b>
R&M Expense	11.95	11.46	12.54	12.46	15.65	<b>64.05</b>	9.61	<b>73.66</b>
Utility & Outsourcing Expenses	13.64	16.57	16.52	18.68	16.83	<b>82.25</b>	9.63	<b>91.88</b>
Other Outflows	1.53	2.64	3.01	3.06	0.45	<b>10.68</b>	0.66	<b>11.33</b>
<b>Total Operating Expenditure (A)</b>	<b>111.01</b>	<b>136.60</b>	<b>152.05</b>	<b>169.01</b>	<b>127.64</b>	<b>696.30</b>	<b>70.78</b>	<b>767.08</b>
<b>As per the Study</b>								
Employee Benefit Expenses	48.15	59.73	73.80	77.33	57.16	<b>316.17</b>	31.31	<b>347.48</b>

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	SCP Total (A)	Pre- COD (B)	Total (A+B)
A&G Expenses	1.21	2.05	2.98	3.35	2.37	11.96	0.06	12.02
CHQ & RHQ Expenses	14.67	17.96	30.70	43.63	26.76	133.72	15.09	148.80
R&M Expense	11.83	11.11	11.86	11.86	13.23	59.89	9.58	69.47
Utility & Outsourcing Expenses	13.47	16.36	16.16	18.73	18.83	83.56	9.50	93.07
Other Outflows	1.53	2.64	3.01	3.06	0.45	10.68	0.66	11.33
<b>Total Operating Expenditure (B)</b>	<b>90.87</b>	<b>109.84</b>	<b>138.51</b>	<b>157.97</b>	<b>118.80</b>	<b>615.98</b>	<b>66.20</b>	<b>682.18</b>
<b>Difference (C = A - B)</b>	<b>20.15</b>	<b>26.76</b>	<b>13.54</b>	<b>11.04</b>	<b>8.84</b>	<b>80.32</b>	<b>4.57</b>	<b>84.90</b>

## 6.2 Assessment of O&M Expenses and its allocation submitted by TKIAL and as per the current Study for Post COD Period

- 6.2.1 In FY 2021-22, TKIAL operated the airport for a period of 5.5 months post COD in which they had incurred an amount of Rs. 65.79 crores towards O&M expenses. The employee expenses of AAI, Corporate cost allocation and R&M expenses primarily contribute towards this amount. However, all the expenses were analysed separately to ascertain their reasonableness.
- 6.2.2 The average salary per TKIAL employee is higher than that of the Select Employees (of AAI) by more than ~ 75%. The Study has considered the Select employees of AAI and TKIAL as common and bifurcated the employee expenses towards them in EHCR of 98.56% and 91.67% respectively. The adjustments in the Study led to an overall reduction of Rs. 0.75 crores on the employee expenses.
- 6.2.3 Utility Expense incurred by TKIAL for the Post COD period does not reflect major change as compared to the cost incurred by AAI for Pre COD period, as there has not been any considerable change to the airport infrastructure. The utility expenses with water charges (Rs. 5.68 crores) incurred by TKIAL seems to be reasonable after netting off the recoveries from the concessionaires.
- 6.2.4 The Security expenses, as per TKIAL is Rs. 3.76 crores. The expense related to R&M of security equipment amounting to Rs. 2.04 crores were recategorized to R&M head and analysed there. The Study has further reclassified the expense as common and applied Gross Block ratio which led to an overall reduction of Rs. 2.05 crores in the Security expense.
- 6.2.5 The Corporate Support Service expense, as per the MYTP submission of TKIAL, is Rs. 7.01 crores. However, the Study has made certain adjustment to this expense which led to an overall reduction of Rs. 0.62 crores in the CSS expense.
- 6.2.6 As per the submission of TKIAL, the aeronautical A&G expenses including insurance, IT expense and Bank charges amounts to is Rs. 4.94 crores. Certain reclassifications have been carried out in the Study, resulting in the revised aeronautical A&G expenses to be Rs. 4.81 crores. This led to an overall reduction of Rs. 0.12 crores in the A&G expenses.
- 6.2.7 The R&M expenses of TKIAL were included with R&M of Security equipment in the Study and found reasonable and in the range of cost incurred by other PPP Airports. The Study has reclassified the expenses and led to the increase of R&M expenses by Rs. 1.94 crores. The R&M expense post reclassification as per the Study were lower than 6% of the opening RAB of TKIAL. Therefore, this expense does not require any rationalization.
- 6.2.8 As per the submission of TKIAL, the other outflow expenses as per TKIAL is Rs. 4.46 crores. Certain reclassifications have been carried out in the Study, because of which, other outflow expenses revised to Rs. 4.05 crores. This led to an overall reduction of Rs. 0.41 crores in the other outflow expenses.

- 6.2.9 TKIAL has submitted a cost of Rs. 1.67 crores in respect of fees payment to the Independent Engineer appointed by AAI for a period of 3 years for a fee of Rs. 11.35 crores starting from 22<sup>nd</sup> October 2021. As per Clause 24.3.1 of the Concession Agreement, this cost has to be considered as a pass-through expense by AERA. Consequently, the Study considers the fee of Rs. 1.67 crores as an O&M expense for the Post COD period.
- 6.2.10 As per the submission of TKIAL, the aeronautical O&M expenses for the Post COD Period amounts to Rs. 65.79 crores. Certain reclassifications have been carried out in the Study, because of which, the aeronautical O&M expenses as per the Study were revised to Rs. 63.44 crores. This led to an overall reduction of Rs. 2.34 crores in the aeronautical O&M expenses. The breakdown of the expenses is provided below:

**Table 103: Aeronautical expenses for TKIAL for post COD period as per the current Study**

Heads	Sub Heads	Post COD (Rs. in crores)
Employee Benefit Expenses	Manpower expenses - AAI employees	27.68
	Manpower expenses - Adani employees	3.85
Utility & Outsourcing Expenses	Utility expenses	5.68
	Security expenses	1.71
CSS Expenses	Corporate Allocation	6.39
A&G Expenses	Independent Engineer Fee	1.67
	Administrative Expenses – Others	4.81
R&M Expenses	R&M	7.89
Other Outflows	Collection Charges on UDF	0.11
	Others	4.05
	<b>Total</b>	<b>63.84</b>

- 6.2.11 It is important to consider that TKIAL operated the airport for only 5.5 months during the Second Control Period. In such cases, it is common to have one-time expenses associated with repairs, modifications, or refurbishments when a new operator takes over the operations of an airport. To assess the reasonableness of these expenses, it is necessary to analyze trends over a longer period of time.
- 6.2.12 Drawing conclusions about the efficiency of TKIAL based on just five months of data would be premature. However, based on a broad-level assessment, there are no deviations from the trends observed at TRV in the past. While a longer timeframe would provide a more comprehensive understanding of the operator's performance, the initial analysis does not indicate any significant concerns.

### **6.3 External Benchmarking of Expenses of AAI**

- 6.3.1 It is observed that, based on a per pax basis, TRV seems to have higher operational expenses with respect to select comparable peers. However, this is primarily due to the CHQ/RHQ expenses and Employee expenses that are quite high for TRV.
- 6.3.2 The employee expenses per passenger of TRV are higher than most of the other airports due to lower passenger traffic and TRV's strategy of prioritizing customer service and quality staff leads to a higher cost structure. However, it is within the budget approved in the SCP order. Thus, the employee expenses for TRV seem to be reasonable.
- 6.3.3 The A&G expenses of TRV (4.93% of total expenses) when compared as a % of the total expenses, is slightly higher than Pune. But lower than that of Ahmedabad. Further, the expenses are the second lowest among all the airports. Thus, the A&G expenses are moderate in comparison to the other airports.

- 6.3.4 TRV's R&M expenses per average RAB are lower than most airports, even from an external benchmarking point of view, it can be concluded that the R&M expenses incurred by AAI are reasonable. These expenses were discussed in detail in the fifth chapter (refer para 5.5).
- 6.3.5 TRV is incurring the highest CHQ/RHQ expenses among its peer group and the expenses seem unreasonable. However, these expenses have been readjusted in Table 27. Since TRV was concessioned during the Second Control Period, these expenses would not appear as part of the O&M expenses in future Control Periods. However, TKIAL does incur corporate support service expenses towards its parent companies. If it is observed that such expenses do not seem reasonable, the Study may consider capping the allowable expenses based on suitable global/regional benchmarks at the time of determination of tariffs for future Control Periods.
- 6.3.6 Based on external benchmarking, there is no evidence to suggest that the utility expenses for TRV are unreasonable.
- 6.3.7 Based on the observations from external benchmarking, it can be concluded that the operations and maintenance expenses at TRV are reasonable except for CHQ/RHQ expenses that seem exorbitantly high and are driving the overall costs high. Though the cost structure may evolve as the airport transforms to a PPP regime, the Study may still consider capping the allowable expenses based on suitable regional benchmarks at the time of determination of tariffs for future Control Periods.

## 6.4 Conclusion

- 6.4.1 Based on the analysis of the submissions of AAI and TKIAL, the O&M expenses for TRV for the Second Control Period and Pre & Post COD period is determined as per the Study to be Rs. 745.62 crores. (Rs. 682.18 crores by AAI and Rs. 63.44 crores by TKIAL). The break-up of the O&M expenses is given below.

**Table 104: O&M Expenses for SCP and Pre & Post COD period as per the current Study**

Particulars (Rs. in crores)	FY 17	FY 18	FY 19	FY 20	FY 21	Total (A=sum (FY 17 to FY21))	Pre COD (B)	Total (C=A+B)	Post COD (D)	Total (E=C+D)
Payroll Costs	48.15	59.73	73.80	77.33	57.16	<b>316.17</b>	31.31	<b>347.48</b>	31.53	<b>379.00</b>
A&G Expenses	1.21	2.05	2.98	3.35	2.37	<b>11.96</b>	0.06	<b>12.02</b>	6.48	<b>18.50</b>
CHQ/RHQ or CSS Expenses	14.67	17.96	30.70	43.63	26.76	<b>133.72</b>	15.09	<b>148.80</b>	6.39	<b>155.19</b>
R&M Expenses	11.83	11.11	11.86	11.86	13.23	<b>59.89</b>	9.58	<b>69.47</b>	7.89	<b>77.37</b>
Utility & Outsourcing Expenses	13.47	16.36	16.16	18.73	18.83	<b>83.56</b>	9.50	<b>93.07</b>	7.40	<b>100.46</b>
Other Outflows	1.53	2.64	3.01	3.06	0.45	<b>10.68</b>	0.66	<b>11.33</b>	4.16	<b>15.50</b>
<b>Total Operating Expenditure</b>	<b>90.87</b>	<b>109.84</b>	<b>138.51</b>	<b>157.97</b>	<b>118.80</b>	<b>615.98</b>	<b>66.20</b>	<b>682.18</b>	<b>63.84</b>	<b>746.02</b>

## 7. ANNEXURES

### 7.1 Annexure 1: R&M Expenses reallocation for SCP and Pre COD period as per the current Study

#### Annexure 1: Part 1 – FY 2016-17

A/c No.	A/c Description	Segment	Accumulated Balance (Rs. in crores)	As per AAI Submission	As per the Study					Impact (Rs. in crores)
				Total (Aero + Common Aero) (Rs. in crores)	Aero (Rs. in crores)	Common (Rs. in crores)	Allocation Ratio (%)	Common Aero (Rs. in crores)	Total (Aero + Common Aero) (Rs. in crores)	
			A	B	C	D	E	F = D * F	G = C + F	H = B - G
731001000	R & M Civil Runways	40000 Airport	0.25	0.25	0.25	-		-	0.25	-
731002000	R&M-Civil T/W.APRONS	30000 Security	-	-	-	-		-	-	-
731002000	R&M-Civil T/W.APRONS	40000 Airport	0.17	0.17	0.17	-		-	0.17	-
731003000	R&M-Tb&Oth.Bldgs-Ops	10000 ANS	-	-	-	-		-	-	-
731003000	R&M-Tb&Oth.Bldgs-Ops	40000 Airport	1.65	1.63	1.44	0.21	90.00%	0.19	1.63	0.00
731005000	R&M-Resdl.Bldg	40000 Airport	(0.00)	(0.00)	-	(0.00)	78.13%	(0.00)	(0.00)	-
731006000	R&M-Oth.Bldg	10000 ANS	0.03	-	-	-		-	-	-
731006000	R&M-Oth.Bldg	40000 Airport	0.30	0.23	0.23	-		-	0.23	-
731007000	R&M-Sewage&Drainage	40000 Airport	0.17	0.17	0.17	-		-	0.17	-
731009000	R & M: Civil:General	40000 Airport	0.19	0.18	0.11	0.09	91.81%	0.08	0.18	0.00
731011000	R & M: Spl Repairs	40000 Airport	0.67	0.61	-	0.61	90.00%	0.55	0.55	0.06
731101000	R&M-A/C Eqpt	10000 ANS	0.00	0.00	0.00	-		-	0.00	-
731101000	R&M-A/C Eqpt	40000 Airport	1.01	0.83	0.04	0.85	90.00%	0.77	0.81	0.02
731102000	R&M:Powr Su.&Gen.Set	10000 ANS	0.01	0.01	0.01	-		-	0.01	-
731102000	R&M:Powr Su.&Gen.Set	40000 Airport	1.09	2.11	1.09	1.10	91.81%	1.01	2.10	0.01
731103000	R&M-Gmd Light	10000 ANS	-	-	-	-		-	-	-
731103000	R&M-Gmd Light	30000 Security	-	-	-	-		-	-	-
731103000	R&M-Gmd Light	40000 Airport	0.32	0.32	0.32	-		-	0.32	-
731104000	R & M: Elec. Instal.	10000 ANS	0.56	0.37	0.32	0.04	90.00%	0.04	0.36	0.00
731104000	R & M: Elec. Instal.	30000 Security	-	-	-	-		-	-	-
731104000	R & M: Elec. Instal.	40000 Airport	0.38	0.37	0.23	0.14	90.00%	0.13	0.36	0.00
731105000	R & M: Elec.:Others	10000 ANS	0.04	0.04	0.04	-		-	0.04	-
731105000	R & M: Elec.:Others	40000 Airport	1.78	1.77	1.77	-		-	1.77	-
731201000	R&M:P&M/For./Rr/Gr.	40000 Airport	0.01	0.01	-	0.01	94.73%	0.01	0.01	0.00
731202000	R & M: Cars	40000 Airport	0.00	0.00	-	0.00	94.73%	0.00	0.00	0.00
731203000	R & M: Jeeps	40000 Airport	0.04	0.04	-	0.04	94.73%	0.04	0.04	0.00
731204000	R & M: Ambulances	40000 Airport	0.02	0.02	0.02	-		-	0.02	-
731205000	R&M:Pickup Van/Buses	40000 Airport	0.01	0.01	-	0.01	94.73%	0.01	0.01	0.00
731206000	R & M: Ff Veh.& Eqpt	40000 Airport	0.13	0.13	0.13	-		-	0.13	-
731207000	R & M: Vehicle:Other	40000 Airport	0.00	0.00	-	0.00	94.73%	0.00	0.00	0.00
731301000	R & M: F&F-Office	30000 Security	0.00	0.00	0.00	-		-	0.00	-
731301000	R & M: F&F-Office	40000 Airport	0.11	0.09	0.03	0.08	71.71%	0.06	0.08	0.00
731302000	R & M: F&F-T.Bldg	40000 Airport	0.01	0.01	-	0.01	90.00%	0.01	0.01	0.00
731401000	R&M:-Surveillance Eq	10000 ANS	0.01	-	-	-		-	-	-
731401000	R&M:-Surveillance Eq	40000 Airport	0.07	0.07	0.07	-		-	0.07	-
731402000	R&M-Comm. Eqpts	10000 ANS	0.00	-	-	-		-	-	-
731402000	R&M-Comm. Eqpts	40000 Airport	0.04	0.04	-	0.04	90.00%	0.04	0.04	0.00
731403000	R&M:-Nav.Eqpts	40000 Airport	0.01	0.01	-	-		-	-	0.01
731404000	R&M:-Auto.Eqpts	10000 ANS	0.02	-	-	-		-	-	-

A/c No.	A/c Description	Segment	Accumulated Balance (Rs. in crores)	As per AAI Submission	As per the Study					Impact (Rs. in crores)
				Total (Aero + Common Aero) (Rs. in crores)	Aero (Rs. in crores)	Common (Rs. in crores)	Allocation Ratio (%)	Common Aero (Rs. in crores)	Total (Aero + Common Aero) (Rs. in crores)	
			A	B	C	D	E	F = D * F	G = C + F	H = B - G
731405000	R&M:-Ancil.Cns Eqpts	10000 ANS	0.05	-	-	-		-	-	-
731406000	R&M:-Facil.Eqpts	10000 ANS	-	-	-	-		-	-	-
731406000	R&M:-Facil.Eqpts	40000 Airport	0.44	0.44	0.44	-		-	0.44	-
731407000	R&M-Sec.Eqpts.	40000 Airport	0.24	0.24	0.24	-		-	0.24	-
731407010	R&M-Electron-Spl Rep	40000 Airport	0.01	0.01	-	0.01	90.00%	0.01	0.01	0.00
731408000	Tel. Leased Lines/Sp	10000 ANS	0.32	-	-	-		-	-	-
731409000	R&M-Other Cns Eqpt	10000 ANS	0.06	-	-	-		-	-	-
731409000	R&M-Other Cns Eqpt	40000 Airport	(0.00)	(0.00)	(0.00)	-		-	(0.00)	-
731501000	R&M: Comp., It H/W	40000 Airport	0.14	0.11	0.03	0.11	71.71%	0.08	0.11	0.00
733001000	AOCC Expenses	40000 Airport	1.67	1.67	1.67	-		-	1.67	-
	<b>Total</b>		<b>12.03</b>	<b>11.95</b>	<b>8.82</b>	<b>3.36</b>		<b>3.01</b>	<b>11.83</b>	<b>0.12</b>

## Annexure 1: Part 2 – FY 2017-18

A/c No.	A/c Description	Segment	Accumulated Balance (Rs. in crores)	As per AAI Submission	As per the Study					Impact (Rs. in crores)
				Total (Aero + Common Aero) (Rs. in crores)	Aero (Rs. in crores)	Common (Rs. in crores)	Allocation Ratio (%)	Common Aero (Rs. in crores)	Total (Aero + Common Aero) (Rs. in crores)	
			A	B	C	D	E	F = D * F	G = C + F	H = B - G
730009000	Survey/Maps/Charts	40000 Airport	0.00	0.00	0.00	-		-	0.00	-
731001000	R & Mcivil RUNWAYS	40000 Airport	0.32	0.32	0.32	-		-	0.32	-
731003000	R&M-Tb&Oth.Bldgs-Ops	10000 ANS	-	-	-	-		-	-	-
731003000	R&M-Tb&Oth.Bldgs-Ops	25000 AAICLASCL	0.03	-	-	-		-	-	-
731003000	R&M-Tb&Oth.Bldgs-Ops	40000 Airport	1.29	1.26	0.89	0.41	90.00%	0.37	1.25	0.01
731004000	R&M-CARGO Bldg	40000 Airport	-	-	-	-		-	-	-
731005000	R&M-Resdl.Bldg	40000 Airport	0.05	0.05	-	0.05	69.23%	0.03	0.03	0.01
731006000	R&M-Oth.Bldg	40000 Airport	0.32	0.13	0.13	-		-	0.13	-
731007000	R&M-Sewage&Drainage	40000 Airport	0.40	0.40	0.40	-		-	0.40	-
731008000	R&M-FENCING,SEC.B/W	40000 Airport	0.07	0.07	0.07	-		-	0.07	-
731009000	R & M: Civil:General	30000 Security	0.00	0.00	0.00	-		-	0.00	-
731009000	R & M: Civil:General	40000 Airport	0.46	0.27	0.24	0.03	91.61%	0.03	0.27	-0.00
731011000	R & M: Spl Repairs	40000 Airport	0.85	0.78	0.00	0.84	90.00%	0.76	0.76	0.01
731101000	R&M-A/C Eqpt	10000 ANS	0.01	0.01	0.01	-		-	0.01	-
731101000	R&M-A/C Eqpt	40000 Airport	0.68	0.15	0.03	0.51	90.00%	0.06	0.09	0.06
731102000	R&M:Powr Su.&Gen.Set	10000 ANS	0.00	0.00	0.00	-		-	0.00	-
731102000	R&M:Powr Su.&Gen.Set	40000 Airport	1.54	1.41	0.14	1.38	91.61%	1.34	1.48	-0.07
731103000	R&M-Grnd Light	40000 Airport	0.13	0.13	0.13	-		-	0.13	-
731104000	R & M: Elec. Instal.	10000 ANS	0.32	0.32	0.32	-	91.61%	-	0.32	-
731104000	R & M: Elec. Instal.	40000 Airport	1.29	1.09	0.53	0.61	91.61%	0.55	1.07	0.02
731105000	R & M: Elec.:Others	40000 Airport	1.75	1.74	1.69	0.06		0.05	1.74	0.00
731106000	R & M: Spl Repairs	40000 Airport	0.01	0.01	0.01	-	94.12%	-	0.01	-
731201000	R&M:P&M/For./Rr/Gr.	40000 Airport	0.05	0.05	-	0.05	94.12%	0.04	0.04	0.00
731202000	R & M: Cars	40000 Airport	0.00	0.00	-	0.00	94.12%	0.00	0.00	0.00
731203000	R & M: Jeeps	40000 Airport	0.01	0.01	-	0.01		0.01	0.01	0.00
731204000	R & M: Ambulances	40000 Airport	0.01	0.01	0.01	-	94.12%	-	0.01	-
731205000	R&M:Pickup Van/Buses	40000 Airport	0.01	0.01	-	0.01		0.01	0.01	0.00
731206000	R & M: Ff Veh.& Eqpt	10000 ANS	-0.01	-	-	-	94.12%	-	-	-
731206000	R & M: Ff Veh.& Eqpt	40000 Airport	0.13	0.13	0.13	-		-	0.13	-
731207000	R & M: Vehicle:Other	40000 Airport	0.00	0.00	-	0.00		0.00	0.00	0.00
731209000	R&M-Te.Mt.Fire.S.Rep	10000 ANS	0.08	-	-	-	69.23%	-	-	-
731209000	R&M-Te.Mt.Fire.S.Rep	40000 Airport	0.06	0.06	0.06	-		-	0.06	-
731301000	R & M: F&F-Office	40000 Airport	0.12	0.11	0.09	0.04		0.03	0.11	0.00
731302000	R & M: F&F-T.Bldg	40000 Airport	-	-	-	-		-	-	-
731402000	R&M-Comm. Eqpts	10000 ANS	0.02	-	-	-		-	-	-
731405000	R&M:-Ancil.Cns Eqpts	10000 ANS	0.02	-	-	-	94.12%	-	-	-
731406000	R&M:-Facil.Eqpts	10000 ANS	0.13	-	-	-		-	-	-
731406000	R&M:-Facil.Eqpts	20000 Cargo	-	-	-	-		-	-	-
731406000	R&M:-Facil.Eqpts	25000 AAICLASCL	0.00	-	-	-		-	-	-
731406000	R&M:-Facil.Eqpts	30000 Security	0.00	0.00	0.00	-		-	0.00	-
731406000	R&M:-Facil.Eqpts	40000 Airport	0.26	0.26	0.26	-		-	0.26	-
731407000	R&M-Sec.Eqpts.	40000 Airport	0.15	0.15	0.15	-		-	0.15	-
731407010	R&M-Electron-Spl Rep	40000 Airport	0.01	0.01	0.01	-		-	0.01	-

A/c No.	A/c Description	Segment	Accumulated Balance (Rs. in crores)	As per AAI Submission	As per the Study					Impact (Rs. in crores)
				Total (Aero + Common Aero) (Rs. in crores)	Aero (Rs. in crores)	Common (Rs. in crores)	Allocation Ratio (%)	Common Aero (Rs. in crores)	Total (Aero + Common Aero) (Rs. in crores)	
			A	B	C	D	E	F = D * F	G = C + F	H = B - G
731408000	Tel. Leased Lines/Sp	10000 ANS	0.39	-	-	-		-	-	-
731409000	R&M-Other Cns Eqpt	10000 ANS	0.03	-	-	-		-	-	-
731409000	R&M-Other Cns Eqpt	40000 Airport	-	-	-	-		-	-	-
731501000	R&M: Comp., It H/W	10000 ANS	0.00	0.00	-	0.00	69.23%	0.00	0.00	0.00
731501000	R&M: Comp., It H/W	20000 Cargo	0.00	-	-	-		-	-	-
731501000	R&M: Comp., It H/W	30000 Security	0.00	0.00	-	0.00	69.23%	0.00	0.00	0.00
731501000	R&M: Comp., It H/W	40000 Airport	0.20	0.16	0.03	0.17	69.23%	0.12	0.15	0.01
731407005	R&M Bot Xbis Lease	40000 Airport	0.29	0.29	-	-		-	-	0.29
733001000	AOCC Expenses	40000 Airport	2.08	2.08	2.08	-		-	2.08	-
	<b>Total</b>		<b>13.57</b>	<b>11.46</b>	<b>7.71</b>	<b>4.17</b>		<b>3.40</b>	<b>11.11</b>	<b>0.34</b>



## Annexure 1: Part 3 – FY 2018-19

A/c No.	A/c Description	Segment	Accumulated Balance (Rs. in crores)	As per AAI Submission	As per the Study					Impact (Rs. in crores)
				Total (Aero + Common Aero) (Rs. in crores)	Aero (Rs. in crores)	Common (Rs. in crores)	Allocation Ratio (%)	Common Aero (Rs. in crores)	Total (Aero + Common Aero) (Rs. in crores)	
			A	B	C	D	E	F = D * F	G = C + F	H = B - G
731001000	R & Mcivil RUNWAYS	40000 Airport	0.01	0.01	0.01	-		-	0.01	-
731003000	R&M-Tb&Oth.Bldgs-Ops	30000 Security	-	-	-	-		-	-	-
731003000	R&M-Tb&Oth.Bldgs-Ops	40000 Airport	4.33	2.34	1.68	0.72	90.00%	0.65	2.33	0.02
731004000	R&M-CARGO Bldg	40000 Airport	0.00	0.00	0.00	-		-	0.00	-
731005000	R&M-Resdl.Bldg	40000 Airport	0.01	0.01	0.01	-		-	0.01	-
731006000	R&M-Oth.Bldg	40000 Airport	1.18	0.72	0.17	0.59	90.00%	0.53	0.70	0.02
731007000	R&M-Sewage&Drainage	40000 Airport	0.06	0.06	0.06	-		-	0.06	-
731009000	R & M: Civil:General	40000 Airport	0.09	0.08	-	0.08	91.62%	0.07	0.07	0.01
731011000	R & M: Spl Repairs	40000 Airport	0.08	0.08	0.08	-		-	0.08	-
731101000	R&M-A/C Eqpt	40000 Airport	0.77	0.61	0.02	0.65	90.00%	0.59	0.60	0.01
731102000	R&M:Powr Su.&Gen.Set	10000 ANS	0.00	-	-	-		-	-	-
731102000	R&M:Powr Su.&Gen.Set	40000 Airport	2.55	1.80	0.40	1.50	91.52%	1.45	1.85	-0.05
731103000	R&M-Grnd Light	40000 Airport	0.14	0.14	0.14	-		-	0.14	-
731104000	R & M: Elec. Instal.	10000 ANS	0.08	-	-	-		-	-	-
731104000	R & M: Elec. Instal.	40000 Airport	0.85	0.64	0.17	0.51	90.00%	0.46	0.62	0.02
731105000	R & M: Elec.:Others	10000 ANS	0.00	-	-	-		-	-	-
731105000	R & M: Elec.:Others	40000 Airport	2.11	1.94	1.55	0.42	90.00%	0.38	1.93	0.02
731201000	R&M:P&M/For./Rr/Gr.	40000 Airport	0.03	0.03	-	0.03	94.02%	0.03	0.03	0.00
731202000	R & M: Cars	40000 Airport	0.00	0.00	-	0.00	94.02%	0.00	0.00	0.00
731203000	R & M: Jeeps	40000 Airport	0.01	-	-	0.01	94.02%	0.01	0.01	-0.01
731204000	R & M: Ambulances	40000 Airport	0.01	0.01	0.01	-		-	0.01	-
731205000	R&M:Pickup Van/Buses	40000 Airport	0.00	0.00	-	0.00	94.02%	0.00	0.00	0.00
731206000	R & M: Ff Veh.& Eqpt	40000 Airport	0.54	0.54	0.54	-		-	0.54	-
731207000	R & M: Vehicle:Other	40000 Airport	0.00	0.00	-	0.00	94.02%	0.00	0.00	0.00
731301000	R & M: F&F-Office	10000 ANS	0.00	-	-	-		-	-	-
731301000	R & M: F&F-Office	40000 Airport	0.03	0.02	-	0.03	68.47%	0.02	0.02	0.00
731302000	R & M: F&F-T.Bldg	40000 Airport	-0.00	-0.00	-0.00	-		-	-0.00	-
731401000	R&M:-Surveillance Eq	10000 ANS	0.81	-	-	-		-	-	-
731401000	R&M:-Surveillance Eq	30000 Security	0.04	0.04	0.04	-		-	0.04	-
731401000	R&M:-Surveillance Eq	40000 Airport	0.12	0.12	0.12	-		-	0.12	-
731402000	R&M-Comm. Eqpts	10000 ANS	0.01	-	-	-		-	-	-
731402000	R&M-Comm. Eqpts	40000 Airport	0.05	0.05	0.05	-		-	0.05	-
731404000	R&M:-Auto.Eqpts	10000 ANS	0.01	-	-	-		-	-	-
731404000	R&M:-Auto.Eqpts	40000 Airport	-0.31	-	-	-		-	-	-
731405000	R&M:-Ancil.Cns Eqpts	10000 ANS	-	-	-	-		-	-	-
731406000	R&M:-Facil.Eqpts	10000 ANS	0.00	-	-	-		-	-	-
731406000	R&M:-Facil.Eqpts	40000 Airport	0.62	0.62	0.62	-		-	0.62	-
731407000	R&M-Sec.Eqpts.	40000 Airport	0.16	0.16	0.16	-		-	0.16	-
731407010	R&M-Electron-Spl Rep	40000 Airport	0.03	0.03	0.03	-		-	0.03	-
731408000	Tel. Leased Lines/Sp	10000 ANS	0.08	-	-	-		-	-	-
731408000	Tel. Leased Lines/Sp	40000 Airport	-	-	-	-		-	-	-
731409000	R&M-Other Cns Eqpt	10000 ANS	0.07	-	-	-		-	-	-
731409000	R&M-Other Cns Eqpt	40000 Airport	-0.04	-	-	-		-	-	-
731501000	R&M: Comp., It H/W	40000 Airport	0.20	0.16	0.06	0.14	68.47%	0.10	0.15	0.00
731407005	R&M Bot Xbis Lease	40000 Airport	0.65	0.65	-	-		-	-	0.65

A/c No.	A/c Description	Segment	Accumulated Balance (Rs. in crores)	As per AAI Submission	As per the Study					Impact (Rs. in crores)
				Total (Aero + Common Aero) (Rs. in crores)	Aero (Rs. in crores)	Common (Rs. in crores)	Allocation Ratio (%)	Common Aero (Rs. in crores)	Total (Aero + Common Aero) (Rs. in crores)	
			<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F = D * F</b>	<b>G = C + F</b>	<b>H = B - G</b>
733001000	Aocc Expenses	40000 Airport	1.66	1.66	1.66	-		-	1.66	
	<b>Total</b>		<b>17.04</b>	<b>12.54</b>	<b>7.57</b>	<b>4.68</b>		<b>4.29</b>	<b>11.86</b>	<b>0.69</b>

## Annexure 1: Part 4 – FY 2019-20

A/c No.	A/c Description	Segment	Accumulated Balance (Rs. in crores)	As per AAI Submission	As per the Study					Impact (Rs. in crores)
				Total (Aero + Common Aero) (Rs. in crores)	Aero (Rs. in crores)	Common (Rs. in crores)	Allocation Ratio (%)	Common Aero (Rs. in crores)	Total (Aero + Common Aero) (Rs. in crores)	
			A	B	C	D	E	F = D * F	G = C + F	H = B - G
731001000	R & Mcivil RUNWAYS	40000 Airport	0.06	0.06	0.06	-		-	0.06	-
731003000	R&M-Tb&Oth.Bldgs-Ops	30000 Security	-	0.00	0.98	-		-0.98	0.00	-
731003000	R&M-Tb&Oth.Bldgs-Ops	40000 Airport	1.36	1.45	0.58	0.95	90.00%	0.86	1.44	0.01
731006000	R&M-Oth.Bldg	40000 Airport	0.97	0.95	0.58	0.39	90.00%	0.35	0.94	0.01
731008000	R&M-Fencing,Sec.B/W	40000 Airport	0.01	0.01	0.01	-		-	0.01	-
731009000	R & M: Civil:General	40000 Airport	0.06	0.06	-	0.06	91.72%	0.05	0.05	0.00
731101000	R&M-A/C Eqpt	40000 Airport	0.78	0.95	0.00	1.04	90.00%	0.93	0.93	0.02
731102000	R&M:Powr Su.&Gen.Set	40000 Airport	2.56	1.72	0.11	1.72	91.72%	1.67	1.78	-0.06
731103000	R&M-Grnd Light	40000 Airport	0.18	0.18	0.18	-		-	0.18	-
731104000	R & M: Elec. Instal.	40000 Airport	0.47	0.45	-	0.47	90.00%	0.43	0.43	0.02
731105000	R & M: Elec.:Others	40000 Airport	3.43	3.08	2.46	0.66	90.00%	0.60	3.05	0.03
731201000	R&M:P&M/For./Rr/Gr.	40000 Airport	0.11	0.11	-	0.11	93.86%	0.10	0.10	0.01
731202000	R & M: Cars	40000 Airport	0.00	0.00	-	0.00	93.86%	0.00	0.00	0.00
731203000	R & M: Jeeps	40000 Airport	0.02	0.01	-	0.02		0.01	0.01	-
731204000	R & M: Ambulances	40000 Airport	0.03	0.03	0.03	-		-	0.03	-
731205000	R&M:Pickup Van/Buses	40000 Airport	0.01	0.01	-	0.01	93.86%	0.01	0.01	0.00
731206000	R & M: Ff Veh.& Eqpt	40000 Airport	0.22	0.22	0.22	-		-	0.22	-
731207000	R & M: Vehicle:Other	40000 Airport	0.00	0.00	-	0.00	93.86%	0.00	0.00	0.00
731301000	R & M: F&F-Office	40000 Airport	0.02	0.02	-	0.02	66.90%	0.01	0.01	0.00
731304000	In Line Bag Man Pow	40000 Airport	0.52	0.52	-	-		-	-	0.52
731401000	R&M:-Surveillance Eq	40000 Airport	0.18	0.18	0.18	-		-	0.18	-
731402000	R&M-Comm. Eqpts	10000 ANS	0.01	-	-	-		-	-	-
731402000	R&M-Comm. Eqpts	40000 Airport	0.06	0.06	0.06	-		-	0.06	-
731403000	R&M:-Nav.Eqpts	10000 ANS	0.00	-	-	-		-	-	-
731404000	R&M:-Auto.Eqpts	10000 ANS	0.02	-	-	-		-	-	-
731405000	R&M:-Ancil.Cns Eqpts	10000 ANS	-	-	-	-		-	-	-
731406000	R&M:-Facil.Eqpts	40000 Airport	0.31	0.31	0.31	-		-	0.31	-
731407000	R&M-Sec.Eqpts.	40000 Airport	0.00	0.00	0.00	-		-	0.00	-
731407010	R&M-Electron-Spl Rep	40000 Airport	0.10	0.10	0.10	-		-	0.10	-
731408000	Tel. Leased Lines/Sp	10000 ANS	0.43	-	-	-		-	-	-
731408000	Tel. Leased Lines/Sp	40000 Airport	-	-	-	-		-	-	-
731409000	R&M-Other Cns Eqpt	10000 ANS	0.05	-	-	-		-	-	-
731409000	R&M-Other Cns Eqpt	40000 Airport	0.04	-	-	-		-	-	-
731501000	R&M: Comp., It H/W	10000 ANS	0.01	-	-	-		-	-	-
731501000	R&M: Comp., It H/W	40000 Airport	0.23	0.19	0.11	0.12	66.90%	0.08	0.19	0.00
731502000	R&M: AMC-S/W	40000 Airport	0.00	-	-	-	66.90%	-	-	-
731407005	R&M Bot Xbis Lease	40000 Airport	0.03	0.03	-	-		-	-	0.03
733001000	AOCC Expenses	40000 Airport	1.75	1.75	1.75	-		-	1.75	-
	<b>Total</b>		<b>14.06</b>	<b>12.46</b>	<b>7.72</b>	<b>5.58</b>		<b>4.14</b>	<b>11.86</b>	<b>0.60</b>

## Annexure 1: Part 5 – FY 2020-21

A/c No.	A/c Description	Segment	Accumulated Balance (Rs. in crores)	As per AAI Submission	As per the Study					Impact (Rs. in crores)
				Total (Aero + Common Aero) (Rs. in crores)	Aero (Rs. in crores)	Common (Rs. in crores)	Allocation Ratio (%)	Common Aero (Rs. in crores)	Total (Aero + Common Aero) (Rs. in crores)	
			A	B	C	D	E	F = D * F	G = C + F	H = B - G
730009000	Survey/Maps/Charts	10000 ANS	0.01	-	-	-		-	-	-
731001000	R & Mcivil RUNWAYS	40000 Airport	0.00	0.00	0.00	-		-	0.00	-
731003000	R&M-Tb&Oth.Bldgs-Ops	40000 Airport	1.53	1.50	1.12	0.41	90.00%	0.37	1.49	0.01
731006000	R&M-Oth.Bldg	40000 Airport	0.97	0.92	0.45	0.50	90.00%	0.45	0.90	0.02
731009000	R & M: Civil:General	40000 Airport	0.06	0.06	-	0.06	91.68%	0.06	0.06	0.01
731101000	R&M-A/C Eqpt	30000 Security	0.00	0.00	0.00	-		-	0.00	-
731101000	R&M-A/C Eqpt	40000 Airport	1.08	0.96	0.04	0.99	90.00%	0.89	0.93	0.03
731102000	R&M:Powr Su.&Gen.Set	40000 Airport	2.44	1.95	0.50	1.54	91.68%	1.50	2.00	-0.06
731103000	R&M-Grnd Light	40000 Airport	0.20	0.20	0.20	-		-	0.20	-
731104000	R & M: Elec. Instal.	40000 Airport	1.09	0.94	0.60	0.36	90.00%	0.32	0.92	0.01
731105000	R & M: Elec.:Others	40000 Airport	3.89	3.67	2.39	1.37	90.00%	1.24	3.62	0.04
731106000	R & M: Spl Repairs	40000 Airport	0.01	0.01	0.01	-		-	0.01	-
731201000	R&M:P&M/For./Rr/Gr.	40000 Airport	0.01	0.01	-	0.01	93.78%	0.01	0.01	0.00
731202000	R & M: Cars	40000 Airport	0.00	0.00	-	0.00	93.78%	0.00	0.00	0.00
731203000	R & M: Jeeps	40000 Airport	0.00	0.00	-	0.00		0.00	0.00	-
731204000	R & M: Ambulances	40000 Airport	0.00	0.00	0.00	-		-	0.00	-
731205000	R&M:Pickup Van/Buses	40000 Airport	0.00	0.00	-	0.00	93.78%	0.00	0.00	0.00
731206000	R & M: Ff Veh.& Eqpt	40000 Airport	0.24	0.24	0.24	-		-	0.24	-
731207000	R & M: Vehicle:Other	40000 Airport	0.00	0.00	-	0.00	93.78%	0.00	0.00	0.00
731301000	R & M: F&F-Office	40000 Airport	0.01	0.01	-	0.01	66.75%	0.01	0.01	0.00
731304000	In Line Bag Man Pow	40000 Airport	2.33	2.33	-	-		-	-	2.33
731401000	R&M:-Surveillance Eq	40000 Airport	0.13	0.13	0.13	-		-	0.13	-
731402000	R&M-Comm. Eqpts	10000 ANS	0.02	0.01	0.01	-		-	0.01	-
731402000	R&M-Comm. Eqpts	40000 Airport	0.27	0.27	0.27	-		-	0.27	-
731403000	R&M:-Nav.Eqpts	10000 ANS	0.08	-	-	-		-	-	-
731405000	R&M:-Ancil.Cns Eqpts	10000 ANS	0.00	-	-	-		-	-	-
731406000	R&M:-Facil.Eqpts	10000 ANS	0.00	-	-	-		-	-	-
731406000	R&M:-Facil.Eqpts	40000 Airport	0.12	0.12	0.12	-		-	0.12	-
731407000	R&M-Sec.Eqpts.	10000 ANS	-	-	-	-		-	-	-
731407000	R&M-Sec.Eqpts.	30000 Security	0.01	0.01	0.01	-		-	0.01	-
731407000	R&M-Sec.Eqpts.	40000 Airport	0.15	0.15	0.15	-		-	0.15	-
731407010	R&M-Electron-Spl Rep	40000 Airport	0.00	0.00	0.00	-		-	0.00	-
731408000	Tel. Leased Lines/Sp	10000 ANS	0.97	-	-	-		-	-	-
731408000	Tel. Leased Lines/Sp	40000 Airport	0.05	0.05	0.05	-		-	0.05	-
731409000	R&M-Other Cns Eqpt	10000 ANS	0.03	-	-	-		-	-	-
731501000	R&M: Comp., It H/W	10000 ANS	0.00	0.00	-	0.00	66.75%	0.00	0.00	0.00
731501000	R&M: Comp., It H/W	40000 Airport	0.57	0.44	0.14	0.42	66.75%	0.28	0.43	0.01
733001000	AOCC Expenses	40000 Airport	1.63	1.63	1.63	-		-	1.63	-
	<b>Total</b>		<b>17.94</b>	<b>15.65</b>	<b>8.08</b>	<b>5.71</b>		<b>5.15</b>	<b>13.23</b>	<b>2.41</b>

## Annexure 1: Part 6 – FY 2021-22 (up to COD)

A/c No.	A/c Description	Segment	Accumulated Balance (Rs. in crores)	As per AAI Submission	As per the Study					Impact (Rs. in crores)
				Total (Aero + Common Aero) (Rs. in crores)	Aero (Rs. in crores)	Common (Rs. in crores)	Allocation Ratio (%)	Common Aero (Rs. in crores)	Total (Aero + Common Aero) (Rs. in crores)	
			A	B	C	D	E	F = D * F	G = C + F	H = B - G
730009000	Survey/Maps/Charts	10000 ANS	0.01	-	-	-		-	-	-
730009000	Survey/Maps/Charts	40000 Airport	0.01	0.01	0.01	-		-	0.01	-
731003000	R&M-Tb&Oth.Bldgs-Ops	10000 ANS	4.46	4.44	4.22	0.24	90.00%	0.22	4.44	0.00
731003000	R&M-Tb&Oth.Bldgs-Ops	40000 Airport	-3.62	-3.32	-	-3.62	90.00%	-3.26	-3.26	-0.06
731006000	R&M-Oth.Bldg	40000 Airport	0.39	0.53	0.39	0.14	90.00%	0.13	0.52	0.01
731009000	R & M: Civil:General	40000 Airport	0.07	0.07	-	0.07	91.80%	0.06	0.06	0.01
731101000	R&M-A/C Eqpt	40000 Airport	0.17	0.14	0.04	0.11	90.00%	0.10	0.14	0.00
731102000	R&M:Powr Su.&Gen.Set	40000 Airport	0.72	0.48	0.01	0.50	90.00%	0.45	0.46	0.02
731103000	R&M-Grnd Light	40000 Airport	0.02	0.02	0.02	-		-	0.02	-
731104000	R & M: Elec. Instal.	40000 Airport	1.53	1.38	0.65	0.79	90.00%	0.71	1.37	0.01
731105000	R & M: Elec.:Others	40000 Airport	2.74	2.34	1.08	1.37	90.00%	1.23	2.31	0.03
731201000	R&M:P&M/For./Rr/Gr.	40000 Airport	0.00	0.00	-	0.00	92.50%	0.00	0.00	0.00
731202000	R & M: Cars	40000 Airport	0.01	0.01	-	0.01	92.50%	0.00	0.00	0.00
731203000	R & M: Jeeps	40000 Airport	0.00	0.00	-	0.00	92.50%	0.00	0.00	0.00
731204000	R & M: Ambulances	40000 Airport	0.00	0.00	0.00	-		-	0.00	-
731205000	R&M:Pickup Van/Buses	40000 Airport	0.01	0.01	-	0.01	92.50%	0.01	0.01	0.00
731206000	R & M: Ff Veh.& Eqpt	40000 Airport	0.08	0.08	0.08	-		-	0.08	-
731207000	R & M: Vehicle:Other	40000 Airport	0.00	0.00	-	0.00	92.50%	0.00	0.00	0.00
731208000	R & M: Aircraft	40000 Airport	-	-	-	-		-	-	-
731209000	R&M-Te.Mt.Fire.S.Rep	10000 ANS	0.17	-	-	-		-	-	-
731301000	R & M: F&F-Office	40000 Airport	0.00	0.00	-	0.00	64.02%	0.00	0.00	0.00
731303000	R&M-Store-Sl Repair	10000 ANS	-	-	-	-		-	-	-
731401000	R&M:-Surveillance Eq	10000 ANS	0.00	-	-	-		-	-	-
731401000	R&M:-Surveillance Eq	40000 Airport	0.01	0.01	0.01	-		-	0.01	-
731402000	R&M-Comm. Eqpts	10000 ANS	0.00	-	-	-		-	-	-
731402000	R&M-Comm. Eqpts	40000 Airport	0.20	0.20	0.20	-		-	0.20	-
731403000	R&M:-Nav.Eqpts	10000 ANS	0.05	-	-	-		-	-	-
731403000	R&M:-Nav.Eqpts	40000 Airport	0.00	-	-	-		-	-	-
731404000	R&M:-Auto.Eqpts	10000 ANS	0.02	-	-	-		-	-	-
731405000	R&M:-Ancil.Cns Eqpts	10000 ANS	0.18	-	-	-		-	-	-
731406000	R&M:-Facil.Eqpts	40000 Airport	0.13	0.13	0.13	-		-	0.13	-
731407000	R&M-Sec.Eqpts.	40000 Airport	2.06	2.06	2.06	-		-	2.06	-
731407010	R&M-Electron-Spl Rep	10000 ANS	0.00	-	-	-		-	-	-
731407010	R&M-Electron-Spl Rep	40000 Airport	0.01	0.01	0.01	-		-	0.01	-
731408000	Tel. Leased Lines/Sp	10000 ANS	1.02	-	-	-		-	-	-
731408000	Tel. Leased Lines/Sp	40000 Airport	-0.00	-	-	-		-	-	-
731409000	R&M-Other Cns Eqpt	10000 ANS	0.05	-	-	-		-	-	-
731410000	Fti Service Charges	10000 ANS	0.82	-	-	-		-	-	-
731501000	R&M: Comp., It H/W	10000 ANS	0.00	0.00	-	0.00	64.02%	0.00	0.00	0.00
731501000	R&M: Comp., It H/W	40000 Airport	0.30	0.23	0.08	0.22	64.02%	0.14	0.22	0.01
731502000	R&M: AMC-S/W	40000 Airport	0.01	0.01	-	0.01	64.02%	0.01	0.01	0.00
733001000	AOCC Expenses	40000 Airport	0.78	0.78	0.78	-		-	0.78	-
	<b>Total</b>		<b>12.42</b>	<b>9.61</b>	<b>9.76</b>	<b>-0.13</b>		<b>-0.18</b>	<b>9.58</b>	<b>0.03</b>

## 7.2 Annexure 2: Utilities and Outsourcing reallocation for SCP and Pre COD period as per the current Study

### Annexure 2: Part 1 – FY 2016-17

A/c No.	A/c Description	Segment	Accumulated Balance (Rs. in crores)	As per AAI Submission	As per the Study					Impact (Rs. in crores)
				Total (Aero + Common Aero) (Rs. in crores)	Aero (Rs. in crores)	Common (Rs. in crores)	Allocation Ratio (%)	Common Aero (Rs. in crores)	Total (Aero + Common Aero) (Rs. in crores)	
			A	B	C	D	E	F = D * F	G = C + F	H = B - G
722001000	Pol For CFT	40000 Airport	0.04	0.04	-	0.04	71.71%	0.03	0.03	0.01
722002000	Pol-Other Cars/Jeep	30000 Security	0.00	-	-		-	-	-	-
722002000	Pol-Other Cars/Jeep	40000 Airport	0.08	0.08	-	0.08	71.71%	0.05	0.05	0.02
722003001	POL-Pick Upvan&Buses	40000 Airport	0.02	0.02	-	0.02	71.71%	0.02	0.02	0.01
722003002	Pol-Other Vehicles	40000 Airport	0.05	0.05	-	0.05	71.71%	0.03	0.03	0.01
722006000	Cons.-Paper Glass	40000 Airport	0.02	0.02	0.02		-	-	0.02	-
722013000	Other Consumables	30000 Security	0.00	0.00	0.00		-	-	0.00	-
722013000	Other Consumables	40000 Airport	0.23	0.22	0.16	0.07	90.00%	0.06	0.22	0.00
726001000	Electricity Expenses	10000 ANS	2.55	2.05	-	2.55	80.44%	2.05	2.05	-
726001000	Electricity Expenses	40000 Airport	10.25	8.24	-	10.25	80.44%	8.24	8.24	-
726002000	Diesel/Oil-DG Sets	40000 Airport	0.16	0.13	-	0.16	80.44%	0.13	0.13	-
980012000	Ewc(Staff)	10000 ANS	0.00	-	-			-	-	-
980012000	Ewc(Staff)	40000 Airport	0.00	(0.00)	(0.00)			-	(0.00)	-
940017000	Ewchgs(Oth)	40000 Airport	-0.73	(0.73)	(0.73)			-	(0.73)	-
940018000	Ewc(Govt.)	40000 Airport	-0.02	(0.02)	(0.02)			-	(0.02)	-
726003000	Working On Trivandrum Trail Balance	40000 Airport	0.38	0.38	-	0.38	91.81%	0.35	0.35	0.03
729001000	Hire Chgs-Mc/Jeeps	30000 Security	0.01	0.01	-	0.01	94.73%	0.01	0.01	0.00
729001000	Hire Chgs-Mc/Jeeps	40000 Airport	0.16	0.16	-	0.16	94.73%	0.15	0.15	0.01
729002000	Other Hire Charges	40000 Airport	0.02	0.02	-	0.02	94.73%	0.02	0.02	0.00
729004000	Hiring-Manpower	10000 ANS	0.08	-	-			-	-	-
729004000	Hiring-Manpower	40000 Airport	0.23	0.23	-	0.23	91.81%	0.21	0.21	0.02
742001000	W/W-Oth.Sec.Cont.	40000 Airport	0.45	0.44	0.33	0.12	90.00%	0.11	0.44	0.00
722005000	Toiletry & Cons.Stores	40000 Airport	0.09	0.09	0.09			-	0.09	-
760001000	Upkeep Exp (Ess Exp.)	10000 ANS	0.01	0.01	0.01			-	0.01	-
760001000	Upkeep Exp (Ess Exp.)	40000 Airport	1.02	0.98	0.31	0.72	90.00%	0.65	0.95	0.03
760002000	Upkeep Exp (Mess)	40000 Airport	1.32	1.21		1.32	90.00%	1.19	1.19	0.02
	<b>Total</b>		<b>16.43</b>	<b>13.64</b>	<b>0.16</b>	<b>16.18</b>		<b>13.31</b>	<b>13.47</b>	<b>0.17</b>

## Annexure 2: Part 2 – FY 2017-18

A/c No.	A/c Description	Segment	Accumulated Balance (Rs. in crores)	As per AAI Submission Total (Aero + Common Aero) (Rs. in crores)	As per the Study					Impact (Rs. in crores)
					Aero (Rs. in crores)	Common (Rs. in crores)	Allocation Ratio (%)	Common Aero (Rs. in crores)	Total (Aero + Common Aero) (Rs. in crores)	
			A	B	C	D	E	F = D * F	G = C + F	H = B - G
722001000	POL For CFT	40000 Airport	0.06	0.06	-	0.06	69.23%	0.04	0.04	0.02
722002000	Pol-Other Cars/Jeep	40000 Airport	0.09	0.09	-	0.09	69.23%	0.07	0.07	0.03
722003001	POL-Pick Upvan&Buses	40000 Airport	0.02	0.02	-	0.02	69.23%	0.01	0.01	0.01
722003002	Pol-Other Vehicles	40000 Airport	0.06	0.06	-	0.06	69.23%	0.04	0.04	0.02
722006000	Cons.-Paper Glass	40000 Airport	0.04	0.04	0.04	-		-	0.04	-
722008000	Cons. Of Elec.Spares	10000 ANS	0.09	-	-	-		-	-	-
722008000	Cons. Of Elec.Spares	40000 Airport	0.04	0.04	0.04	-		-	0.04	-
722010000	Cons-Tyres O Vehicle	40000 Airport	0.01	0.01	0.01	-		-	0.01	-
722013000	Other Consumables	10000 ANS	0.00	-	-	-		-	-	-
722013000	Other Consumables	40000 Airport	0.34	0.33	0.26	0.08	90.00%	0.07	0.33	0.00
726001000	Electricity Expenses	10000 ANS	2.63	2.12	-	2.63	80.44%	2.12	2.12	-
726001000	Electricity Expenses	40000 Airport	10.57	8.50	-	10.57	80.44%	8.50	8.50	-
726002000	Diesel/Oil-DG Sets	40000 Airport	0.19	0.15	-	0.19	80.44%	0.15	0.15	-
980012000	Ewc(Staff)	10000 ANS	-0.00	-	-	-		-	-	-
980012000	Ewc(Staff)	20000 Cargo	-0.00	-	-	-		-	-	-
980012000	Ewc(Staff)	30000 Security	-0.00	-0.00	-0.00	-		-	-0.00	-
980012000	Ewc(Staff)	40000 Airport	-0.00	-0.00	-0.00	-		-	-0.00	-
940017000	Ewchgs(Oth)	10000 ANS	-0.05	-	-	-		-	-	-
940017000	Ewchgs(Oth)	40000 Airport	-0.76	-0.76	-0.76	-		-	-0.76	-
940018000	Ewc(Govt.)	40000 Airport	-0.02	-0.02	-0.02	-		-	-0.02	-
726003000	Water Charges	40000 Airport	0.31	0.31	-	0.31	91.61%	0.28	0.28	0.03
729001000	Hire Chgs-Mc/Jeeps	30000 Security	0.00	0.00	-	0.00	94.12%	0.00	0.00	0.00
729001000	Hire Chgs-Mc/Jeeps	40000 Airport	0.16	0.16	-	0.16	94.12%	0.15	0.15	0.01
729002000	Other Hire Charges	40000 Airport	0.00	0.00	-	0.00	94.12%	0.00	0.00	0.00
729004000	Hiring-Manpower	10000 ANS	0.06	-	-	-		-	-	-
729004000	Hiring-Manpower	20000 Cargo	-	-	-	-		-	-	-
729004000	Hiring-Manpower	25000 AAICLASCL	0.02	0.02	-	-		-	-	0.02
729004000	Hiring-Manpower	30000 Security	0.02	0.02	-	0.02	91.61%	0.02	0.02	0.00
729004000	Hiring-Manpower	40000 Airport	0.17	0.16	-	0.16	91.61%	0.15	0.15	0.01
742001000	W/W-Oth.Sec.Cont.	10000 ANS	0.04	0.04	0.04	-		-	0.04	-
742001000	W/W-Oth.Sec.Cont.	40000 Airport	0.79	0.78	0.67	0.12	80.44%	0.11	0.78	0.00
722005000	Toiletry&Cons.Stores	40000 Airport	0.04	0.04	0.04	-		-	0.04	-
760001000	Upkeep Exp(Ess Exp.)	40000 Airport	1.49	1.45	0.77	0.72	90.00%	0.65	1.42	0.03
760002000	Upkeep Exp(Mess)	40000 Airport	3.24	2.96	-	3.24	90.00%	2.91	2.91	0.04
	<b>Total</b>		<b>19.65</b>	<b>16.57</b>	<b>1.08</b>	<b>18.43</b>		<b>15.28</b>	<b>16.36</b>	<b>0.22</b>

## Annexure 2: Part 3 – FY 2018-19

A/c No.	A/c Description	Segment	Accumulated Balance (Rs. in crores)	As per AAI Submission	As per the Study					Impact (Rs. in crores)
				Total (Aero + Common Aero) (Rs. in crores)	Aero (Rs. in crores)	Common (Rs. in crores)	Allocation Ratio (%)	Common Aero (Rs. in crores)	Total (Aero + Common Aero) (Rs. in crores)	
			A	B	C	D	E	F = D * F	G = C + F	H = B - G
722001000	POL For CFT	40000 Airport	0.06	0.06	-	0.06	68.47%	0.04	0.04	0.02
722002000	Pol-Other Cars/Jeep	40000 Airport	0.12	0.12	-	0.12	68.47%	0.08	0.08	0.04
722003001	POL-Pick Upvan&Buses	40000 Airport	0.03	0.03	-	0.03	68.47%	0.02	0.02	0.01
722003002	Pol-Other Vehicles	40000 Airport	0.06	0.06	-	0.06	68.47%	0.04	0.04	0.02
722006000	Cons.-Paper Glass	40000 Airport	0.02	0.02	0.02	-		-	0.02	-
722010000	Cons-Tyres O Vehicle	40000 Airport	0.00	0.00	0.00	-		-	0.00	-
722012000	Cns Stores-Indig.	40000 Airport	0.01	0.01	0.01	-		-	0.01	-
722008000	Cons. Of Elec.Spares	10000 ANS	0.11	-	-	-		-	-	-
722008000	Cons. Of Elec.Spares	40000 Airport	0.02	0.02	0.02	-		-	0.02	-
722013000	Other Consumables	10000 ANS	0.00	-	-	-		-	-	-
722013000	Other Consumables	40000 Airport	0.23	0.23	0.23	0.01	90.00%	0.01	0.23	0.00
726001000	Electricity Expenses	10000 ANS	3.78	3.04	-	3.78	80.44%	3.04	3.04	-
726001000	Electricity Expenses	30000 Security	0.01	0.01	-	0.01	80.44%	0.01	0.01	-
726001000	Electricity Expenses	40000 Airport	8.90	7.16	-	8.90	80.44%	7.16	7.16	-
726002000	Diesel/Oil-DG Sets	40000 Airport	0.21	0.17	-	0.21	80.44%	0.17	0.17	-
980012000	Ewc(Staff)	10000 ANS	-	-	-	-		-	-	-
980012000	Ewc(Staff)	20000 Cargo	-	-	-	-		-	-	-
980012000	Ewc(Staff)	25000 AAICLASCL	(0.00)	-	-	-		-	-	-
980012000	Ewc(Staff)	40000 Airport	(0.00)	(0.00)	(0.00)	-		-	(0.00)	-
940017000	Ewchgs(Oth)	10000 ANS	-	-	-	-		-	-	-
940017000	Ewchgs(Oth)	40000 Airport	(1.22)	(1.22)	(1.22)	-		-	(1.22)	-
940018000	Ewc(Govt.)	40000 Airport	(0.02)	(0.02)	(0.02)	-		-	(0.02)	-
726003000	Water Charges	40000 Airport	0.27	0.27	-	0.27	91.52%	0.24	0.24	0.02
729001000	Hire Chgs-Mc/Jeeps	30000 Security	0.00	0.00	-	0.00	94.02%	0.00	0.00	0.00
729001000	Hire Chgs-Mc/Jeeps	40000 Airport	0.22	0.22	-	0.22	94.02%	0.20	0.20	0.01
729002000	Other Hire Charges	40000 Airport	0.01	0.01	-	0.01	94.02%	0.01	0.01	0.00
729003000	Hire Chg-Oth.Vehicle	40000 Airport	0.01	0.01	-	0.01	94.02%	0.01	0.01	0.00
729004000	Hiring-Manpower	10000 ANS	0.11	-	-	-		-	-	-
729004000	Hiring-Manpower	25000 AAICLASCL	0.08	0.08	-	-		-	-	0.08
729004000	Hiring-Manpower	30000 Security	0.05	0.05	-	0.05	91.52%	0.05	0.05	0.00
729004000	Hiring-Manpower	40000 Airport	0.68	0.64	-	0.64	91.52%	0.59	0.59	0.05
742001000	W/W-Oth.Sec.Cont.	10000 ANS	0.01	-	-	-		-	-	-
742001000	W/W-Oth.Sec.Cont.	30000 Security	0.02	0.02	0.02	-		-	0.02	-
742001007	W/W Exp(Aaiclascl)	25000 AAICLASCL	(0.08)	-	-	-		-	-	-
742001000	W/W-Oth.Sec.Cont.	40000 Airport	0.73	0.72	0.61	0.12	90.00%	0.11	0.72	0.00
722005000	Toiletry&Cons.Stores	30000 Security	0.01	0.01	0.01	-		-	0.01	-
722005000	Toiletry&Cons.Stores	40000 Airport	0.04	0.04	0.04	-		-	0.04	-
760001000	Upkeep Exp(Ess Exp.)	40000 Airport	1.65	1.59	0.77	0.88	90.00%	0.79	1.56	0.03
760002000	Upkeep Exp(Mess)	40000 Airport	3.44	3.15	-	3.44	90.00%	3.10	3.10	0.05
	<b>Total</b>		<b>19.58</b>	<b>16.52</b>	<b>0.49</b>	<b>18.83</b>		<b>15.68</b>	<b>16.16</b>	<b>0.35</b>



## Annexure 2: Part 4 – FY 2019-20

A/c No.	A/c Description	Segment	Accumulated Balance (Rs. in crores)	As per AAI Submission	As per the Study					Impact (Rs. in crores)
				Total (Aero + Common Aero) (Rs. in crores)	Aero (Rs. in crores)	Common (Rs. in crores)	Allocation Ratio (%)	Common Aero (Rs. in crores)	Total (Aero + Common Aero) (Rs. in crores)	
			A	B	C	D	E	F = D * F	G = C + F	H = B - G
722001000	POL For CFT	40000 Airport	0.07	0.07	-	0.07	66.90%	0.05	0.05	0.02
722002000	Pol-Other Cars/Jeep	10000 ANS	0.01	-	-	-	-	-	-	-
722002000	Pol-Other Cars/Jeep	40000 Airport	0.09	0.09	-	0.09	66.90%	0.06	0.06	0.03
722003001	POL-Pick Upvan&Buses	40000 Airport	0.02	0.02	-	0.02	66.90%	0.01	0.01	0.00
722003002	Pol-Other Vehicles	40000 Airport	0.08	0.08	-	0.08	66.90%	0.05	0.05	0.03
722006000	Cons.-Paper Glass	40000 Airport	0.03	0.03	0.03	-	-	-	0.03	-
722008000	Cons. Of Elec.Spares	10000 ANS	0.82	-	-	-	-	-	-	-
722008000	Cons. Of Elec.Spares	40000 Airport	0.01	0.01	0.01	-	-	-	0.01	-
722012000	Cns Stores-Indig.	40000 Airport	-	-	-	-	-	-	-	-
722013000	Other Consumables	10000 ANS	0.00	-	-	-	-	-	-	-
722013000	Other Consumables	40000 Airport	0.41	0.41	0.35	0.06	90.00%	0.05	0.41	0.00
726001000	Electricity Expenses	10000 ANS	2.58	2.08	-	2.58	80.44%	2.08	2.08	-
726001000	Electricity Expenses	40000 Airport	10.41	8.37	-	10.41	80.44%	8.37	8.37	-
726002000	Diesel/Oil-DG Sets	30000 Security	-	-	-	-	-	-	-	-
726002000	Diesel/Oil-DG Sets	40000 Airport	0.41	0.33	-	0.41	80.44%	0.33	0.33	-
980012000	Ewc(Staff)	10000 ANS	-0.00	-	-	-	-	-	-	-
980012000	Ewc(Staff)	20000 Cargo	-	-	-	-	-	-	-	-
980012000	Ewc(Staff)	40000 Airport	-0.00	-0.00	-0.00	-	-	-	-0.00	-
940017000	Ewchgs(Oth)	40000 Airport	-0.97	-0.97	-0.97	-	-	-	-0.97	-
940018000	Ewc(Govt.)	40000 Airport	-0.01	-0.01	-0.01	-	-	-	-0.01	-
726003000	Water Charges	30000 Security	0.00	0.00	-	0.00	91.72%	0.00	0.00	0.00
726003000	Water Charges	40000 Airport	0.16	0.16	-	0.16	91.72%	0.14	0.14	0.01
729001000	Hire Chgs-Mc/Jeeps	10000 ANS	0.01	-	-	-	-	-	-	-
729001000	Hire Chgs-Mc/Jeeps	30000 Security	-	-	-	-	-	-	-	-
729001000	Hire Chgs-Mc/Jeeps	40000 Airport	0.24	0.24	-	0.24	93.86%	0.22	0.22	0.01
729001007	Hire Charges(Aaicas)	25000 AAICLASCL	-0.24	-	-	-	-	-	-	-
729002000	Other Hire Charges	10000 ANS	-	-	-	-	-	-	-	-
729002000	Other Hire Charges	40000 Airport	0.24	0.24	-	0.24	93.86%	0.22	0.22	0.01
729003000	Hire Chg-Oth.Vehicle	40000 Airport	0.08	0.08	-	0.08	93.86%	0.08	0.08	0.01
729004000	Hiring-Manpower	10000 ANS	0.16	-	-	-	-	-	-	-
729004000	Hiring-Manpower	20000 Cargo	0.01	0.01	-	-	-	-	-	0.01
729004000	Hiring-Manpower	25000 AAICLASCL	0.23	0.23	-	-	-	-	-	0.23
729004000	Hiring-Manpower	30000 Security	0.01	0.63	0.01	-	-	0.62	0.63	-
729004000	Hiring-Manpower	40000 Airport	0.74	-	-	-	-	-	-	-
731304000	In Line Bag Man Pow	40000 Airport	0.52	-	0.52	-	-	-	0.52	-0.52
742001000	W/W-Oth.Sec.Cont.	30000 Security	0.09	0.09	0.09	-	-	-	0.09	-
742001000	W/W-Oth.Sec.Cont.	40000 Airport	0.99	0.97	0.81	0.18	90.00%	0.16	0.97	0.00
722005000	Toiletry&Cons.Stores	40000 Airport	0.02	0.02	0.02	-	-	-	0.02	-
760001000	Upkeep Exp(Ess Exp.)	10000 ANS	0.00	0.00	0.00	-	-	-	0.00	-
760001000	Upkeep Exp(Ess Exp.)	40000 Airport	2.09	2.02	0.98	1.11	90.00%	1.00	1.98	0.04
760002000	Upkeep Exp(Mess)	40000 Airport	3.80	3.48	-	3.80	90.00%	3.42	3.42	0.06
	<b>Total</b>		<b>23.12</b>	<b>18.68</b>	<b>1.85</b>	<b>19.52</b>		<b>16.88</b>	<b>18.73</b>	<b>-0.05</b>

## Annexure 2: Part 5 – FY 2020-21

A/c No.	A/c Description	Segment	Accumulated Balance (Rs. in crores)	As per AAI Submission	As per the Study					Impact (Rs. in crores)
				Total (Aero + Common Aero) (Rs. in crores)	Aero (Rs. in crores)	Common (Rs. in crores)	Allocation Ratio (%)	Common Aero (Rs. in crores)	Total (Aero + Common Aero) (Rs. in crores)	
			A	B	C	D	E	F = D * F	G = C + F	H = B - G
722001000	POL For CFT	10000 ANS	0.01	-	-	-		-	-	-
722001000	POL For CFT	40000 Airport	0.07	0.07	-	0.07	66.75%	0.05	0.05	0.02
722002000	Pol-Other Cars/Jeep	10000 ANS	0.01	-	-	-		-	-	-
722002000	Pol-Other Cars/Jeep	40000 Airport	0.05	0.05	-	0.05	66.75%	0.04	0.04	0.02
722003001	POL-Pick Upvan&Buses	40000 Airport	0.02	0.02	-	0.02	66.75%	0.01	0.01	0.01
722003002	Pol-Other Vehicles	40000 Airport	0.10	0.10	-	0.10	66.75%	0.06	0.06	0.03
722006000	Cons.-Paper Glass	40000 Airport	0.02	0.02	0.02	-		-	0.02	-
722010000	Cons-Tyres O Vehicle	40000 Airport	0.02	0.02	0.02	-		-	0.02	-
722013000	Other Consumables	10000 ANS	0.00	-	-	-		-	-	-
722013000	Other Consumables	30000 Security	(0.01)	(0.01)	(0.01)	-		-	(0.01)	-
722013000	Other Consumables	40000 Airport	0.44	0.44	0.41	0.03	90.00%	0.02	0.44	0.00
726001000	Electricity Expenses	10000 ANS	2.02	1.62	-	2.02	80.44%	1.62	1.62	-
726001000	Electricity Expenses	40000 Airport	8.07	6.49	-	8.07	80.44%	6.49	6.49	-
726002000	Diesel/Oil-DG Sets	40000 Airport	0.20	0.16	-	0.20	80.44%	0.16	0.16	-
980012000	Ewc(Staff)	10000 ANS	(0.00)	-	-	-		-	-	-
980012000	Ewc(Staff)	40000 Airport	(0.00)	(0.00)	(0.00)	-		-	(0.00)	-
940017000	Ewchgs(Oth)	10000 ANS	(0.00)	-	-	-		-	-	-
940017000	Ewchgs(Oth)	30000 Security	(0.00)	(0.00)	(0.00)	-		-	(0.00)	-
940017000	Ewchgs(Oth)	40000 Airport	(0.38)	(0.38)	(0.38)	-		-	(0.38)	-
726003000	Water Charges	30000 Security	0.01	0.01	-	0.01	91.68%	0.01	0.01	0.00
726003000	Water Charges	40000 Airport	0.25	0.25	-	0.25	91.68%	0.23	0.23	0.02
729001000	Hire Chgs-Mc/Jeeps	10000 ANS	0.00	-	-	-		-	-	-
729001000	Hire Chgs-Mc/Jeeps	30000 Security	0.00	0.00	-	0.00	93.78%	0.00	0.00	0.00
729001000	Hire Chgs-Mc/Jeeps	40000 Airport	0.22	0.22	-	0.22	93.78%	0.21	0.21	0.01
729001007	Hire Charges(Aaiclas	25000 AAICLASCL	(0.02)	-	-	-		-	-	-
729002000	Other Hire Charges	10000 ANS	0.00	-	-	-		-	-	-
729002000	Other Hire Charges	40000 Airport	0.20	0.20	-	0.20	93.78%	0.19	0.19	0.01
729003000	Hire Chg-Oth.Vehicle	10000 ANS	(0.00)	-	-	-		-	-	-
729003000	Hire Chg-Oth.Vehicle	40000 Airport	0.12	0.12	-	0.12	93.78%	0.11	0.11	0.01
729004000	Hiring-Manpower	10000 ANS	0.14	-	-	-		-	-	-
729004000	Hiring-Manpower	25000 AAICLASCL	0.02	0.02	-	-		-	-	0.02
729004000	Hiring-Manpower	30000 Security	0.16	0.16	-	0.16	91.68%	0.15	0.15	0.01
729004000	Hiring-Manpower	40000 Airport	1.00	0.77	-	0.97		0.77	0.77	-
731304000	In Line Bag Man Pow	40000 Airport	2.33	-	2.33	-		-	2.33	(2.33)
742001000	W/W-Oth.Sec.Cont.	30000 Security	0.01	0.10	0.01	-		-	0.01	0.09
742001000	W/W-Oth.Sec.Cont.	40000 Airport	0.10	1.19	0.10	0.25	90.00%	0.22	0.32	0.87
722005000	Toiletry&Cons.Stores	30000 Security	1.21	0.00	0.96	-		-	0.96	(0.96)
722005000	Toiletry&Cons.Stores	40000 Airport	0.00	0.00	0.00	-		-	0.00	(0.00)
760001000	Upkeep Exp(Ess Exp.)	10000 ANS	0.00	0.00	0.00	-		-	0.00	0.00
760001000	Upkeep Exp(Ess Exp.)	40000 Airport	0.00	2.10	0.00	1.25	90.00%	1.12	1.12	0.98
760002000	Upkeep Exp(Mess)	40000 Airport	2.17	3.09	0.92	3.33	90.00%	3.00	3.92	(0.83)
	<b>Total</b>		<b>18.56</b>	<b>16.83</b>	<b>4.38</b>	<b>17.32</b>		<b>14.46</b>	<b>18.83</b>	<b>(2.00)</b>

## Annexure 2: Part 6 – FY 2021-22 (Upto COD)

A/c No.	A/c Description	Segment	Accumulated Balance (Rs. in crores)	As per AAI Submission	As per the Study					Impact (Rs. in crores)
				Total (Aero + Common Aero) (Rs. in crores)	Aero (Rs. in crores)	Common (Rs. in crores)	Allocation Ratio (%)	Common Aero (Rs. in crores)	Total (Aero + Common Aero) (Rs. in crores)	
			A	B	C	D	E	F = D * F	G = C + F	H = B - G
722001000	POL For CFT	40000 Airport	0.05	0.05	-	0.05	64.02%	0.03	0.03	0.02
722002000	Pol-Other Cars/Jeep	10000 ANS	0.01	-	-	-		-	-	-
722002000	Pol-Other Cars/Jeep	40000 Airport	0.05	0.05	-	0.05	64.02%	0.03	0.03	0.02
722003001	POL-Pick Upvan&Buses	40000 Airport	0.01	0.01	-	0.01	64.02%	0.01	0.01	0.00
722003002	Pol-Other Vehicles	40000 Airport	0.06	0.06	-	0.06	64.02%	0.04	0.04	0.02
722006000	Cons.-Paper Glass	40000 Airport	-	-	-	-		-	-	-
722013000	Other Consumables	10000 ANS	0.00	-	-	-		-	-	-
722013000	Other Consumables	40000 Airport	0.19	0.18	0.15	0.04	90.00%	0.04	0.18	0.00
726001000	Electricity Expenses	10000 ANS	1.14	0.92	-	1.14	80.44%	0.92	0.92	-
726001000	Electricity Expenses	40000 Airport	3.99	3.21	-	3.99	80.44%	3.21	3.21	-
726002000	Diesel/Oil-DG Sets	40000 Airport	0.09	0.07	-	0.09	80.44%	0.07	0.07	-
980012000	Ewc(Staff)	10000 ANS	(0.00)	-	-	-		-	-	-
980012000	Ewc(Staff)	40000 Airport	(0.00)	(0.00)	(0.00)	-		-	(0.00)	-
940017000	Ewchgs(Oth)	10000 ANS	(0.00)	-	-	-		-	-	-
940017000	Ewchgs(Oth)	40000 Airport	(0.23)	(0.23)	(0.23)	-		-	(0.23)	-
726003000	Water Charges	40000 Airport	0.12	0.12	-	0.12	91.80%	0.11	0.1077	0.01
729001000	Hire Chgs-Mc/Jeeps	10000 ANS	0.07	-	-	-		-	-	-
729001000	Hire Chgs-Mc/Jeeps	40000 Airport	0.11	0.11	-	0.11	92.50%	0.10	0.10	0.01
729002000	Other Hire Charges	40000 Airport	0.09	0.09	-	0.09	92.50%	0.08	0.08	0.01
729003000	Hire Chg-Oth.Vehicle	30000 Security	0.01	0.01	-	0.01	92.50%	0.01	0.01	0.00
729004000	Hiring-Manpower	10000 ANS	0.18	-	-	-		-	-	-
729004000	Hiring-Manpower	25000 AAICLASCL	-	-	-	-		-	-	-
729004000	Hiring-Manpower	30000 Security	(0.01)	(0.01)	-	(0.01)	91.80%	(0.01)	(0.01)	(0.00)
729004000	Hiring-Manpower	40000 Airport	1.73	1.57	-	1.73		1.57	1.57	-
742001000	W/W-Oth.Sec.Cont.	10000 ANS	(0.00)	-	-	-		-	-	-
742001000	W/W-Oth.Sec.Cont.	30000 Security	0.15	0.15	0.15	-		-	0.15	-
742001000	W/W-Oth.Sec.Cont.	40000 Airport	0.62	0.60	0.44	0.17	90.00%	0.16	0.60	0.00
760001000	Upkeep Exp(Ess Exp.)	40000 Airport	1.20	1.15	0.46	0.74	90.00%	0.66	1.13	0.03
760002000	Upkeep Exp(Mess)	40000 Airport	1.67	1.52	-	1.67	90.00%	1.51	1.51	0.01
	<b>Total</b>		<b>11.29</b>	<b>9.63</b>	<b>0.97</b>	<b>10.06</b>		<b>8.53</b>	<b>9.50</b>	<b>0.13</b>

**7.3 Annexure 3: R&M Expenses reallocation for Post COD period as per the current Study**

Cost Element	Cost Element Description	Amount (Rs. in crores)	As per TKIAL Submission	As per study		
			Classification	Reclassification	Reallocation (%)	Aero Expenses (Rs. in crores)
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53005200	Repairs & Maintenance-Buildings	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53005200	Repairs & Maintenance-Buildings	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53006000	Repairs & Maintenance-Plant & Machinery	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53006000	Repairs & Maintenance-Plant & Machinery	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53006000	Repairs & Maintenance-Plant & Machinery	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53006000	Repairs & Maintenance-Plant & Machinery	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)

Cost Element	Cost Element Description	Amount (Rs. in crores)	As per TKIAL Submission	As per study		
			Classification	Reclassification	Reallocation (%)	Aero Expenses (Rs. in crores)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Aeronautical	100.00%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00

Cost Element	Cost Element Description	Amount (Rs. in crores)	As per TKIAL Submission	As per study		
			Classification	Reclassification	Reallocation (%)	Aero Expenses (Rs. in crores)
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Aeronautical	100.00%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53005200	Repairs & Maintenance-Buildings	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53006000	Repairs & Maintenance-Plant & Machinery	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53006000	Repairs & Maintenance-Plant & Machinery	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53006000	Repairs & Maintenance-Plant & Machinery	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53006000	Repairs & Maintenance-Plant & Machinery	(0.00)	Aeronautical	Aeronautical	100.00%	(0.00)
53006000	Repairs & Maintenance-Plant & Machinery	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53005200	Repairs & Maintenance-Buildings	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53005200	Repairs & Maintenance-Buildings	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)

Cost Element	Cost Element Description	Amount (Rs. in crores)	As per TKIAL Submission	As per study		
			Classification	Reclassification	Reallocation (%)	Aero Expenses (Rs. in crores)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53006000	Repairs & Maintenance-Plant & Machinery	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53006000	Repairs & Maintenance-Plant & Machinery	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53006000	Repairs & Maintenance-Plant & Machinery	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53006000	Repairs & Maintenance-Plant & Machinery	(0.00)	Aeronautical	Aeronautical	100.00%	(0.00)
53006000	Repairs & Maintenance-Plant & Machinery	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53005200	Repairs & Maintenance-Buildings	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Aeronautical	100.00%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Aeronautical	100.00%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53006000	Repairs & Maintenance-Plant & Machinery	(0.00)	Aeronautical	Aeronautical	100.00%	(0.00)
53006000	Repairs & Maintenance-Plant & Machinery	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00

Cost Element	Cost Element Description	Amount (Rs. in crores)	As per TKIAL Submission	As per study		
			Classification	Reclassification	Reallocation (%)	Aero Expenses (Rs. in crores)
53005200	Repairs & Maintenance-Buildings	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53006000	Repairs & Maintenance-Plant & Machinery	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53006000	Repairs & Maintenance-Plant & Machinery	(0.00)	Aeronautical	Aeronautical	100.00%	(0.00)
53006000	Repairs & Maintenance-Plant & Machinery	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.08	Aeronautical	Common (GBR)	99.38%	0.08
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.22	Aeronautical	Common (GBR)	99.38%	0.22
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.05	Aeronautical	Common (GBR)	99.38%	0.05
53005200	Repairs & Maintenance-Buildings	0.01	Aeronautical	Common (GBR)	99.38%	0.01
55010300	Repairs & Maintenance-Others	0.01	Aeronautical	Aeronautical	100.00%	0.01
53010600	ELECTRIC WORKS	0.18	Aeronautical	Common (GBR)	99.38%	0.18
53010600	ELECTRIC WORKS	0.01	Aeronautical	Common (GBR)	99.38%	0.01
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.01	Aeronautical	Common (GBR)	99.38%	0.01
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Aeronautical	100.00%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)



Cost Element	Cost Element Description	Amount (Rs. in crores)	As per TKIAL Submission	As per study		
			Classification	Reclassification	Reallocation (%)	Aero Expenses (Rs. in crores)
53006000	Repairs & Maintenance-Plant & Machinery	(0.00)	Aeronautical	Aeronautical	100.00%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53005200	Repairs & Maintenance-Buildings	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Aeronautical	100.00%	0.00
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	(0.00)	Aeronautical	Aeronautical	100.00%	(0.00)
53005200	Repairs & Maintenance-Buildings	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.03	Aeronautical	Common (GBR)	99.38%	0.03
53005200	Repairs & Maintenance-Buildings	0.05	Aeronautical	Common (GBR)	99.38%	0.05
53005200	Repairs & Maintenance-Buildings	0.05	Aeronautical	Common (GBR)	99.38%	0.05
55010300	Repairs & Maintenance-Others	0.01	Aeronautical	Aeronautical	100.00%	0.01
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.22	Aeronautical	Common (GBR)	99.38%	0.22
53005200	Repairs & Maintenance-Buildings	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53005200	Repairs & Maintenance-Buildings	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	0.05	Aeronautical	Common (GBR)	99.38%	0.05
53010600	ELECTRIC WORKS	0.03	Aeronautical	Aeronautical	100.00%	0.03
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00

Cost Element	Cost Element Description	Amount (Rs. in crores)	As per TKIAL Submission	As per study		
			Classification	Reclassification	Reallocation (%)	Aero Expenses (Rs. in crores)
53005200	Repairs & Maintenance-Buildings	0.01	Aeronautical	Common (GBR)	99.38%	0.01
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.01	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.01	Aeronautical	Aeronautical	100.00%	0.01
53005200	Repairs & Maintenance-Buildings	0.02	Aeronautical	Common (GBR)	99.38%	0.02
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53006000	Repairs & Maintenance-Plant & Machinery	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.01	Aeronautical	Common (GBR)	99.38%	0.01
55010300	Repairs & Maintenance-Others	0.01	Aeronautical	Common (GBR)	99.38%	0.01
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.01	Aeronautical	Common (GBR)	99.38%	0.01
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.38	Aeronautical	Common (GBR)	99.38%	0.38
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.01	Aeronautical	Aeronautical	100.00%	0.01
53005200	Repairs & Maintenance-Buildings	0.15	Aeronautical	Common (GBR)	99.38%	0.14
53005200	Repairs & Maintenance-Buildings	0.13	Aeronautical	Common (GBR)	99.38%	0.13
53005200	Repairs & Maintenance-Buildings	0.07	Aeronautical	Common (GBR)	99.38%	0.07
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00

Cost Element	Cost Element Description	Amount (Rs. in crores)	As per TKIAL Submission	As per study		
			Classification	Reclassification	Reallocation (%)	Aero Expenses (Rs. in crores)
53005200	Repairs & Maintenance-Buildings	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53006000	Repairs & Maintenance-Plant & Machinery	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.01	Aeronautical	Common (GBR)	99.38%	0.01
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.01	Aeronautical	Common (GBR)	99.38%	0.01
51000600	Consumption of Stores & Spares-Domestic	0.01	Aeronautical	Common (GBR)	99.38%	0.01
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00



Cost Element	Cost Element Description	Amount (Rs. in crores)	As per TKIAL Submission	As per study		
			Classification	Reclassification	Reallocation (%)	Aero Expenses (Rs. in crores)
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Common (GBR)	99.38%	0.00

Cost Element	Cost Element Description	Amount (Rs. in crores)	As per TKIAL Submission	As per study		
			Classification	Reclassification	Reallocation (%)	Aero Expenses (Rs. in crores)
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000900	Consumption of Operating Supplies-Domest	0.04	Aeronautical	Common (GBR)	99.38%	0.04
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.30	Aeronautical	Common (GBR)	99.38%	0.30
53010600	ELECTRIC WORKS	0.21	Aeronautical	Common (GBR)	99.38%	0.21
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.01	Aeronautical	Common (GBR)	99.38%	0.01
53010600	ELECTRIC WORKS	0.01	Aeronautical	Common (GBR)	99.38%	0.01
53010600	ELECTRIC WORKS	0.02	Aeronautical	Common (GBR)	99.38%	0.02
53006000	Repairs & Maintenance-Plant & Machinery	0.01	Aeronautical	Common (GBR)	99.38%	0.01
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.10	Aeronautical	Common (GBR)	99.38%	0.10
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.01	Aeronautical	Aeronautical	100.00%	0.01
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.10	Aeronautical	Common (GBR)	99.38%	0.10
53005200	Repairs & Maintenance-Buildings	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53005200	Repairs & Maintenance-Buildings	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)



Cost Element	Cost Element Description	Amount (Rs. in crores)	As per TKIAL Submission	As per study		
			Classification	Reclassification	Reallocation (%)	Aero Expenses (Rs. in crores)
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Common (GBR)	99.38%	0.00



Cost Element	Cost Element Description	Amount (Rs. in crores)	As per TKIAL Submission	As per study		
			Classification	Reclassification	Reallocation (%)	Aero Expenses (Rs. in crores)
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000900	Consumption of Operating Supplies-Domest	0.01	Aeronautical	Common (GBR)	99.38%	0.01
53005200	Repairs & Maintenance-Buildings	0.05	Aeronautical	Common (GBR)	99.38%	0.05
53005200	Repairs & Maintenance-Buildings	0.01	Aeronautical	Common (GBR)	99.38%	0.01
53010600	ELECTRIC WORKS	0.01	Aeronautical	Common (GBR)	99.38%	0.01
53006000	Repairs & Maintenance-Plant & Machinery	0.17	Aeronautical	Common (GBR)	99.38%	0.17
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.03	Aeronautical	Common (GBR)	99.38%	0.03
53005200	Repairs & Maintenance-Buildings	0.01	Aeronautical	Common (GBR)	99.38%	0.01
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.02	Aeronautical	Common (GBR)	99.38%	0.02
53006000	Repairs & Maintenance-Plant & Machinery	0.01	Aeronautical	Common (GBR)	99.38%	0.01
53006000	Repairs & Maintenance-Plant & Machinery	0.01	Aeronautical	Common (GBR)	99.38%	0.01
53006000	Repairs & Maintenance-Plant & Machinery	0.01	Aeronautical	Common (GBR)	99.38%	0.01
53010600	ELECTRIC WORKS	0.17	Aeronautical	Common (GBR)	99.38%	0.17

Cost Element	Cost Element Description	Amount (Rs. in crores)	As per TKIAL Submission	As per study		
			Classification	Reclassification	Reallocation (%)	Aero Expenses (Rs. in crores)
53006000	Repairs & Maintenance-Plant & Machinery	0.13	Aeronautical	Common (GBR)	99.38%	0.13
53010600	ELECTRIC WORKS	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53010600	ELECTRIC WORKS	0.05	Aeronautical	Common (GBR)	99.38%	0.05
53010600	ELECTRIC WORKS	0.04	Aeronautical	Common (GBR)	99.38%	0.04
53010600	ELECTRIC WORKS	0.02	Aeronautical	Common (GBR)	99.38%	0.02
53010600	ELECTRIC WORKS	0.05	Aeronautical	Common (GBR)	99.38%	0.05
53005200	Repairs & Maintenance-Buildings	0.09	Aeronautical	Common (GBR)	99.38%	0.09
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.01	Aeronautical	Common (GBR)	99.38%	0.01
53010600	ELECTRIC WORKS	0.01	Aeronautical	Common (GBR)	99.38%	0.01
53006000	Repairs & Maintenance-Plant & Machinery	0.01	Aeronautical	Common (GBR)	99.38%	0.01
53006000	Repairs & Maintenance-Plant & Machinery	0.01	Aeronautical	Common (GBR)	99.38%	0.01
53005200	Repairs & Maintenance-Buildings	0.01	Aeronautical	Common (GBR)	99.38%	0.01
53005200	Repairs & Maintenance-Buildings	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
51000600	Consumption of Stores & Spares-Domestic	0.07	Aeronautical	Excluded	0.00%	-
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Excluded	0.00%	-
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.01	Aeronautical	Common (GBR)	99.38%	0.01
53010600	ELECTRIC WORKS	0.01	Aeronautical	Common (GBR)	99.38%	0.01
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.03	Aeronautical	Common (GBR)	99.38%	0.03
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.04	Aeronautical	Common (GBR)	99.38%	0.04
53005200	Repairs & Maintenance-Buildings	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53005200	Repairs & Maintenance-Buildings	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53005200	Repairs & Maintenance-Buildings	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
53005200	Repairs & Maintenance-Buildings	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)

Cost Element	Cost Element Description	Amount (Rs. in crores)	As per TKIAL Submission	As per study		
			Classification	Reclassification	Reallocation (%)	Aero Expenses (Rs. in crores)
51000900	Consumption of Operating Supplies-Domest	0.00	Aeronautical	Common (GBR)	99.38%	0.00
51000600	Consumption of Stores & Spares-Domestic	-	Aeronautical	Common (GBR)	99.38%	-
53006000	Repairs & Maintenance-Plant & Machinery	0.02	Aeronautical	Common (GBR)	99.38%	0.02
53006000	Repairs & Maintenance-Plant & Machinery	0.02	Aeronautical	Common (GBR)	99.38%	0.02
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.01	Aeronautical	Common (GBR)	99.38%	0.01
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.08	Aeronautical	Aeronautical	100.00%	0.08
53005200	Repairs & Maintenance-Buildings	0.04	Aeronautical	Aeronautical	100.00%	0.04
53005200	Repairs & Maintenance-Buildings	0.01	Aeronautical	Common (GBR)	99.38%	0.01
53006000	Repairs & Maintenance-Plant & Machinery	0.05	Aeronautical	Common (GBR)	99.38%	0.05
53006000	Repairs & Maintenance-Plant & Machinery	0.03	Aeronautical	Common (GBR)	99.38%	0.03
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Aeronautical	100.00%	0.00
53005200	Repairs & Maintenance-Buildings	0.10	Aeronautical	Common (GBR)	99.38%	0.10
53006000	Repairs & Maintenance-Plant & Machinery	0.30	Aeronautical	Aeronautical	100.00%	0.30
53006000	Repairs & Maintenance-Plant & Machinery	0.04	Aeronautical	Common (GBR)	99.38%	0.04
53006000	Repairs & Maintenance-Plant & Machinery	0.11	Aeronautical	Aeronautical	100.00%	0.11
53010600	ELECTRIC WORKS	0.00	Aeronautical	Aeronautical	100.00%	0.00
53010600	ELECTRIC WORKS	0.03	Aeronautical	Common (GBR)	99.38%	0.03
53010600	ELECTRIC WORKS	0.03	Aeronautical	Common (GBR)	99.38%	0.03
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Aeronautical	100.00%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.09	Aeronautical	Common (GBR)	99.38%	0.09
53010600	ELECTRIC WORKS	0.02	Aeronautical	Common (GBR)	99.38%	0.02
53010600	ELECTRIC WORKS	0.01	Aeronautical	Common (GBR)	99.38%	0.01
53010600	ELECTRIC WORKS	0.05	Aeronautical	Aeronautical	100.00%	0.05
53010600	ELECTRIC WORKS	0.05	Aeronautical	Common (GBR)	99.38%	0.05
53010600	ELECTRIC WORKS	0.87	Aeronautical	Common (GBR)	99.38%	0.86
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53006000	Repairs & Maintenance-Plant & Machinery	0.00	Aeronautical	Common (GBR)	99.38%	0.00

Cost Element	Cost Element Description	Amount (Rs. in crores)	As per TKIAL Submission	As per study		
			Classification	Reclassification	Reallocation (%)	Aero Expenses (Rs. in crores)
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53010600	ELECTRIC WORKS	0.01	Aeronautical	Common (GBR)	99.38%	0.01
55010300	Repairs & Maintenance-Others	0.01	Aeronautical	Aeronautical	100.00%	0.01
53005200	Repairs & Maintenance-Buildings	0.02	Aeronautical	Common (GBR)	99.38%	0.02
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
53005200	Repairs & Maintenance-Buildings	(0.00)	Aeronautical	Common (GBR)	99.38%	(0.00)
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55010300	Repairs & Maintenance-Others	0.00	Aeronautical	Common (GBR)	99.38%	0.00
55011100	Security Automation Expenses	0.01	Aeronautical	Aeronautical	100.00%	0.01
55011100	Security Automation Expenses	0.01	Aeronautical	Aeronautical	100.00%	0.01
55011100	Security Automation Expenses	0.04	Aeronautical	Aeronautical	100.00%	0.04
55011100	Security Automation Expenses	0.16	Aeronautical	Aeronautical	100.00%	0.16
55011100	Security Automation Expenses	0.01	Aeronautical	Aeronautical	100.00%	0.01
55011100	Security Automation Expenses	0.50	Aeronautical	Aeronautical	100.00%	0.50
55011100	Security Automation Expenses	0.00	Aeronautical	Aeronautical	100.00%	0.00
55011100	Security Automation Expenses	0.00	Aeronautical	Aeronautical	100.00%	0.00
55011100	Security Automation Expenses	0.00	Aeronautical	Aeronautical	100.00%	0.00
55011100	Security Automation Expenses	0.00	Aeronautical	Aeronautical	100.00%	0.00
55011100	Security Automation Expenses	0.00	Aeronautical	Aeronautical	100.00%	0.00
55011100	Security Automation Expenses	0.00	Aeronautical	Aeronautical	100.00%	0.00
55011100	Security Automation Expenses	0.02	Aeronautical	Aeronautical	100.00%	0.02
55011100	Security Automation Expenses	0.01	Aeronautical	Aeronautical	100.00%	0.01
55011100	Security Automation Expenses	0.09	Aeronautical	Aeronautical	100.00%	0.09
55011100	Security Automation Expenses	0.00	Aeronautical	Aeronautical	100.00%	0.00
55011100	Security Automation Expenses	0.00	Aeronautical	Aeronautical	100.00%	0.00
55011100	Security Automation Expenses	0.03	Aeronautical	Aeronautical	100.00%	0.03
55011100	Security Automation Expenses	0.13	Aeronautical	Aeronautical	100.00%	0.13
55011100	Security Automation Expenses	0.41	Aeronautical	Aeronautical	100.00%	0.41
55011100	Security Automation Expenses	0.31	Aeronautical	Aeronautical	100.00%	0.31
55011100	Security Automation Expenses	0.14	Aeronautical	Aeronautical	100.00%	0.14
55011100	Security Automation Expenses	0.13	Aeronautical	Aeronautical	100.00%	0.13
55011100	Security Automation Expenses	0.01	Aeronautical	Aeronautical	100.00%	0.01
55011100	Security Automation Expenses	0.01	Aeronautical	Aeronautical	100.00%	0.01
55011100	Security Automation Expenses	0.01	Aeronautical	Aeronautical	100.00%	0.01
	<b>Total</b>	<b>7.99</b>				<b>7.89</b>

## 7.4 Annexure 4: Note on Corporate Cost Allocation



### Brief Note on Corporate Cost Allocation methodology

In respect to the Corporate cost allocation methodology adopted by Adani group of entities we would like to submit as follows: -

- i. TRV (Kerala) International Airport Limited (TKIAL) is a group company of Adani Group. Adani Enterprises Limited (AEL) holds 51% shareholding in TKIAL directly and 49% shareholding indirectly through Adani Airport Holdings Limited (AAHL).
- ii. AEL is a flagship company for Adani Group which has promoted various businesses like Power, Renewable, Ports, Logistics, Airports, Data Center, Defense etc.
- iii. AAHL is a company incorporated with an aim to promote Airport and Airport related activities. As on date AAHL has portfolio of 8 Airports i.e. Mangaluru, Lucknow, Ahmedabad, Guwahati, Jaipur, Thiruvanthapuram, Mumbai and Navi Mumbai.
- iv. AEL and AAHL have developed various capabilities, infrastructure and processes in several areas ("Corporate Support Services").
  - a. AEL has consolidated various strategic functions/activities like corporate finance, legal, central procurement, green initiative, ESG, Information technology, taxation, management assurance, internal audit, shared service for financial transactions, human resource management. AEL also includes various strategic and leadership functions like Chairman office, Group CFO office, Corporate Communication and Branding etc. AEL provides support on these functions to all group companies including but not limited to Power, Renewable, Ports, Logistics, Airports, Data Center, Defense etc.
  - b. AAHL houses a team of specialized subject matter experts in Aviation sector having domain knowledge and expertise in Airports Operation, Airside Management, Master Planning, Designing, Airport Development, Airport Regulatory, Human Resources, Transition Management, Hospitality, Customer management, Finance Management, Legal expertise, Cargo Development and management, Airline Marketing, Retail, Commercial, Space Leasing, Non-Aeronautical etc.
- v. These capabilities, infrastructure, and processes (retained under AEL and AAHL) are very important for sustainable operations of any business including Airports.
- vi. The cost is incurred by AEL and AAHL on overall basis to provide these services and support to various group companies (including Airports) by AEL and to various Airport companies in case of AAHL respectively. The major composition of these costs includes salaries and administrative costs.
- vii. These common costs are recovered (except certain services as mentioned in point (viii) below) by AEL and AAHL through appropriate allocation method/keys.



- viii. AEL / AAHL do not allocate the costs which are related to shareholders services (activities performed by AEL / AAHL for their own benefits like consolidation of accounts, secretarial etc.). Further AAHL does not allocate the costs relating to non-Aeronautical activities.
- ix. The cost is allocated on cost-to-cost basis "without any mark-up". As on date Adani Group has portfolio of 8 Airports. In case these services are to be maintained by each Airport on standalone basis then the summation of cost incurred by each Airport will be much higher than the consolidated cost incurred by AEL and AAHL to maintain these services.
- x. It is a common practice across all the industries operated by big business houses including private Airport entities and AAI, whereby cost allocation process is prevalent.
- xi. Similar corporate cost allocation practice is used by other airport companies. For e.g., GMR Infrastructure Limited (GIL) and GMR Airports Limited (GAL) provide services to DIAL and GHIAL and their costs are allocated based on suitable drivers. Similar practice is followed by AAI as well in allocating its Central Head Quarters (CHQ) / Regional Head Quarters (RHQ) costs to various airports under two categories (i) manpower cost and (ii) admin & general costs.

AAHL had hired an independent consultant, PwC, to undertake a study on Corporate Cost Allocation who have opined that consolidation of support services have benefits like: -

- a) Leveraging on best practices
- b) Centralized monitoring and control
- c) Efficiencies and economies of scale

The independent consultant also opined that such corporate cost allocation practice is adopted by various large corporates including Aviation companies in India and overseas.

Further the independent consultant has advised that, non-allocation of shareholders cost, non-allocation of non-aeronautical services at AAHL, recovery at cost to cost without mark-up and allocation based on various drivers, are suggested approach for allocation methodology.

Enclosed : - Annexure 1 –Corporate Cost allocation for TKIAL for FY21-22 and Annexure 2 – Corporate Cost allocation for TKIAL for FY22-23



**Annexure 1 – Actual amount of Corporate Cost allocation for TKIAL for FY21-22 (i.e. from COD to 31<sup>st</sup> March 2022)**

*Allocation from AAHL for FY21-22 (i.e. from COD to 31<sup>st</sup> March 2022) (Rs. Crs)*

Departments	Allocation Keys	Admin	Personnel Cost	Total
Human Resources and Admin	Ratio of Number of Employees of a SPV to Total Adani Group Employees	0.05	0.22	0.27
Finance	Ratio of Debt raised for a SPV to total Debt raised for Airport Group	0.04	0.14	0.18
Operations (Airline Marketing, Operation, Security, HSE, Regulatory)	Ratio of Per Pax Revenue of SPV to total Per Pax Revenue	0.21	0.86	1.07
Information Technology	Ratio of Number of IT users in a SPV to total IT users in all airports	0.03	0.13	0.16
Inhouse Legal Team	Ratio of Legal Budget of a SPV to Total Legal Budget of all airports	0.00	0.01	0.01
Cargo Development	Ratio of Per Pax Revenue of a SPV to total Per Pax Revenue of all airports	0.00	0.00	0.00
CEO Office	Ratio of Per Pax Revenue of SPV to total Per Pax Revenue	0.57	2.30	2.87
<b>Total</b>		<b>0.91</b>	<b>3.65</b>	<b>4.57</b>

*Allocation from AEL for FY21-22 (i.e. from COD to 31<sup>st</sup> March 2022) (Rs. Crs)*

Departments	Allocation Keys	Admin	Personnel Cost	Total
HR and Admin	Ratio of Number of Employees of a SPV to Total Adani Group Employees	0.31	0.62	0.93
Finance, Tax and Internal Audit	Ratio of Debt raised for a SPV to total Debt raised for Adani Group, Ratio of Turnover of a SPV to Total Group Turnover and Ratio of Full Time Equivalents (FTE) allocated to a SPV to total FTEs	0.05	0.11	0.16





Departments	Allocation Keys	Admin	Personnel Cost	Total
IT	Ratio of Number of IT users in a SPV to total Group users	0.19	0.39	0.59
Legal	Ratio of Legal Budget of a SPV to Total Legal Budget of all airports	0.01	0.02	0.02
CMD Office and Support Staff	Ratio of a SPV PBT to Group PBT and Airport budgeted expenditure to Total budgeted expenditure	0.23	0.48	0.71
Procurement	Ratio of Turnover of a SPV to Total Group Turnover	0.00	0.00	0.01
Land & Estate	Ratio of a SPV PBT to Group PBT	0.01	0.01	0.02
<b>Total</b>		<b>0.81</b>	<b>1.64</b>	<b>2.44</b>