

**STUDY**  
**ON**  
**EFFICIENT OPERATION AND**  
**MAINTENANCE EXPENSES**

*for*

**SARDAR VALLABHBHAI PATEL INTERNATIONAL**  
**AIRPORT (SVPIA)**

*(Second Control Period: 01<sup>st</sup> April 2016 – 31<sup>st</sup> March 2021)*

*Initiated by*

**AIRPORTS ECONOMIC REGULATORY AUTHORITY OF**  
**INDIA**  
**(AERA)**

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## 1. OBJECTIVE OF THIS STUDY

Sardar Vallabhbhai Patel International Airport (SVPIA) is an international airport serving the twin cities of Ahmedabad and Gandhinagar in Gujarat, India. The airport is located in Hansol, 9 km north of central Ahmedabad. It is named after Sardar Vallabhbhai Patel, the First Deputy Prime Minister of India. The airport was set up in 1937 and was categorised as an 'International' airport on 23<sup>rd</sup> May 2000. The Airport is the busiest and largest airport in the Indian state of Gujarat. In FY 2020, it handled about 11.43 million passengers, making it the eighth-busiest airport in terms of passenger traffic in India.

Under the provisions of Airports Economic Regulatory Authority of India Act, 2008 (read with AERA Amendment Act 2019 and AERA Amendment Act 2021), Ahmedabad Airport is one of the major airports under the ambit of AERA. Pursuant to AERA Act 2008, the Authority had issued guidelines for the purpose of determination of aeronautical tariffs for major airports. As per the guidelines, AERA had issued Tariff Order No. 14/2018-19 dated 23<sup>rd</sup> July 2018, in the matter of determination of aeronautical tariffs for SVPIA for the Second Control Period (SCP).

In accordance with AERA Order No. 14/2016-17, the Authority has adopted shared till approach for determination of tariffs of SVPIA. As per the shared till approach, 30% of the non-aeronautical revenues are to be used to cross-subsidise the aeronautical revenues, i.e., the Aggregate Revenue Requirements.

Establishing efficient Operation and Maintenance expenses and their reasonableness is pivotal to the effective execution of tariff determination for aeronautical services. Across airports in India, the Operation & Maintenance (O&M) expenditure has consistently been increasing, driven by investments in expanding, modernizing and improving operational efficiency of the airports.

Assessment of Operation and Maintenance expense requires examination of financial information submitted by the airport operator, and independent examination of the baseline operating expense levels, expense reduction, efficiency initiatives and conduct of benchmarking exercises.

Additionally, there is a growing influence of technology in improving operational efficiency and service in almost all airport facilities and services. This has resulted in deployment of technology related products and/or services and various related tangible and intangible expenses with varying degrees of in-house and third-party involvement.

The objective of the study is to understand and analyse the historical trends of change in the O&M expenses and how SVPIA has been performing in comparison to select peers in the industry. The detailed analysis of O&M expenses is expected to help in understanding the reasons behind the existing expense levels being over/under the efficient expense levels. Based on which, it would help in assisting the Authority in determining the efficient operation and maintenance expenses for SVPIA. Further, the study also aims to assess the allocation of various O&M related expenses among the Aeronautical and Non-Aeronautical activities, as per the general principles followed by the Authority, so that the passengers / flyers are not over-burdened with resultant fees / charges.

Accordingly, AERA has decided to conduct a study on efficient O&M expenses for true-up of the Second Control Period and use the findings of this study for the tariff determination for the Third Control Period.

In February 2019, the Adani Enterprises-led Adani Airport Limited (AAL) won the rights of operations, management and development of the airport under the public-private partnership (PPP) model for a period of 50 years. On 14<sup>th</sup> February 2020, Concession Agreement was signed between Airport Authority of India (AAI) and Adani Ahmedabad International Airports Limited<sup>1</sup> (AIAL) and the Commercial Operation Date (COD) was achieved on 07<sup>th</sup> November 2020. Financial data has been shared by Airport Authority of India for the period from 01<sup>st</sup> April 2016 till 06<sup>th</sup> November 2020 and AIAL for the period from 07<sup>th</sup> November 2020 till 31<sup>st</sup> March 2021 and therefore, the submissions have been analysed independently.

As part of this study, the following have been examined/ referred:

- i. The AERA Act, 2008 with its amendment in 2019 and 2021

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<sup>1</sup> Now Ahmedabad International Airport Limited (AIAL)



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- ii. Airports Economic Regulatory Authority of India (Terms and Conditions for Determination of Tariff for Airport Operators) Guidelines, 2011 dated 28 February 2011
- iii. AERA Order No. 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. 14/2018-2019 dated 23<sup>rd</sup> July 2018 [In the matter of Determination of tariffs for Aeronautical Services in respect of Sardar Vallabhbhai Patel International Airport, Ahmedabad (SVPIA) for the second Control Period (01.04.2016-31.03.2021)]
- v. Concession agreement dated 14<sup>th</sup> February 2020 entered into between Airports Authority of India and Adani Ahmedabad International Airport Limited for Sardar Vallabhbhai Patel International Airport at Ahmedabad.
- vi. Memorandum of Understanding (MoU) between Government of India (Ministry of Civil Aviation) and Adani Ahmedabad International Airport Limited
- vii. Previous Tariff Orders of other airports
- viii. Annual Reports, Trial Balances, Clarifications, Certificates & Reports (from financial auditors and technical consultants) and other details received from AAI and AIAL

## 2. TERMS OF REFERENCE AND OUR WORK PERFORMED

### 2.1. Terms of Reference

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 3.1 (v) and 3.1 (vi) of Schedule 1 of its RFP No. 02 / 2021-2022 dated 14<sup>th</sup> October 2021 for engagement of consultants to assist AERA in determination of tariffs for aeronautical services at Sardar Vallabhbhai Patel International Airport, Ahmedabad for the Control Period (01.04.2021 to 31.03.2026), which state:

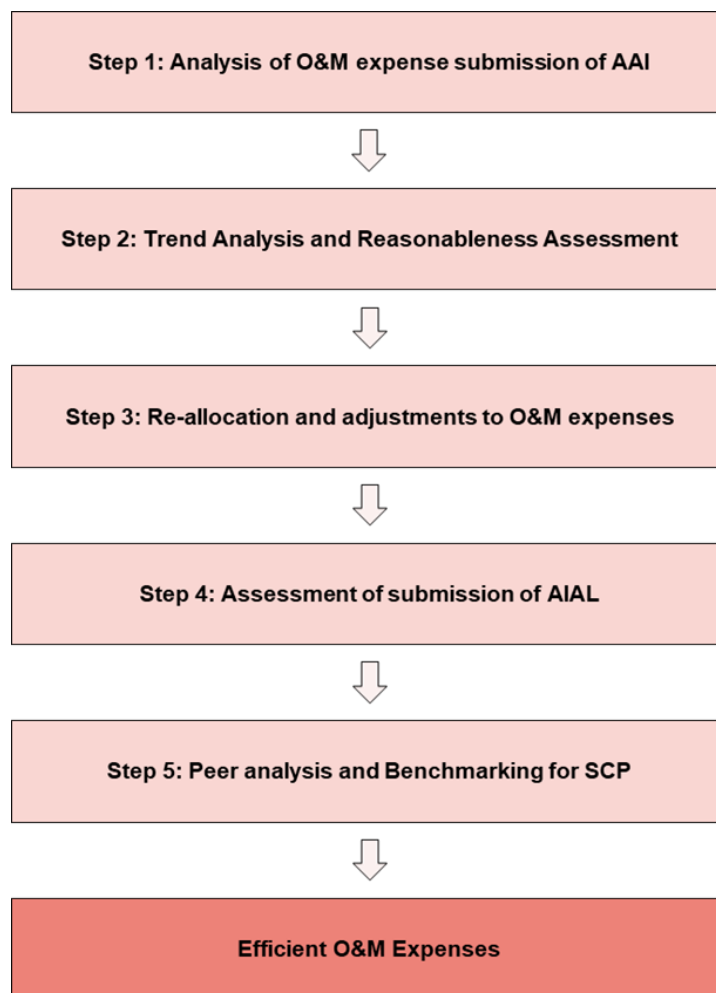
- “3.1 (v) – Asset / OPEX segregation between Aero and Non-Aero”
- “3.1 (vi) – Examine and recommend efficient costs for O&M as part of tariff determination process.”

### 2.2. Work Performed

#### Methodology:

The steps elaborated below have been followed for determining the efficient O&M expenses for SVPIA in this study:

Figure 1: Approach for this study



#### Step 1: Analysis of submission of AAI

As a first step, assessment of the Operation and Maintenance expenses based on the submissions of AAI has been carried out. The O&M Expenses, or any other underlying data submitted by AAI have not been audited as part of this study. The study has relied on the trial balances submitted by AAI for FY 2017-2021 and the audited

financial statement of AIAL for FY 2021 to verify the expenses incurred during the Second Control Period. The expenses for FY 2021 are as per the actuals submitted by AAI for the period till 06<sup>th</sup> November 2020 and the actuals submitted by AIAL for the period from 07<sup>th</sup> November 2020 till 31 March 2021. For most part of the Second Control Period, the airport was operated by AAI and for the last 5 months of the SCP, the airport was operated by AIAL. AAI has submitted the O&M expenses under following heads:

- **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.
- **Repairs and Maintenance (R&M) Expenses** for repairs of buildings, ambulances, offices etc.
- **Utility Expenses** such as diesel, electricity and water charges.
- **CHQ/RHQ Expenses** such as retirement benefits, admin expenses etc
- **Other Operating Expenses** such as advertising, consumable expenses etc.

### **Step 2: Trend analysis & reasonableness assessment (Internal benchmarking)**

In order to understand the change / variation of the various elements of the O&M expenses, a trend analysis has been done for the First Control Period (FCP) as well as the Second Control Period for the aeronautical portion of O&M expenses as per airport operator's submission. Certain expenses like employee benefit expenses were seen to follow a trend unlike expenses such as A&G. Therefore, such expenses were studied separately.

The objective of the same is to understand the correlation between the year-on-year change in these expenses vis-à-vis drivers such as the passenger traffic, ATM traffic, number of employees etc. The study intends to analyse the reasons for variance in the growth of O&M expenses as per historical data and as submitted by the airport operator for the Second Control Period and to understand whether the airport operator has been following a prudent approach in managing these expenses in line with the change in the parameters.

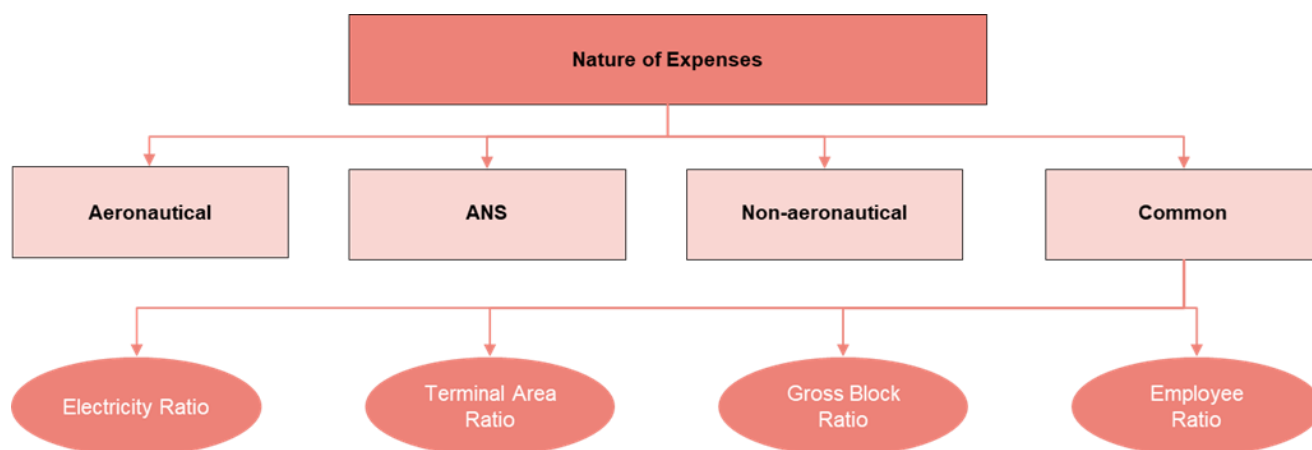
The major expenses submitted by the airport operator were studied in detail to assess the reasonableness of the same.

### **Step 3: Re-allocation and adjustments in proposed expenses**

As the final step for establishment of the efficient O&M expenses of AAI for SVPIA, the allocation of common expenses across 'Aeronautical', 'Non-Aeronautical' and 'Air Navigation Services (ANS)' by the airport operator has been analysed in detail. Subsequently, wherever necessary, an alternate allocation has been suggested. Under the principles discussed in this report, the allocation of common expenses has been considered as per the reasoning elaborated below:

- Common expenses have been segregated using an appropriate cost driver as described under the respective Paras or as per actual expense incurrence.
- In the absence of a more appropriate cost driver, common expenses related to Terminal Operations have been apportioned among Aeronautical and Non-aeronautical activities based on the terminal allocation ratio.
- Similarly, for common expenses related to Repair & Maintenance of assets, in the absence of a more appropriate cost driver, the same have been apportioned among Aeronautical and Non-aeronautical activities based on the adjusted Gross Fixed Assets (GFA) ratio recommended by the Study on Allocation of Assets for SVPIA.
- Common expenses related to employees have been apportioned among Aeronautical and Non-aeronautical activities based on the employee ratio.

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



**Step 4: Assessment of submission of AIAL**

The above-mentioned analysis was carried out separately for the last five months of the Second Control Period, in order to assess the reasonableness of the expenses incurred by AIAL in FY 2021 (post COD). The expenses were also compared expense levels of other PPP airports wherever relevant.

**Step 5: Peer analysis and benchmarking (External benchmarking) for SCP**

The major expense heads were compared with those of select airports. The comparable airports for the peer analysis have been selected considering their passenger traffic and ownership.

The comparison matrices have been considered using an appropriate driver such as passenger traffic, gross block, revenue and number of employees across the select airports. The observations related to management of the O&M expenses of SVPIA against those of selected peers have been presented in this study.

The above have been discussed in detail in the respective Chapters of this report.

### 3. OPERATION & MAINTENANCE EXPENSES PROPOSED BY AAI AND AIAL FOR SECOND CONTROL PERIOD

#### 3.1. O&M Expenses approved as per the Tariff Order for the Second Control Period

- 3.1.1. Before beginning the assessment as explained in the previous Chapter, it would be pertinent to look at the relevant submissions made by AAI and AIAL.
- 3.1.2. In the Tariff Order for the Second Control Period, the Authority had approved the O&M expenses of INR 561.7 Cr. based on its analysis of the submissions made by AAI as shown in table below:

**Table 1: O&M expenses approved by Authority for Second Control Period in the Tariff Order for SCP**

FY ending March 31 (INR Cr.)	2017	2018	2019	2020	2021	Total
Payroll expenditure	28.6	39.2	41.2	43.2	45.4	197.6
Administrative and general expenditure	5.9	6.4	10.9	11.2	11.5	45.9
Apportionment of A&G expenses of CHQ/RHQ	13.3	13.2	13.8	14.5	15.2	70
Repairs and Maintenance expenditure	24.8	24.2	25.7	27.3	27.8	129.8
Utility and Outsourcing expenditure	23.2	23.2	23.2	23.2	23.2	116
Other outflows	0.4	0.4	0.5	0.5	0.6	2.4
<b>Total</b>	<b>96.1</b>	<b>106.6</b>	<b>115.2</b>	<b>120.0</b>	<b>123.8</b>	<b>561.7</b>

Source: Tariff order of the Second Control Period

#### 3.2. O&M Expenses as per the true up submission by AAI and AIAL for the Second Control Period

- 3.2.1. In the true-up proposal, AAI has proposed the following O&M expenses for the SCP:

**Table 2: O&M expenses proposed by AAI for true-up of SCP**

FY ending March 31 (INR Cr.)	2017	2018	2019	2020	2021 (till COD)	Total (till COD)
Employee Benefit	23.69	31.59	38.37	41.14	16.26	151.05
Resources Deployed from DIAL / MIAL	-0.05	-0.05	-0.05	-0.04	0.00	-0.18
Administrative & Other Expenses	3.21	6.49	6.54	14.41	20.76	51.40
Operating Expenses	42.83	48.94	58.91	56.43	17.18	224.29
Repairs & Maintenance	34.30	5.02	5.03	7.01	4.06	55.42
Security Expenses	0.45	0.90	-0.32	0.04	0.20	1.27
Prior Period Adjustment (NET)	0.09	0.42	0.00	-0.37	0.20	0.34
Finance Cost	0.00	0.00	0.00	0.15	0.00	0.15
Consumption of Stores Spares	0.00	0.00	0.00	0.00	0.00	0.00
CHQ/RHQ	75.17	61.09	58.75	85.97	44.65	325.63
<b>Total</b>	<b>179.70</b>	<b>154.40</b>	<b>167.23</b>	<b>204.74</b>	<b>103.32</b>	<b>809.38</b>

- 3.2.2. From the above table, it was observed that the expense heads considered by AAI were different from those approved by AERA in the Tariff Order (Order No.14/2018-19 dated 23<sup>rd</sup> July 2018) for SVPIA for the Second Control Period. Further it was observed that certain expenses were grouped under incorrect heads such as in the case of certain R&M expenses that were grouped under "Operating expenses". In order to have a fair comparison between the actual expenses incurred and the projections approved in the Tariff Order for SCP, AAI was requested to share the actual O&M expenses incurred against the projections listed in Table 1. AAI vide email dated 22<sup>nd</sup> June 2022 shared the revised O&M expenses as follows.

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**Table 3: Revised O&M expenses proposed by AAI for true-up of SCP**

FY ending March 31 (INR Cr.)	2017	2018	2019	2020	2021 (till COD)	Total (till COD)
Payroll expenditure	23.64	31.54	38.32	41.10	16.26	150.87
Administrative and general expenditure	9.22	13.79	16.31	28.15	26.18	93.64
Apportionment of A&G expenses of CHQ/RHQ	75.17	61.09	58.75	85.97	44.65	325.63
Repairs and Maintenance expenditure	28.64	31.67	40.84	35.51	18.84	155.51
Utility and Outsourcing expenditure	18.50	19.93	20.33	20.80	10.05	89.62
Other outflows	0.62	1.51	0.17	0.52	0.40	3.22
<b>Total</b>	<b>155.80</b>	<b>159.52</b>	<b>174.72</b>	<b>212.05</b>	<b>116.39</b>	<b>818.48</b>

Source: Clarifications received from AAI

3.2.3. It can be seen from the above table that the revised O&M expenses are slightly higher than those submitted as part of the initial true up proposal. AAI clarified that few expenses were missed out during the initial submissions and that though the invoices against certain expenses were raised post COD, all the expenses included in the revised O&M expense submissions were incurred prior to COD. Therefore, the Study has considered the revised O&M expenses submitted by AAI for its analysis.

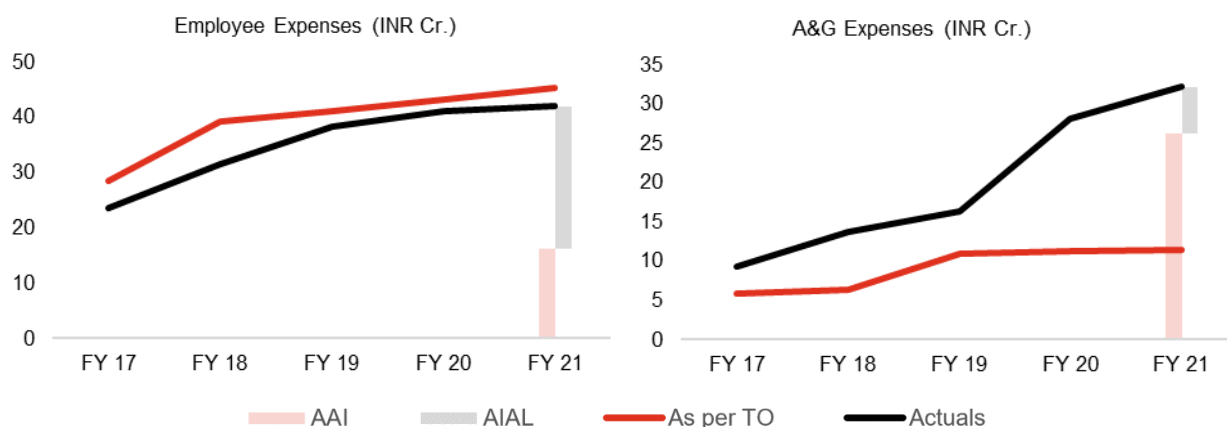
3.2.4. Accordingly, the O&M expenses considered by the Study for its analysis, including the expenses submitted by AIAL for the Second Control Period (post-COD) are as follows:

**Table 4: O&M Expenses submitted by AAI & AIAL for SCP as per the Study**

FY ending March 31 (INR crore)	2017	2018	2019	2020	2021 until COD	2021 post COD <sup>2</sup>	2021 (Total)	Total (till COD)	Total in SCP
Employee Benefit	23.64	31.54	38.32	41.10	16.26	25.71	41.98	150.87	176.58
Administrative & General Expenses	9.22	13.79	16.31	28.15	26.18	6.00	32.18	93.64	99.64
CHQ/RHQ Expenses	75.17	61.09	58.75	85.97	44.65	6.98	51.63	325.63	332.61
Repairs and Maintenance Expenses	28.64	31.67	40.84	35.51	18.84	10.37	29.22	155.51	165.88
Utility and Outsourcing expenditure	18.50	19.93	20.33	20.80	10.05	6.31	16.36	89.62	95.92
Other outflows	0.62	1.51	0.17	0.52	0.40	15.74	16.14	3.22	18.96
<b>Total</b>	<b>155.80</b>	<b>159.52</b>	<b>174.72</b>	<b>212.05</b>	<b>116.39</b>	<b>71.11</b>	<b>187.50</b>	<b>818.48</b>	<b>889.59</b>

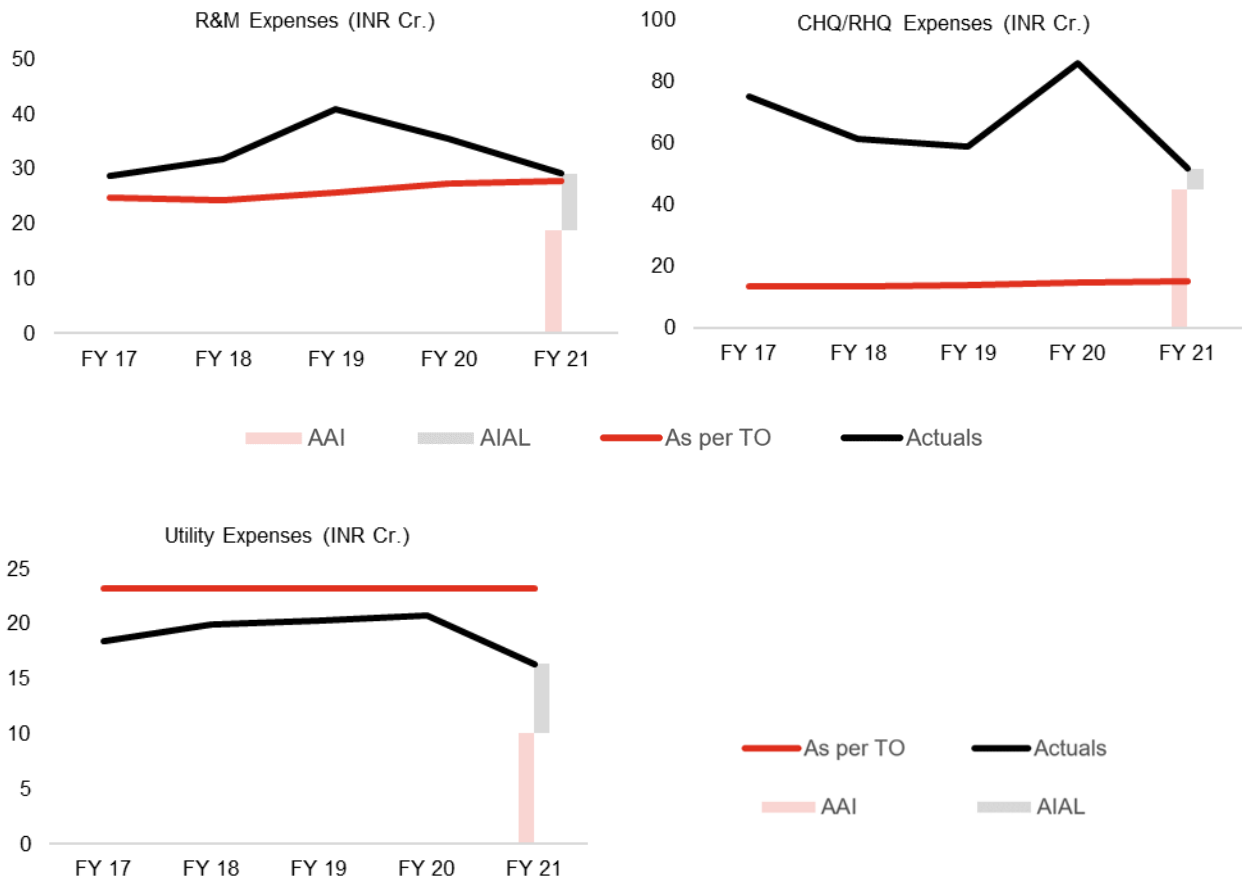
3.2.5. The comparison of the major expenses against the projections approved by the Authority in the Tariff Order for the Second Control Period is as follows:

**Figure 3: Comparison between the actual expenses and the projections in the TO for SCP**



<sup>2</sup> For AIAL, Administrative and other expenses include rates and taxes, insurance and administrative expenses, CHQ/RHQ expenses consists of corporate costs allocated to AIAL and Other outflows includes – IT expenses, security expenses, cargo expenses, bank and other finance charges and others

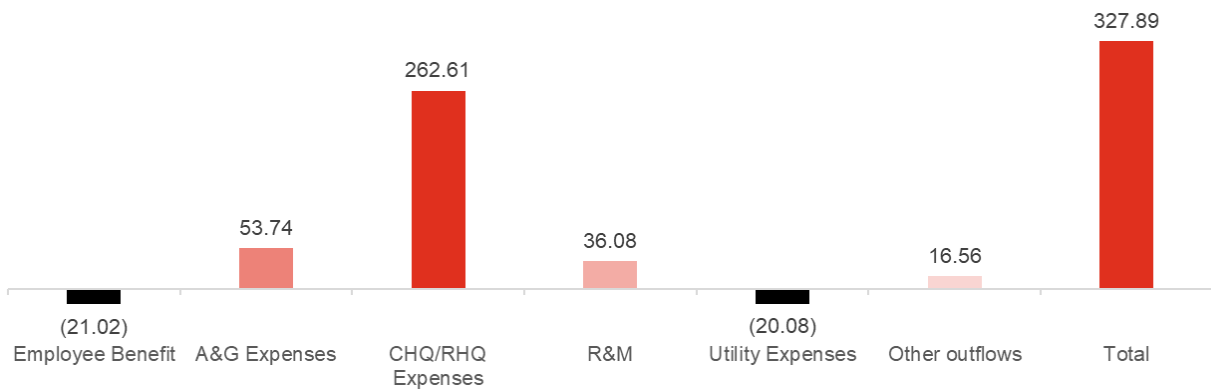
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3.2.6. From the above table and figures, it can be observed that the actual CHQ/RHQ expenses, A&G expenses, R&M expenses and Other Outflows are higher than the figures approved by the Authority in the Tariff Order for the SCP.

3.2.7. The deviation of the major O&M expenses as incurred by the Airport Operators as per their true up submissions from the projections approved by the Authority in the Tariff Order for the Second Control Period is shown below.

**Figure 4: Deviations of the actual O&M expenses from projections approved by AERA in TO for SCP**



3.2.8. At an overall level, the actual O&M expenses are higher than the projections in the Tariff Order by INR 327.89 Cr. The highest contributor to this deviation is the CHQ/RHQ expenses that have increased by ~375% from INR 70 Cr. to INR 332.61 Cr. (INR 325.63 Cr was incurred by AAI and the remaining INR 6.98 Cr by AIAL).

### **3.3. Summary**

- 3.3.1. It can be observed from Table 4 that, in general, the O&M expenses proposed by AAI for true-up are higher than those approved by the Authority in its previous order i.e., for the Second Control Period.
- 3.3.2. Among the major expense heads under O&M expenditure, the submissions for CHQ/RHQ expenses, A&G expenses, R&M expenses and Other Outflows indicate an increase vis-à-vis those approved by the Authority in the previous order. This has been analysed in detail in the subsequent Chapters.
- 3.3.3. The actual O&M expenses incurred are INR 889.59 Cr. compared to INR 561.7 Cr. approved in the previous Tariff Order. There is a deviation of 58% from the approved projections. The highest contributor to this deviation is the CHQ/RHQ expenses that have increased by ~375% from INR 70 Cr. to INR 332.61 Cr.



## 4. INTERNAL BENCHMARKING OF EXPENSES OF AAI

### 4.1. Introduction

4.1.1. In order to understand the change in various O&M expense heads, the reasons for such change and the effectiveness of the airport operator in managing expenses and the trend of O&M expenses has been analysed over the First and Second Control Period against the change in traffic and ATM.

### 4.2. Trend Analysis of O&M expenses

4.2.1. Some expenses such as payroll expenditure were observed to follow a trend. Hence, the growth of these expenses was studied to understand the change in these expenses over time.

4.2.2. The following table shows the change in O&M expenses in the First and Second Control Periods vis-à-vis the Passenger and ATM traffic growth:

**Table 5: O&M expenses growth vs Traffic and ATM growth**

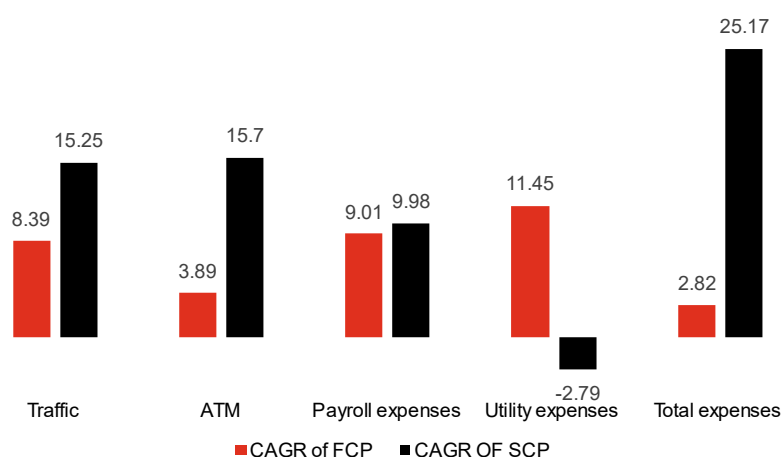
Particulars	First Control Period						Second Control Period						
	FY 12	FY 13	FY 14	FY 15	FY 16	4-year CAGR (%)	FY 17	FY 18	FY 19	FY 20	FY 21	CAGR (16-20) (%)	Change (FY 20-21) (%)
Traffic (MPPA)	4.70	4.16	4.56	5.05	6.48	8.39	7.41	9.17	11.17	11.43	3.64	15.25	-68.14
ATM ('000)	40.5	38.3	42.2	38.8	47.2	3.89	51.11	63.13	78.41	84.58	40.21	15.7	-52.46
Payroll expenses (INR Cr.)	19.9	20.3	20.4	25.0	28.1	9.01	23.64	31.54	38.32	41.1	26.98	9.98	-34.36
Utility expenses (INR Cr.)	15.1	17.4	17.2	21.2	23.3	11.45	18.50	19.93	20.33	20.80	16.68	-2.79	-19.82
Total O&M expenses* (INR Cr.)	77.3	76.2	78.0	79.6	86.4	2.82	155.80	159.52	174.72	212.05	193.10	25.17	-8.94

Source: AAI traffic news, true up submission of AAI and Tariff Order of the Second Control Period

Note: For FY 2021, the extrapolated figures have been considered

\* The Total O&M expenses also include A&G, R&M, CHQ/RHQ expenses and other outflows. These expenses have been analysed separately in Para 4.3

**Figure 5: Comparison between the O&M expenses growth in the First and Second Control Period**



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

#### First Control Period:

4.2.4. The employee expenses and utility expenditure from FY 12 to FY 16, had been growing at a higher rate compared to the growth in traffic and ATM.

4.2.5. The total operational expenses grew at a CAGR of about 2.8% from FY 12 to FY 16 which is lower than the growth in traffic and ATM.

**Second Control Period (For FY 16-20 i.e., pre-COVID period)**

4.2.6. The employee expenses have a lower CAGR (~10%) as compared to the growth in traffic and ATM. This is an improvement over the trend observed in the First Control Period.

4.2.7. The utility expenditure recorded a negative CAGR of -2.8% during this period while the traffic was on an upward trend. Also, when compared to the CAGR of 11.5% in FCP, the expenses seem to have been curtailed in the SCP.

4.2.8. The total operational expenses grew at a higher rate (~25%) than that of passenger (~15%) and ATM (~16%) traffic.

**Second Control Period (FY 2021)**

4.2.9. Compared to FY 2020, the employee expenses dropped by ~34% whereas the utility expenses dropped by ~20%. The drop in passenger traffic during the same period was 68%.

4.2.10. The drop in total expenses (~9%) was not as high as that of PAX (~68%) and ATM (~52.5%) traffic. This is expected due to the fact that the traffic has dropped significantly whereas, certain major expenses such as A&G expenses have remained more or less consistent. These expenses have been analysed in para 4.3.

**Comparison between FCP and SCP (Pre-COVID period):**

4.2.11. The employee expenses and the total expenses grew at a higher rate in the Second Control Period as compared to that of the First Control Period. However, the employee expenses have grown at a lower rate when compared to the traffic growth rates.

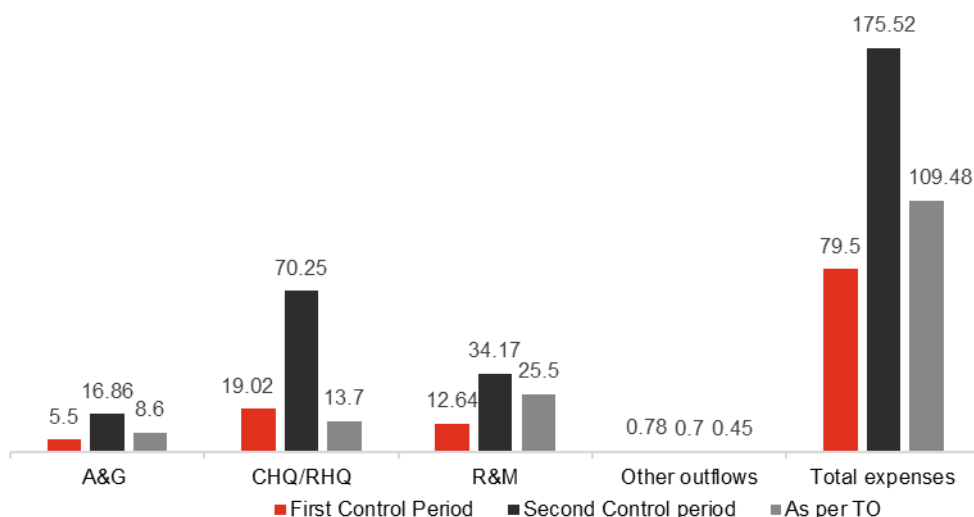
4.2.12. The utility expenditure grew at a lower CAGR in the Second Control Period and have in fact decreased when compared to that of the First Control Period.

**4.3. Comparison of average O&M expenses**

4.3.1. Some expenses such as Administrative and General Expenses did not appear to follow a steady trend. Hence, the average expenses incurred in the First and Second Control Period were compared for such items.

4.3.2. The following figure elaborates the average O&M expenses in the First and Second control period:

**Figure 6: Comparison of average expenses in the First and Second Control Period (INR Cr.)**



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Note: The figures for the First Control Period are taken from the Tariff Order for SCP whereas the figures for the Second Control Period are as per the true submissions of AAI. The Total O&M expenses also include Payroll and Utility expenses. These expenses have been analysed separately in Para 4.2.

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

- The average CHQ/RHQ expenses, A&G expenses, and R&M expenses in the Second Control Period are higher when compared to the First Control Period.
- The average CHQ/RHQ expenses, A&G expenses, R&M expenses and the other outflows in the Second Control Period are higher when compared to the projections approved as per the Tariff Order for SCP.
- The average Other Outflows incurred in the SCP also exceeds the average approved amount by the Authority. However, the Other Outflows form just ~0.39% of the total O&M expenses.
- Even at an overall level, the O&M expenses incurred in the Second Control Period are significantly higher than the expenses incurred in the First Control Period and the projections approved as per the Tariff Order for SCP.
- Primarily, the rise in CHQ/RHQ expenses, A&G expenses and R&M expenses are driving up the total expenses in the Second Control Period.

### 4.4. Analysis of actual O&M expenses between FY 16 and FY 20

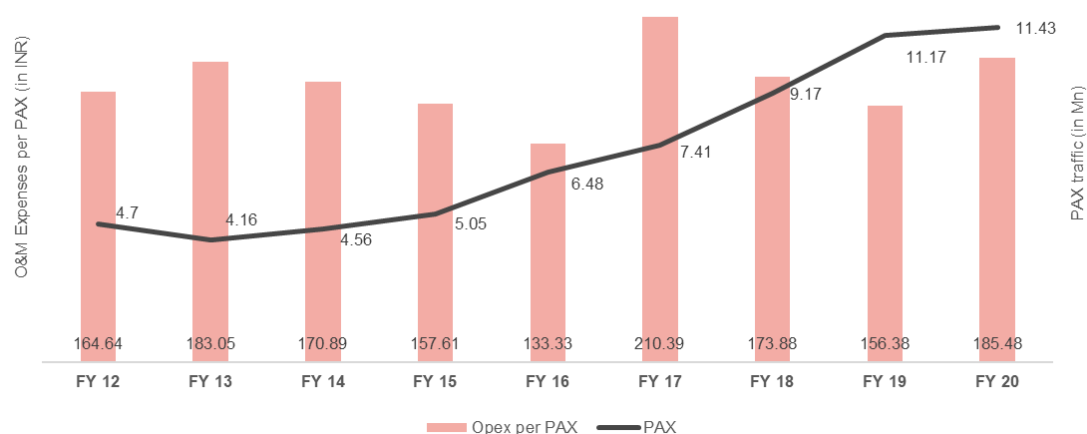
4.4.1. Based on the actual O&M expenses submitted by AAI, the change in some of the key parameters in FY 2020 (penultimate year in SCP i.e., pre-COVID period vis-à-vis FY 2016 (final year of First Control Period) is summarised below:

**Table 6: Comparison of parameters between FY 2016, FY 2020 and FY 2021**

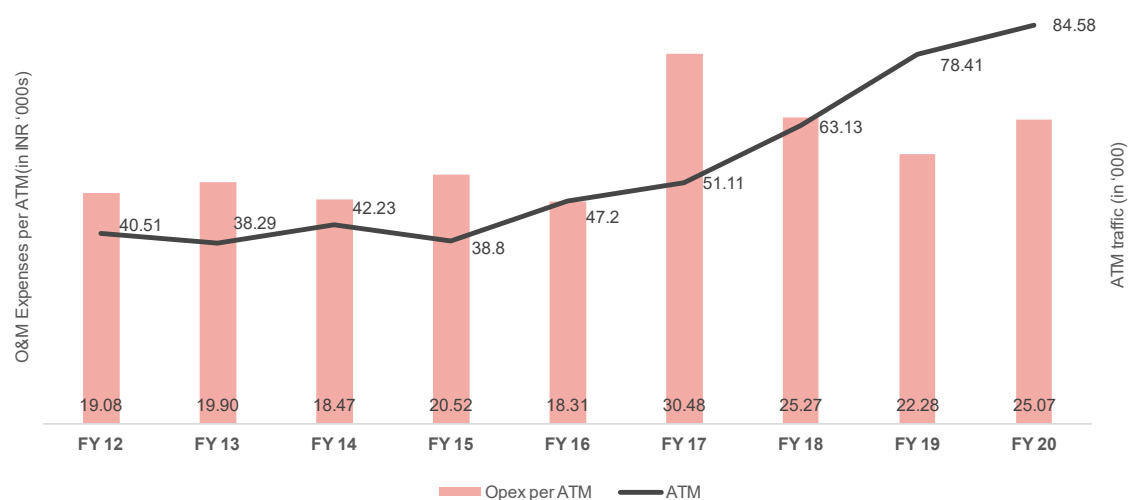
Parameter / Aspect	FY 16	FY 20	Increase from FY 16-20	FY 20 (Inflation adjusted)
	A	B	(B – A) ÷ A	B ÷ Inflation Factor*
Traffic (MPPA)	6.48	11.43	76.43%	
O&M expenses (INR Cr)	86.40	212.05	145.43%	180.75
O&M expenses per PAX (INR)	133.33	185.48	39.11%	158.10
ATM ('000)	47.20	84.58	79.21%	
O&M expenses per ATM (INR)	18,307.02	25,072.32	36.95%	21,371.58

\* Inflation factor has been computed below in Para 4.4.4

**Figure 7: Trend of O&M expenses per PAX**



**Figure 8: Trend of O&M expenses per ATM**



- 4.4.2. The total expenses per PAX have more or less remained at the same levels in Second Control Period when compared to the First Control Period, with the exception of FY 2017. This is primarily due to a steep increase in R&M expenses in FY 2017, which is analysed in Para 4.5.13.
- 4.4.3. Even the growth in O&M expenses per ATM are not high. However, the traffic growth in the Second Control Period is much higher than in the First Control Period. Therefore, prima facie, it doesn't seem as if SVPIA has been able to achieve economies of scale in this regard. Nevertheless, it would be pertinent to note that the terminal capacity of SVPIA is 10.84 MPPA (Domestic: 8.44 MPPA, International: 2.4 MPPA), whereas the traffic has been more than 11 MPPA since FY 2019 (excluding the pandemic period). Therefore, capacity constraints may also have an impact on the cost efficiency of SVPIA.
- 4.4.4. It needs to be noted that the absolute comparison of First Control Period and Second Control Period may not be fair since inflation would have been a factor in the rise in costs. Therefore, an inflation adjusted comparison was undertaken to account for this externality. The inflation factor was computed based on the following:

**Table 7: Inflation rates for FY 2017-20 as considered by the Study**

Particulars	FY 2017	FY 2018	FY 2019	FY 2020
CPI Inflation <sup>3</sup>	4.5%	3.60%	3.40%	4.80%
Inflation factor	1.05	1.08	1.12	1.17

- 4.4.5. From Table 6, the following observations can be made:
- The increase in the O&M expenses for the period of FY 16-20 is significantly higher as compared to traffic and ATM growth rates.
  - Even after accounting for inflation, O&M expenses per PAX and O&M expenses per ATM have grown considerably (~19% and ~17% respectively).

<sup>3</sup> <https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=20751>

#### 4.5. Assessment of reasonableness of major O&M expenses

4.5.1. Employee, A&G, R&M, CHQ/RHQ, and Utility Expenses form the significant part of the expenses of SVPIA (~99% of O&M expenses). These expenses have been studied in detail in the following Paras.

##### Employee Expenses:

4.5.2. The comparison of actual employee expenses claimed by AAI for true up of the Second Control Period and the projections approved by the Authority in the Tariff Order for SCP is given below.

**Table 8: Comparison of employee expenses as per true up submission vs Tariff Order**

Particulars (INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 <sup>4</sup>	Total
<b>As per true up proposal of AAI</b>						
Employee expenses	22.78	26.94	29.78	36.30	21.83	137.64
Retirement benefits at CHQ	0.86	4.60	8.54	4.80	5.15	23.95
Total employee expenses	23.64	31.54	38.32	41.10	26.98	161.59
<b>As per Tariff Order for SCP</b>						
Employee expenses – Non CHQ	26.4	36.2	38	39.9	41.9	182.4
Employee expenses – CHQ	4.4	6	6.3	6.6	6.9	30.2
Less: Common expenses related to ANS	2.2	3	3.1	3.3	3.5	15.1
Total employee expenses	28.6	39.2	41.2	43.2	45.4	197.6

Source: True up submission of AAI and the Tariff Order of the SCP

4.5.3. As can be seen above, the actual employee expenses incurred by AAI are lower than the projections approved by AERA as per the Tariff Order for the Second Control Period.

4.5.4. The employee expenses have been analysed with respect to two parameters viz, number of passengers per employee and average salary per employee.

4.5.5. Based on global benchmarks, the level of staffing for an airport is generally considered to be optimum when the number of passengers per employee is around 15000-17000.<sup>5</sup>

4.5.6. The following table elaborates the above-mentioned parameters in the Second Control Period:

**Table 9: Analysis of employee expenses of AAI**

Particulars	UoM	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Employee Expenses as per AAI	INR Cr.	23.64	31.54	38.32	41.1	26.98 <sup>6</sup>	161.59
Cumulative growth in costs compared to FY 16	%	-15.9%	12.2%	36.4%	46.3%		
Employee Expenses as per TO for SCP	INR Cr.	28.6	39.2	41.2	43.2	45.4	197.6
Growth approved by AERA in the Tariff Order*	%		39.5%	46.6%	53.7%		
Number of employees (aeronautical)	Nos	155	147	161	162	174	
Number of passengers per employee	1000 Nos	47.82	62.22	69.47	70.69	20.91**	
Average salary per employee	INR Mn.	1.53	2.14	2.38	2.54		
Growth in average salary	%		39.9%	11.2%	6.7%		

\*Base year is FY 2016

\*\*Actual figures for FY 2021 have been considered

Source: True up submission of AAI and the Tariff Order of the SCP

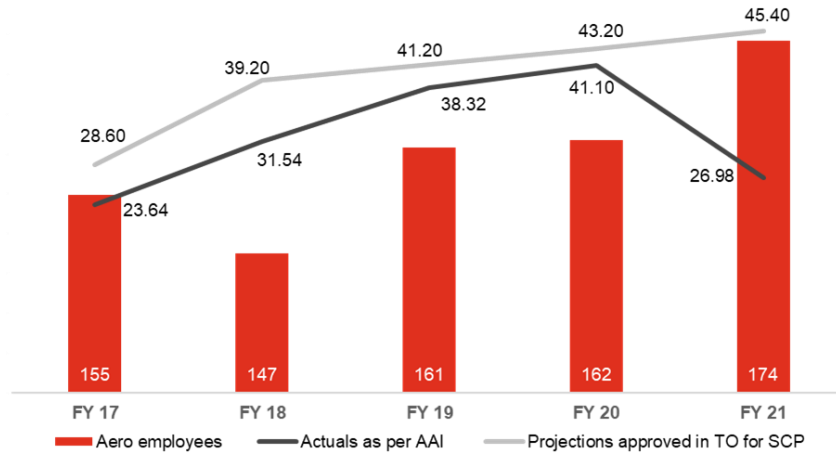
Note: FY 2021 is not considered as the costs do not reflect actuals since AAI was not operating the airport for the entire year

<sup>4</sup> Extrapolated figures have been considered for FY 2021 since AAI was operating the airport only till 06<sup>th</sup> November 2020

<sup>5</sup> Source: ACI Airport Key Performance Indicator 2019 (<https://store.aci.aero/product/2019-airport-key-performance-indicators/>)

<sup>6</sup> Extrapolated figures have been considered for FY 2021 since AAI was operating the airport only till 06<sup>th</sup> November 2020

**Figure 9: Analysis of employee expenses of AAI in the Second Control Period**



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

- The average salary per employee shows an increasing trend. There has been a significant increase in employee expenses in FY 2018 on account of revision of wages. However, the employee expenses and its growth in the Second Control Period is well within the projections made by AERA in the Tariff Order. Therefore, the employee expenses for SVPIA for SCP seem reasonable.

**Administrative & General Expenses**

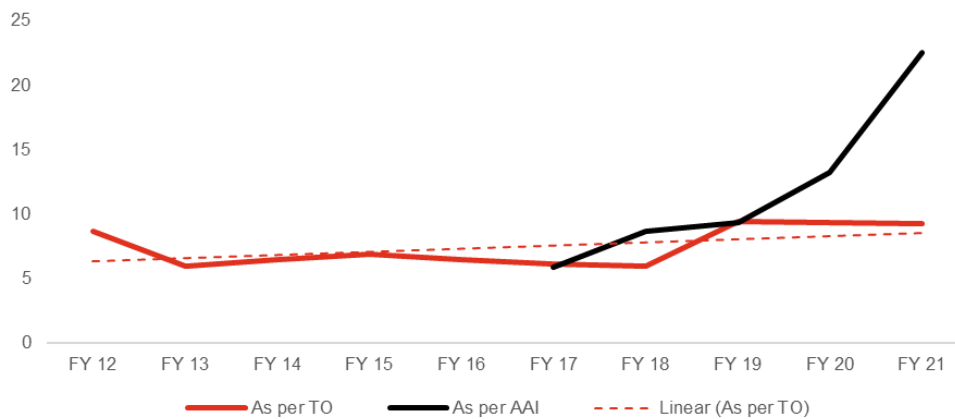
4.5.8. Administrative expenses are typically observed to grow in proportion with the total expenditure. Therefore, the A&G expense has been examined as a % of the overall expenses.

**Table 10: Analysis of actual A&G expenses in the FCP and SCP by AAI**

Particulars (in %)	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21 (pre-COD) <sup>7</sup>
<b>As per TO for SCP</b>										
A&G expenses as % of O&M expenses	8.7	6.0	6.5	6.9	6.5	6.14	6.00	9.46	9.33	9.29*
<b>As per AAI</b>										
A&G expenses as % of O&M expenses						5.91	8.64	9.34	13.27	22.49

<sup>7</sup>Note: Projection approved for FY 2021 as per Tariff Order for SCP

**Figure 10: Analysis of actual A&G expenses of AAI in the FCP and SCP (% of overall expenses)**



<sup>7</sup> Extrapolated figures are considered for FY 2021

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4.5.9. From the above table and figure, the following observation can be made:

- The A&G expenses in FY 17 are lower than those incurred in the First Control Period. However, the expenses have increased significantly in FY 20 and FY 21. Even when compared to the projection approved as per Tariff Order for SCP, it is observed that the A&G expenses incurred by AAI in the SCP were lower during FY 2017 and FY 2019, thereafter it rose significantly from FY 2020. AAI was asked to justify the reason for such escalation in the last two years of SCP. AAI vide their email dated 13<sup>th</sup> May 2022 clarified that the municipal taxes showed a sudden rise in FY 2020-21 as demand was raised by the local authority for payment of tax for an earlier period as well.

4.5.10. It can be observed from the table below that the municipal tax expense was constant during FY 2017-19, but then it started to increase from FY 2020 and a significant amount of INR 20.04 Cr was incurred in FY 2021. As a result, in the Second Control Period, the major contributor of A&G expenses was municipal taxes (~29% of the total A&G expenses). AAI was asked to clarify the prior periods for which these taxes were applicable and the reasons for these taxes not being paid in their respective periods. AAI responded vide their email dated 10<sup>th</sup> June 2022 with the breakup of the municipal taxes and clarified that the local authority had not raised the demand for the taxes in each respective year, due to which, significant dues had to be cleared in FY 2020 and FY 2021.

**Table 11: Municipal expenses incurred by AAI**

Particulars (INR Cr)	FY 17	FY 18	FY 19	FY 20	FY 21 (until COD)	Total
Municipal Taxes	0.26	0.26	0.26	5.98	20.04	26.78

Source: Clarifications received from AAI

4.5.11. Other major contributors of the A&G expenses incurred in SCP are “Upkeep expense (MESS)” and AOCC expenses which amount to INR 22.89 Cr. and INR 7.81 Cr. respectively. In the Tariff Order for SCP, AERA had noted that the annual expenditure towards AOCC and Upkeep are INR 3.12 Cr. and INR 7.21 Cr. respectively. Therefore, the actual costs incurred by AAI towards these expenses in SCP appear to be reasonable. The remaining A&G expenses are constituted by numerous low value expense items. Therefore, except in the case of Municipal Taxes, the A&G expenses are not being driven up by any specific expense items. However, even after accounting for the deviation due to the Municipal Taxes, the overall A&G expenses appear to be quite high when compared to the projections approved by AERA in the Tariff Order for SCP.

4.5.12. Therefore, based on internal benchmarking, the A&G expenses for SVPIA for SCP appear to be high. However, from an external benchmarking perspective, the A&G expenses of AAI seem to be at par with the expenses incurred by other comparable airports (The external benchmarking has been detailed in Para 7.4).

**Repairs & Maintenance Expenses**

4.5.13. R&M expenses depend on the quantum of assets and generally tend to increase with ageing of assets due to increased need for maintenance as the assets depreciate. Therefore R&M expenses have been examined as a percentage of the aeronautical Gross Block.

**Table 12: Analysis of R&M expenses of AAI**

Particulars (in %)	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21 (pre-COD) <sup>8</sup>
<b>As per TO for SCP</b>										
R&M expenses as % of average Aero Gross Block	2.8	1.8	1.5	2.2	2.5	4.26	4.07	4.16	4.27	3.76*
<b>As per AAI</b>										
R&M expenses as % of average Aero Gross Block						4.82	5.15	6.40	5.19	4.37

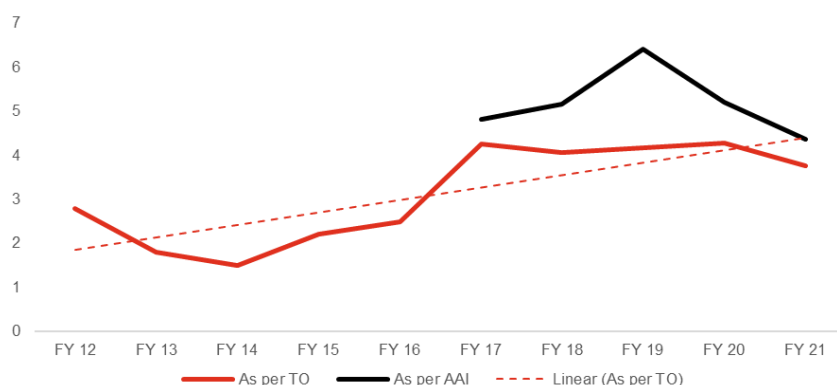
<sup>8</sup>Note: Projection approved for FY 2021 as per Tariff Order for SCP

<sup>8</sup> Extrapolated figures are considered for FY 2021

## Study on Efficient Operation & Maintenance Expenses for SVPIA

Source: True up submission of AAI and the Tariff Order for the SCP

**Figure 11: Analysis of R&M expenses of AAI in FCP and SCP (% of average Aero Gross Block)**



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

- It is observed that the R&M expenses incurred by AAI is higher than the projection approved in the Tariff Order for SCP till FY 2021.
- From the table below, it can be observed that the runway maintenance expenses amount to INR 33.82 Cr which is ~22% of the total R&M expenses. As per the tariff order (Order No. 14/2018-19), the Authority had proposed to amortize the projected runway recarpeting expense of INR 38 Cr. over the period of 5 years (FY 17-FY 21). In its revised submission dated 22<sup>nd</sup> June 2022, AAI had amortized the actual expense of INR 33.82 Cr. incurred towards runway recarpeting over the period of 5 years of the SCP.

**Table 13: Major R&M expenses incurred by AAI in SCP**

Particular (INR Cr.)	FY 17	FY 18	FY 19	FY 20	FY 21 (until COD)	Total
Civil Runways	6.76	6.76	6.76	6.76	6.76	33.82
Electrical installation	10.23	14.76	13.24	15.30	7.59	61.12
Security equipment	3.76	4.40	7.61	3.49	0.00	19.26

Source: Clarifications received from AAI

- From the above table, it can be seen that Electrical installation expenses amounts to INR 61.12 Cr (~39% of R&M expenses) and Security equipment expense amounts to INR 19.26 Cr which is almost 12% of the total R&M expenses. Together, these two expenses contribute 51% of the total R&M expenses. Prima facie these expenses seem to be driving up the R&M expenses in the Second Control Period.
- AAI was asked to justify these substantial amounts in the Electrical installation expenses and Security equipment expenses to which they responded vide their email dated 2<sup>nd</sup> June 2022 that: *“All R&M electrical exp is booked under this R&M code. R&M cost were not budgeted for each line of expenditure in 2nd control period, instead an overall 10% increase was considered”* and *“All security related expenditure like AMC of security equipment, ILBS expense etc are booked under this code. R&M cost were not budgeted for each line of expenditure in 2nd control period, instead an overall 10% increase was considered”*
- Therefore, based on internal benchmarking, it is observed that AAI has incurred significantly higher expenses towards R&M as compared to what was approved by AERA in the Tariff Order for SCP. Even when compared with the FCP, the R&M expense levels have surged. These expenses have been further examined in Para 5.3.18 to Para 5.3.22 and Para 5.6.



**CHQ/RHQ Expenses:**

4.5.15. In the Tariff Order for the Second Control Period, the Authority had directed AAI to allocate the Corporate Headquarters (CHQ)/ Regional Headquarters (RHQ) costs based on the revenue to AAI, considering that the allocation of costs should be based on the ability of the airports to absorb the cost. Therefore, the CHQ/RHQ expense has been analysed with respect to the total revenue for each year.

4.5.16. The following table elaborates the above-mentioned parameter in the First and Second Control Period:

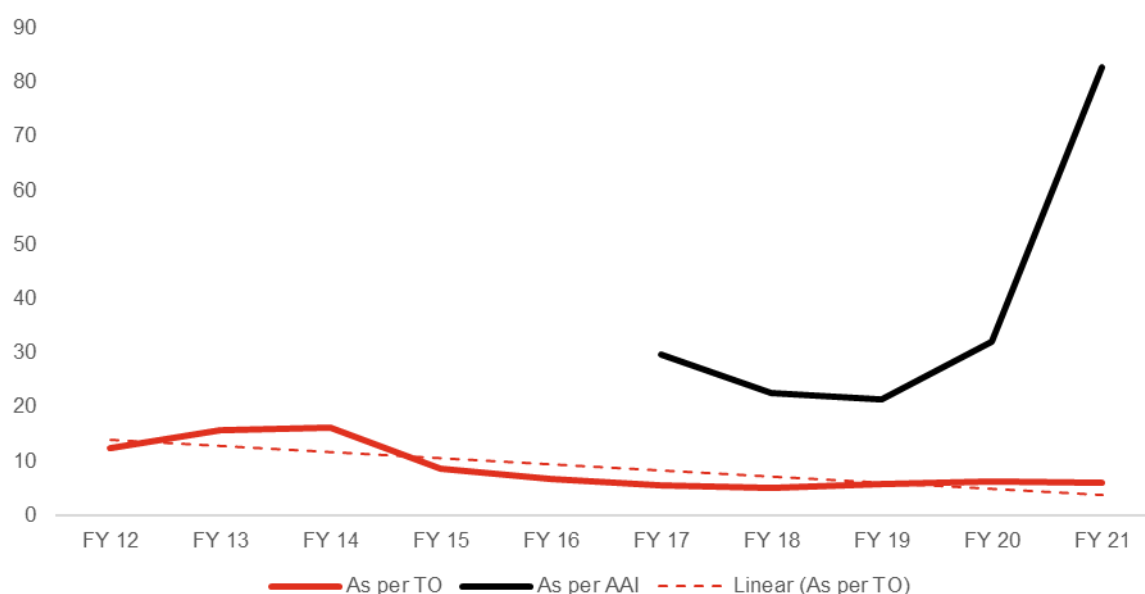
**Table 14: Analysis of CHQ/RHQ expenses for FCP and SCP**

Particulars (in %)	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21 <sup>9</sup>
<b>As per TO for SCP</b>										
CHQ/RHQ as % of total revenue	12.37	15.64	16.08	8.54	6.62	5.58	4.90	5.72	6.19	5.92*
<b>As per AAI</b>										
CHQ/RHQ as % of total revenue						29.64	22.43	21.43	32.02	82.62

\* Note: Projection approved for FY 2021 as per Tariff Order for SCP

Source: True up submission of AAI and the Tariff order of the Second Control Period

**Figure 12: Analysis of CHQ/RHQ expenses of AAI FCP and SCP (% of revenue)**



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

- CHQ/RHQ expenses have grown considerably in the Second Control Period as compared to the First Control Period. In fact, when looked at as a % of revenue, the CHQ/RHQ expenses have more than doubled in the SCP.
- The total CHQ/RHQ expenses for FCP as a percentage of total revenue was ~11%, whereas for the Second Control Period, the ratio stands at ~32%.
- It can be seen from the above graph that during FY 2017, the expenses were almost 4.5x times as that of FY 2016.
- Even when compared to the projection approved as per the Tariff Order for SCP, it is observed that the CHQ/RHQ expenses incurred by AAI in SCP is exorbitantly high.
- AAI was asked to justify this steep increase in CHQ/RHQ expenses to which AAI responded vide their email dated 13<sup>th</sup> May 2022 that *“apportion of CHQ/RHQ expenditure is made on the basis of*

<sup>9</sup> Actual figure of AAI is considered for FY 2021 till COD

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actual expenditure incurred by CHQ/RHQ during the relevant financial year at time of submission of proposal with AERA. This increase may be due to the rise of salary and benefit payable to the employees in line with CPE instruction.” However, the deviation is quite significant, and the justification given by AAI does not satisfactorily explain the magnitude of this deviation. Therefore, AAI was asked to provide the detailed calculations in this regard.

- Vide email dated 10<sup>th</sup> June 2022, AAI responded that the major deviation in CHQ/RHQ expenses is due to the inclusion of the Payroll Expenses of Mumbai Co-ordination cell which were inadvertently being booked in a different Profit Centre up to FY 2019-20 instead of the Western Region Profit Centre. This inclusion has resulted in a deviation of ~INR 145 Cr. in the CHQ/RHQ expenses. The exact justification by AAI in this regard is as follows:

**Table 15: Justifications as per AAI for the rise in CHQ/RHQ expenses in SCP**

Particulars (in INR Cr)	Justifications/Remarks as per AAI	FY 17	FY 18	FY 19	FY 20	FY 21	Total
Impact of Mumbai Co-ordination Cell on Ahmedabad	<i>The Payroll Expenses of Mumbai Co-ordination cell were inadvertently booked in Profit Centre 12061 upto F.Y 2019-20 instead of Western Region Profit Centre 12060. Mumbai and Delhi Airport were privatised in the F.Y 2005-06 . IGI Coordination cell and Mumbai Coordination cell was created at that point of time to look after the activities of Delhi and Mumbai Airport. The IGI coordination Cell (profit centre 14061) was merged with Northern Region long back because all the staff of IGI coordination cell was working for Northern Region .Similarly the Mumbai Coordination Cell pay and Allowance should have been shifted to Western Region but it was inadvertently continue till F.Y 19-20 .The staff of Mumbai Coordination Cell is working for Western Region only, like in case of IGI Co-ordination Cell for Northern Region. In case of Mumbai Co-ordination Cell the booking for 2020-21 has been done in Western Region. The Pay &amp; Allowances of the Mumbai Co-ordination cell was left out inadvertently in the RHQ allocation but now it has been considered from F.Y. 2016-17 to 2019-20 in the western Region . The Northern Region Pay &amp; Allowance expenses are almost same like Western Region Pay &amp; Allowance expenses .The Northern Region Pay &amp; Allowance expenses are almost same like Western Region Pay &amp; Allowance expenses .AAI has already forwarded revised working of CHQ/RHQ expenses for the F.Y 16-17 to F.Y 20-21 after incorporating the changes of western Region on 24/12/2021. In fact there is a reduction of Rs 54 crores in expenses for the F.Y 20-21 in respect to F.Y 19-20 for western Region.</i>	35.59	14.06	29.32	43.40	22.50	144.86
Impact of PRP prov (CHQ )	<i>The Projection was not made at the time of Submission of 2nd Control Period MYTP</i>	4.05	4.86	3.49	5.74	-	18.15

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Particulars (in INR Cr)	Justifications/Remarks as per AAI	FY 17	FY 18	FY 19	FY 20	FY 21	Total
Impact of Pay Revision	<i>The Projection was not made at the time of Submission of 2nd Control Period MYTP</i>	3.85	6.61	-	-	-	10.46
Impact of Acturial Valuation CHQ		-	-	0.48	2.13	-	2.62
Impact of Retirement Benefit CHQ		0.49	2.26	3.11	-	0.21	6.07
Impact of Acturial Valuation WR		-	-	-	8.68	-	8.68
Impact of Retirement Benefit WR		0.57	2.93	4.16	-	-	7.66
<b>Total</b>		44.56	30.71	40.56	59.96	22.71	198.5

Source: Clarifications received from AAI

- The explanation given by AAI accounts for the deviation of only ~ INR 199 Cr. whereas the actual deviation was ~INR 256 Cr. Therefore, these expenses need to be further scrutinized and the same has been carried out in Para 5.3.30 to Para 5.3.35.

**Utility Expenses:**

4.5.18. The utility expenses are seen to vary with the traffic handled and the size of an airport. Hence, the expenses were analysed with respect to the passenger traffic each year and also the area of the terminal. However, the terminal area has remained constant over this period, therefore, the analysis based on expenses per terminal area wouldn't bear fruit. The same would be considered in the external benchmarking analysis.

4.5.19. The following table elaborates the change in utility expenses per PAX in the First and Second Control Period:

**Table 16: Change in utility expenses per PAX for AAI**

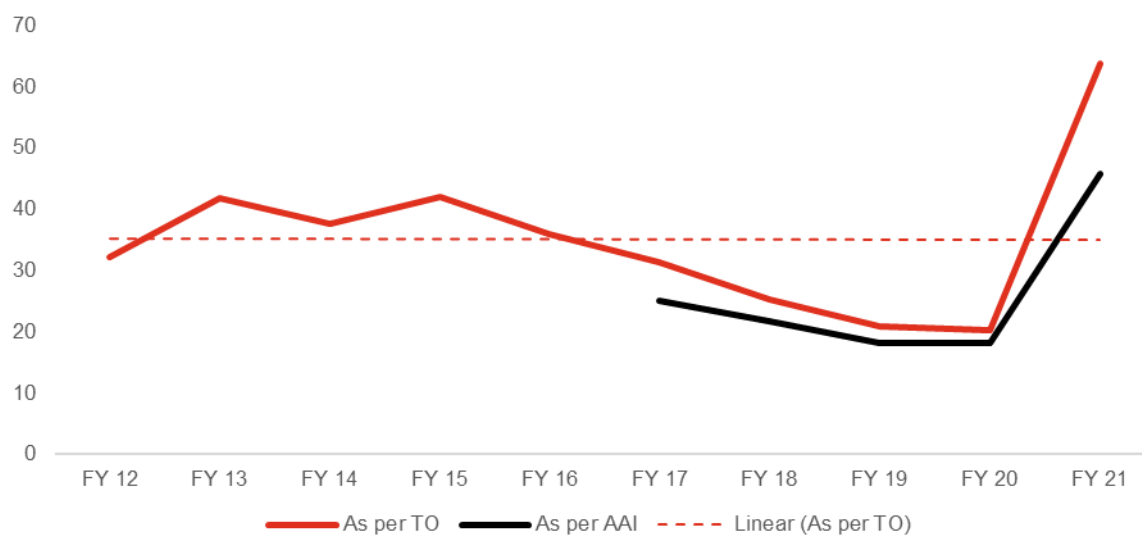
Particulars (INR)	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21 <sup>10</sup>
<b>As per TO for SCP</b>										
Utility expense per PAX	32.16	41.80	37.68	41.98	35.96	31.33	25.29	20.77	20.29	63.69*
<b>As per AAI</b>										
Utility expense per PAX						24.98	21.72	18.20	18.20	45.80

\* Note: Projection approved for FY 2021 as per Tariff Order for SCP

Source: True up submission of AAI and the Tariff order of the Second Control Period

<sup>10</sup> Extrapolated figure of AAI is considered for FY 2021

Figure 13: Analysis of utility expenses per PAX of AAI in FCP and SCP (INR/PAX)



4.5.20. From the above table and figure, the following observations can be obtained:

- In general, the utility expenses per PAX is lower in the Second Control Period and was on a continuous downward trend till FY 2021.
- When compared to the projections approved as per the Tariff Order for SCP, it is observed that the utility expenses are within limits and does not exceed approved amounts from FY 2017 till FY 2021.
- Nevertheless, in FY 2021, the expense per PAX has increased due to the low passenger traffic on account of the COVID-19 pandemic. However, it is still lower than the projections approved as per the Tariff Order for SCP.
- Therefore, the utility expenses for SVPIA for the Second Control Period seem reasonable.

#### 4.6. Summary of internal benchmarking

- 4.6.1. In Second Control Period, the total operational expenses grew at a higher rate (~25%) than that of passenger (~15%) and ATM (~16%) traffic. The O&M expenses incurred in the Second Control Period are significantly higher than the expenses incurred in the First Control Period. The increase is primarily being driven by the rise in CHQ/RHQ expenses, R&M expenses and A&G expenses.
- 4.6.2. In Second Control Period, the employee expenses have a lower CAGR (~10%) as compared to the growth in traffic and ATM. This is an improvement over the trend observed in the First Control Period. Also, the employee expenses and its growth in the Second Control Period are well within the projections made by AERA in the Tariff Order. Therefore, the employee expenses for SVPIA for SCP seem reasonable.
- 4.6.3. The average A&G expenses, CHQ/RHQ expenses and R&M expenses incurred by AAI in the SCP are significantly higher when compared to the approved projections as per the Tariff Order for SCP.
- 4.6.4. The A&G expenses in FY 17 are lower than those incurred in the First Control Period. However, the expenses have increased significantly in FY 20 and FY 21 due to a steep increase in Municipal Taxes. AAI clarified that the local authorities raised a demand for taxes for previous years as well due to which there has been a sudden increase in A&G expenses in the last two years of the SCP. Apart from the Municipal Taxes there are no other major expenses which are driving up the A&G expenses. The overall A&G expenses for SVPIA for SCP appear to be high. However, from an external benchmarking perspective, the A&G expenses of AAI seem to be at par with the expenses incurred by other comparable airports (The external benchmarking has been detailed in Para 7.4).
- 4.6.5. R&M expenses have shown a gradual upward trend over time. Though such a trend is expected with the ageing of assets, the R&M expenses incurred in the SCP are significantly higher when compared to the

expenses incurred in FCP and the projections approved by AERA in the Tariff Order for SCP. It was observed that certain expenses such as R&M of electrical installation and security equipment are driving the costs up. Therefore, based on internal benchmarking, it is observed that AAI has incurred significantly higher expenses towards R&M as compared to what was approved by AERA in the Tariff Order for SCP. Even when compared with the FCP, the R&M expense levels have surged. Therefore, these expenses have been further examined in Para 5.3.18 to Para 5.3.22 and Para 5.6.

- 4.6.6. CHQ/RHQ expenses have grown considerably in the Second Control Period as compared to the First Control Period. The total CHQ/RHQ expenses for FCP as a percentage of total revenue was ~11%, whereas for the Second Control Period, the ratio stands at ~29%. AAI stated that apportion of CHQ/RHQ expenditure is made on the basis of actual expenditure incurred by CHQ/RHQ and that the increase may be due to the rise of salary and benefit payable to the employees in line with CPE instruction. However, the deviation is quite high. The explanation given by AAI accounts for the deviation of only ~ INR 199 Cr. whereas the actual deviation was ~INR 256 Cr. Therefore, these expenses need to be further scrutinized and the same has been carried out in Para 5.3.30 to Para 5.3.35.
- 4.6.7. In general, the utility expenses per PAX is lower in the Second Control Period and was on a continuous downward trend till FY 2021. The utility expenditure recorded a negative CAGR of -2.8% during SCP compared to the CAGR of 11.5% in FCP. Therefore, the utility expenses seem to have been curtailed in the SCP.

#### **4.7. Conclusion**

- 4.7.1. Based on the observations from internal benchmarking, it can be concluded that the operations and maintenance expenses for Second Control Period at SVPIA are reasonable except for the CHQ/RHQ expenses and R&M expenses that have increased significantly. Therefore, these expenses have been further examined in the next chapter (Refer Para 5.3.30 to Para 5.3.35 for CHQ/RHQ expenses and Para 5.3.18 to Para 5.3.22 and Para 5.6 for R&M expenses).

## 5. ALLOCATION OF EXPENSES BETWEEN AERONAUTICAL AND NON-AERONAUTICAL ACTIVITIES

### 5.1. Introduction to segregation of expenses

5.1.1. 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 of the various O&M expense elements have been adopted:

- Expenses which are incurred for operation and maintenance of Aeronautical assets to be categorised as aeronautical expenses.
- Expenses which are incurred for operation and maintenance of Non-aeronautical assets to be categorised as non-aeronautical expenses.
- Expenses which are incurred for operation and maintenance of ANS assets to be categorised as ANS expenses.
- Expenses for which the benefits or use cannot be exclusively linked to either Aeronautical, Non-aeronautical 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. Examples are travel and accommodation.
- 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.

5.1.2. The classification followed by the airport operator with respect to expenses was found to be in line with the general principles discussed above. However, the basis for allocation of certain costs needs to be analysed. The principles of classification followed by the airport operator are provided in the table below.

5.1.3. AAI has proposed to bifurcate the expenses among the aeronautical, non-aeronautical, ANS and common expenses as per the allocation basis elaborated in the table below.

**Table 17: Allocation basis considered by AAI**

Expense Category	Expense Sub-Category / Description	Expense Classification	Allocation Basis
Manpower expenses	Salary, wages & bonus	Common	Employee Ratio
	Imm. Death Relief	Aeronautical	
A&G Expenses	Rent; Communication Expense; Travelling and Conveyance; Advertisement; Printing and Stationary	Common	Employee Ratio
	Collection Charges – UDF	Aeronautical	
	Arbitration expenses and Legal Fee	Aeronautical	
	Municipal Taxes	Aeronautical	
R&M Expenses	R&M costs for buildings, Plant & Machinery and Roads, Runways and culverts	Aeronautical	

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Expense Category	Expense Sub-Category / Description	Expense Classification	Allocation Basis
CHQ/RHQ Expenses	CHQ/RHQ expenses allocated to SVPIA	Common	95%
Utility Expenses	Power, fuel and DG set charges	Common	Electricity Ratio
	Water Charges	Common	Employee Ratio
Miscellaneous & Other Expenses	Security Related Expenses	Aeronautical	
	Finance Cost – Interest on finance lease on XBIS	Aeronautical	

Source: True up submissions of AAI

5.1.4. Based on the above-mentioned allocation methodology, AAI had computed the aeronautical O&M expenses as follows:

**Table 18: Aeronautical O&M expenses as per AAI**

Particulars (INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 (Up to COD)	Total
Employee Benefit	23.64	31.54	38.32	41.10	16.26	150.87
Administrative & Other Expenses	9.22	13.79	16.31	28.15	26.18	93.64
CHQ/RHQ	75.17	61.09	58.75	85.97	44.65	325.63
Repairs & Maintenance	28.64	31.67	40.84	35.51	18.84	155.51
Utility Expenses	18.50	19.93	20.33	20.80	10.05	89.62
Miscellaneous & Other Outflows	0.62	1.51	0.17	0.52	0.40	3.22
<b>Total</b>	<b>155.80</b>	<b>159.52</b>	<b>174.72</b>	<b>212.05</b>	<b>116.39</b>	<b>818.48</b>

Source: True up submissions of AAI

## 5.2. Assessment of allocation ratios for common expenses

### Terminal Allocation Ratio

5.2.1. The airport operator had proposed the following terminal area ratio based on their analysis of the actual usage.

**Table 19: Terminal area ratio considered by AAI**

Particulars (SQM)	Location	2016-17	2017-18	2018-19	2019-20	2020-21
Commercial Stores	T1	532.59	637.05	1,039.32	1,182.21	1,015.86
Airlines	T1	819.50	914.94	885.51	739.04	738.35
Allied Agencies	T1	68.05	68.05	76.87	76.87	76.87
GHA	T1	48.20	57.50	37.00	37.00	54.32
Total Area of T1	T1	29,423.00	29,423.00	29,423.00	29,423.00	29,423.00
<b>T1 Ratio %</b>	<b>T1</b>	<b>4.99%</b>	<b>5.70%</b>	<b>6.93%</b>	<b>6.92%</b>	<b>6.41%</b>
<b>Aero %</b>	<b>T1</b>	<b>95.01%</b>	<b>94.30%</b>	<b>93.07%</b>	<b>93.08%</b>	<b>93.59%</b>
Commercial Stores	T2	543.03	599.99	820.75	633.96	588.11
Airlines	T2	515.19	473.18	473.18	473.18	473.96
Allied Agencies	T2	533.53	603.37	644.62	644.62	644.62
GHA	T2	84.25	83.35	83.35	83.35	93.35
Total Area of T2	T2	41,000.00	41,000.00	41,000.00	41,000.00	41,000.00
<b>T2 Ratio %</b>	<b>T2</b>	<b>4.09%</b>	<b>4.29%</b>	<b>4.93%</b>	<b>4.48%</b>	<b>4.39%</b>
<b>Aero %</b>	<b>T2</b>	<b>95.91%</b>	<b>95.71%</b>	<b>95.07%</b>	<b>95.52%</b>	<b>95.61%</b>
Commercial Stores	T1 + T2	1075.62	1237.04	1860.07	1816.17	1603.97
Airlines	T1 + T2	1334.69	1388.12	1358.69	1212.22	1212.31

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Particulars (SQM)	Location	2016-17	2017-18	2018-19	2019-20	2020-21
Allied Agencies	T1 + T2	601.58	671.42	721.49	721.49	721.49
GHA	T1 + T2	132.45	140.85	120.35	120.35	147.67
Total Terminal Area	T1 + T2	70423	70423	70423	70423	70423
T1 + T2 Ratio %	T1 + T2	4.46%	4.88%	5.77%	5.50%	5.23%
<b>Aero %</b>	T1 + T2	<b>95.54%</b>	<b>95.12%</b>	<b>94.23%</b>	<b>94.50%</b>	<b>94.77%</b>

Source: True up submissions of AAI

5.2.2. The Authority had at the time of determination of tariffs for the Second Control Period decided to adopt the Terminal Area Ratio as 92.5 : 7.5 (aeronautical : non-aeronautical) to encourage the growth of non-aeronautical revenues which would cross-subsidise aeronautical charges. However, AAI is yet to achieve such allocation as directed by the Authority. 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 Area Ratio has been revised to 92.5 : 7.5 (aeronautical : non-aeronautical) in line with the Authority's decision in Order No. 14/2018-19.

5.2.3. Based on the revision of the terminal area ratio, there is a reduction of INR 0.58 Cr in the aeronautical O&M expenses as shown in the following table.

**Table 20: Impact of revision of terminal area ratio as per the Study**

Impact (INR Cr.)	FY 17	FY 18	FY 19	FY 20	FY 21 (till COD)	Total
Revision of terminal area ratio	0.08	0.08	0.10	0.18	0.14	0.58

Source: True up submissions of AAI

### Gross Block Ratio

5.2.4. For bifurcation of certain expenses that are common to the entire airport, the study would utilise the Gross Block ratio (ratio of aeronautical gross block to total gross block). Based on the outcome of the independent study on allocation of assets, the ratio of average aeronautical assets to total assets was determined as follows.

**Table 21: Allocation of Gross Block as per the Study**

% Aero Gross Block (as on 31 March)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021*
Revised aeronautical ratio	84.88%	83.05%	83.46%	83.90%	83.73%

\*As on COD

### Employee Ratio

5.2.5. The department-wise breakup of employees for the Second Control period till COD along with the basis of computing the employee ratio for AAI is summarised in the table below:

**Table 22: Employee details as per AAI**

Particulars (No. of employees)	Classification as per AAI	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 (till COD)
Airport Director	Aero	1	1	1	1	1
Security	Aero	0	1	1	1	1
Terminal Management	Aero	18	18	22	21	21
M.T. Section	Aero	25	16	17	17	18
Fire Service	Aero	71	69	74	73	87
HRM	Common	19	19	19	19	19
Office Language	Aero	3	2	2	2	3
Stores	Aero	1	1	1	1	1
Finance & Accounts	Common	9	8	7	7	8



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Particulars (No. of employees)	Classification as per AAI	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 (till COD)
Cargo	Aero	0	0	1	2	1
Commercial	Non-Aero	5	4	4	4	5
Civil Engineering	Aero	11	10	12	13	12
Electrical Engineering	Aero	12	15	15	16	14
CNS - Other than Airport Systems	ANS	68	57	55	55	52
CNS - Airport system	Aero	0	1	1	1	1
Land Management	Non-Aero	0	0	0	0	0
IT	Aero	0	1	1	1	1
ATC	ANS	94	97	93	96	112
<b>Total</b>		<b>337</b>	<b>320</b>	<b>326</b>	<b>330</b>	<b>357</b>
<b>Employee Ratio (Aero : ANS : Non Aero)</b>						
Aero		45.95%	46.08%	49.33%	49.01%	48.79%
Non Aero		1.62%	1.37%	1.33%	1.32%	1.52%
ANS		52.43%	52.56%	49.33%	49.67%	49.70%
<b>Employee Ratio for (AERO : Non Aero)</b>						
Aero		96.60%	97.12%	97.37%	97.39%	96.99%
Non Aero		3.40%	2.88%	2.63%	2.61%	3.01%

Source: True up submissions of AAI

- 5.2.6. The Study evaluated the basis for computing the Employee ratio as submitted by AAI and observed the classification to be generally appropriate. However, it was noted that the costs directly pertaining to the ANS employees have already been excluded from the O&M expenses, but the common expenses are included. Accordingly, the Study considered the common employees allocated to ANS as deemed non-aeronautical employees since such costs are not a subject of the Study report. Based on the above adjustment, the revised employee ratio computed by the Study is as follows:

**Table 23: Employee ratio of AAI as per the Study**

Particulars (No. of employees)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
<b>No. of resources</b>					
ANS	162	154	148	151	164
Aero	142	135	148	149	161
Non-Aero	5	4	4	4	5
Common	28	27	26	26	27
<b>Total</b>	<b>337</b>	<b>320</b>	<b>326</b>	<b>330</b>	<b>357</b>
<b>Reallocation of common resources</b>					
ANS (deemed non-aeronautical)	14.68	14.19	12.83	12.91	13.42
Aero	12.87	12.44	12.83	12.74	13.17
Non-Aero	0.45	0.37	0.35	0.34	0.41
<b>Total</b>	<b>28.00</b>	<b>27.00</b>	<b>26.00</b>	<b>26.00</b>	<b>27.00</b>
<b>Employee count after reallocation of common resources</b>					
Aero	154.87	147.44	160.83	161.74	174.17
Non-Aero	20.13	18.56	17.17	17.26	18.83
ANS	162.00	154.00	148.00	151.00	164.00
<b>Total</b>	<b>337.00</b>	<b>320.00</b>	<b>326.00</b>	<b>330.00</b>	<b>357.00</b>
<b>Employee Ratio (Aero: ANS : Non Aero)</b>					
Aero	45.95%	46.08%	49.33%	49.01%	48.79%
Non-Aero	5.97%	5.80%	5.27%	5.23%	5.27%

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Particulars (No. of employees)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
ANS	48.07%	48.13%	45.40%	45.76%	45.94%
<b>Employee Ratio for (AERO : Non Aero)</b>					
Aero	88.50%	88.82%	90.35%	90.36%	90.24%
Non-Aero	11.50%	11.18%	9.65%	9.64%	9.76%

Source: True up submissions of AAI

5.2.7. Based on the above computation of the employee ratio, the following table shows its impact on aeronautical O&M expenses.

**Table 24: Impact of revision of the employee expenses on O&M expenses of AAI**

Impact (INR Cr.)	FY 17	FY 18	FY 19	FY 20	FY 21 (till COD)	Total
Revision of employee ratio	2.13	2.64	2.43	3.45	0.95	11.60

Note: The O&M expenses submitted by AAI were adjusted in para 5.2.3 due to revision in terminal area ratio

5.2.8. The O&M expenses after taking into account the revision of the terminal area ratio and the employee ratio is shown below.

**Table 25: Aeronautical expenses as per the Study post revision of terminal and employee ratio**

Particulars (INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 (Till COD)	Total
Employee Benefit	21.73	29.23	36.17	38.14	15.38	140.65
Administrative & Other Expenses	8.95	13.41	15.98	27.55	26.00	91.89
CHQ/RHQ	75.17	61.09	58.75	85.97	44.65	325.63
Repairs & Maintenance	28.64	31.67	40.84	35.51	18.84	155.51
Utility Expenses	18.48	19.91	20.31	20.79	10.05	89.54
Miscellaneous & Other Outflows	0.62	1.49	0.13	0.47	0.39	3.09
<b>Total</b>	<b>153.59</b>	<b>156.80</b>	<b>172.18</b>	<b>208.42</b>	<b>115.30</b>	<b>806.30</b>

Note: The O&M expenses submitted by AAI were adjusted in para 5.2.3 and 5.2.7 due to revision in terminal area ratio and employee ratio

### Summary of the assessment of allocation ratios

5.2.9. The Study has revised the terminal area ratio to 92.5:7.5 (aeronautical : non-aeronautical) as a result of which there is a reduction of INR 0.58 Cr in the aeronautical O&M expenses (Refer Para 5.2.3).

5.2.10. The Study further revised the employee ratio as a result of which there is a reduction of INR 11.60 Cr in the aeronautical O&M expenses. (Refer Table 24).

5.2.11. Accordingly, the aeronautical O&M expenses were computed as given in Table 25.

### 5.3. Reallocation of Common expenses

5.3.1. The study has assessed AAI's proposition of allocation basis of expenses along with categorisation of expenses between Aeronautical, ANS and Non-aeronautical services. The study has suggested reallocation of Operation and Maintenance expenses to determine efficient O&M expenses and has proposed the following adjustments:

#### Employee expenses

5.3.2. Under employee expenses, it is observed that AAI has considered the entire retirement benefit provided at CHQ as aeronautical. As per Para 14.8 of the Tariff Order No. 14/2018-19 dated 23<sup>rd</sup> July 2018 for SVPIA for SCP, the Authority had proposed to use the ratio of 95 : 5 (aeronautical : non aeronautical) for

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retirement benefits provided at CHQ. Accordingly, the allocation of the retirement benefit allocated to CHQ/RHQ was revised as follows:

**Table 26: Reallocation of retirement benefits of AAI as per the Study**

Particulars (INR Cr.)	Allocation	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 (Till COD)	Total
Retirement benefit as per AAI (A)	100% aero	0.86	4.60	8.54	0.00	3.10	17.10
Retirement benefit as per the Study (B = 95% x A)	95% aero	0.82	4.37	8.11	0.00	2.95	16.25
Impact (C = A – B)		0.04	0.23	0.43	0.00	0.16	0.86
Aero employee expenses as per AAI (D) (Refer Table 25)		21.73	29.23	36.17	38.14	15.38	140.65
Aero employee expenses as per the Study (D-C)		21.69	29.00	35.74	38.14	15.22	139.79

**Administrative & General Expenses:**

- 5.3.3. As per the true up submissions of AAI, the municipal tax expenses incurred in SCP were INR 26.78 Cr., which is unusually high. Hence, AAI was requested to share the breakup of this expense as well as the justification for incurring this substantial amount. AAI vide their email dated 16<sup>th</sup> June 2022 stated that “AAI had not received a demand for municipal taxes in the last 10 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 2010-11 to 2020-21 (Up to COD).”
- 5.3.4. AAI also stated that “The total expenses accounted under the GL code - "732001000" is Rs. 26.78 crs, against this Rs. 23.42 Crs is towards Municipal taxes, the balance of Rs. 3.36 crs pertains to other taxes such as Cantonment Taxes, water & sewerage taxes, etc.,”.
- 5.3.5. In the true up proposal, AAI had considered the entire municipal tax as 100% aeronautical. However, in the clarifications provided vide their email dated 16<sup>th</sup> June 2022, AAI revised the allocation of the municipal tax expense as per the classifications given in Table 27. As per the revised submissions, the aeronautical municipal tax expense was INR 25.87 Cr.
- 5.3.6. The Study examined the allocation carried out by AAI and observed that AAI had classified the tax related to airport school building as aeronautical whereas this is not an aeronautical activity. Further, the tax component associated with certain common facilities such as the terminal support buildings were classified as aeronautical. The Study reclassified the tax components appropriately as shown in the following table and recomputed the aeronautical municipal taxes.

**Table 27: Reclassification of the municipal tax as per the Study**

Sl. No.	Building / Pavement	Classification as per AAI	Classification as per the Study
<b>Breakup of Municipal tax</b>			
1	AAI and BCAS Integrated Building	Building is built in equal share	Building is built in equal share
2	Airport School Building	Common facility however treated as Aero	<b>Non-aeronautical</b>
3	Community Hall	Employee Ratio	<b>Revised Employee Ratio</b>
4	AAI Colony	Quarters Ratio	Quarters Ratio
5	Terminal - 2 Building	Terminal Building - 2 Ratio	<b>Revised Terminal Area Ratio</b>
6	A/c plant & Sub-station for T2	100% Aero	<b>Revised Terminal Area Ratio</b>
7	MT Workshop	100% Aero	100% Aero
8	Fire Station	100% Aero	100% Aero
9	Medical Emergency Building	Employee Ratio	<b>Revised Employee Ratio</b>
10	Radar Building	100% ANS	100% ANS
11	Glide Path Building	100% ANS	100% ANS
12	Localizer Building	100% ANS	100% ANS

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Sl. No.	Building / Pavement	Classification as per AAI	Classification as per the Study
13	Gagan Building	100% ANS	100% ANS
14	CISF Barrack	100% Aero	100% Aero
15	ATC Tower	100% ANS	100% ANS
16	A/c plant & Sub-station for T1	100% Aero	<b>Revised Terminal Area Ratio</b>
17	Runway 05/23	100% Aero	100% Aero
18	Parallel Taxi Track	100% Aero	100% Aero
19	Apron in Front of T-2	100% Aero	100% Aero
<b>Breakup of Cantonment tax</b>			
1	Airport Terminal-1	TBLR	<b>Revised Terminal Area Ratio</b>
2	Airport Terminal-3	TBLR	<b>Revised Terminal Area Ratio</b>
3	Airport Terminal-4	TBLR	<b>Revised Terminal Area Ratio</b>
4	Airport Ceremonial Lounge	TBLR	<b>Revised Terminal Area Ratio</b>
5	Airport Powerhouse adjacent to T-3	100% Aero	100% Aero
6	Airport Director Residence	100% Aero	100% Aero

Source: Clarifications received from AAI

- 5.3.7. Based on the above reclassifications, the aeronautical municipal tax was redetermined by the Study as given in the following table:

**Table 28: Reallocated municipal tax of AAI as per the Study**

Expense (INR Cr.)	Allocation	FY 17	FY 18	FY 19	FY 20	FY 21 (till COD)	Total
<b>Total as per AAI</b>							
Municipal tax and cantonment tax		0.26	0.26	0.26	5.98	20.04	26.78
<b>Aeronautical as per AAI (A)</b>	100% Aero	0.26	0.26	0.26	5.98	20.04	26.78
<b>Revised Aeronautical as per Study* (B)</b>	Classifications as per the Study (Refer Table 27)	0.24	0.24	0.24	5.67	19.00	25.41
Overall impact (A – B)		0.01	0.01	0.01	0.31	1.03	1.38

\*After reallocating the expenses and bifurcating on the basis of reclassifications mentioned in Table 27

Source: Clarifications received from AAI

- 5.3.8. Certain A&G expenses such as “Cons. Of Elec.Spares”, arbitration expenses and legal fees and expenses were allocated as 100% aeronautical. However, these charges are not applicable specifically to the aeronautical activities at the airport. The airport caters to both aeronautical and commercial activities. Therefore, it would not be fair to consider these costs as entirely aeronautical. In the absence of the details regarding the cases or disputes to which these expenses pertain to, the Gross Block ratio would be more appropriate for the allocation of these expenses since these are believed to be incurred for the airport in general. Accordingly, the allocation was revised. The impact of this change is as follows:

**Table 29: Reallocated A&G expenses based on Gross Block ratio**

Expense (INR Cr.)	Allocation	FY 17	FY 18	FY 19	FY 20	FY 21 (till COD)	Total
<b>Aeronautical as per AAI</b>							
Cons. Of Elec.Spares (A)	100% Aero	0.00	0.01	0.06	0.01	0.00	0.08
Arbitration Expenses (B)		0.00	-	0.48	-	-	0.48
Legal Fees (C)		0.01	0.14	0.13	0.07	0.04	0.40
Total (D = A + B + C)		0.02	0.15	0.67	0.08	0.05	0.95
<b>Revised Aeronautical as per Study*</b>							
Cons. Of Elec.Spares (E)	Gross block	0.00	0.00	0.05	0.01	0.00	0.06

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Expense (INR Cr.)	Allocation	FY 17	FY 18	FY 19	FY 20	FY 21 (till COD)	Total
Arbitration Expenses (F)		0.00	-	0.40	-	-	0.40
Legal Fees (G)		0.01	0.12	0.11	0.06	0.04	0.33
Total (H =E+ G + E)		0.02	0.12	0.56	0.06	0.04	0.79
Overall impact (D - H)		0.00	0.02	0.11	0.01	0.01	0.16

*\*After reallocating the expenses to Common and bifurcating on the basis of Gross Block Ratio*

*Source: True up submissions of AAI*

5.3.9. As per the true up submissions of AAI, there was a line item called "CSR Capex" included under A&G expenses. AAI was requested to confirm whether CSR Capex is related to corporate social responsibility activities and to provide details of this expense. AAI vide their email dated 16<sup>th</sup> June 2022 stated the following: "AAI undertook CAPEX relating to Corporate Social Responsibility (CSR) activity in FY 2018-19 and FY 2019-20 relating to single project of Solar Panel."

5.3.10. For certain A&G expenses such as "CSR Capex", the Study has looked into the matter of allowing CSR expenditure as a pass through based on the TDSAT's judgement dated December 16, 2020 in the matter of Bangalore International Airport Limited vs Airports Economic Regulatory Authority of India, which states that:

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

5.3.11. Accordingly, the CSR expense would have to be considered for passthrough. The allowable CSR expense is calculated based on the provision of Companies Act, 2013 where the average net profit in the aeronautical P&L for preceding three years is calculated and in case the value is positive CSR is computed as 2% of average net aeronautical profit. This is the maximum CSR eligibility applicable to be trued up as part of operational expenditure. However, in case where the CSR actually paid by AAI is lower than the eligible value, the Study has considered the actual CSR values as per the Trial Balance of AAI.

5.3.12. Accordingly, the CSR expenses were reviewed as follows. It was observed that the expenses incurred by AAI are within the allowable limits. Therefore, the Study has considered the CSR expenses as submitted by AAI.

**Table 30: Reallocated A&G expenses based on average aeronautical profit before tax**

Particulars (INR Cr.)	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21 (till COD)	Total
Aeronautical revenue (A)	118.50	118.40	158.80	186.51	209.39	195.37	166.55	33.45	791.28
Aeronautical operating expenditure (B)	78.00	79.60	86.40	108.32	128.23	119.19	144.62	105.55	605.91
Depreciation (C)	14.40	27.80	28.20	23.08	24.19	26.40	27.22	17.05	117.95
Aeronautical profit before tax (D = A – B – C)	26.10	11.00	44.20	55.11	56.97	49.79	-5.29	-89.15	67.43
Average aeronautical profit before tax (E)				27.10	36.77	52.09	53.95	33.82	203.74
Eligibility (If (E) > 0, then F = E * 2%, else 0)				0.54	0.74	1.04	1.08	0.68	4.07
Aeronautical CSR Expenditure by AAI (G)				0.00	0.00	0.27	0.54	0.00	
CSR expenses to be trued up (F = min (F,G))				0.00	0.00	0.27	0.54	0.00	
Overall impact (G – F)				0.00	0.00	0.00	0.00	0.00	

*Source: True up submissions of AAI*

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5.3.13. As per the true up submissions of AAI, there was a line item called "INT/Penalties-Govt", included under A&G expenses, amounting to INR 2.96 Cr. in SCP. AAI was requested to provide the reasons for incurring these penalties. AAI vide their email dated 16<sup>th</sup> June 2022, stated the following "Interest and Penalties includes interest paid to income tax/GST department for late payment of Taxes."

5.3.14. This "INT/Penalties-Govt" expense was allocated by AAI using the Employee ratio. However, as per paragraph 14.20.7 of the Tariff Order No. 14/2018-19 dated 23rd July 2018 for SVPIA for SCP, "All statutory levies in the nature of fees, levies, taxes and other such charges by Central or State Government or local bodies, local taxes and 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 payment, 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". Hence, this expense has been excluded. Accordingly, the allocation was revised. The impact of this change is as follows:

**Table 31: Exclusion of penalties paid by AAI**

Expense (INR Cr.)	Allocation	FY 17	FY 18	FY 19	FY 20	FY 21 (till COD)	Total
Total		0.00	-	-	2.96	-	2.96
<b>Aeronautical as per AAI (A)</b>	Employee ratio	0.00	-	-	2.68	-	2.68
<b>Revised Aeronautical as per Study* (B)</b>	Excluded	-	-	-	-	-	-
Overall impact (A – B)		0.00	-	-	2.68	-	2.68

\*After excluding penalties

Source: True up submissions of AAI

5.3.15. Certain A&G expenses such as "POL-other vehicles" etc were allocated as 100% aeronautical. However, charges related to fuel and office consumables are incurred for the airport in general and is not applicable specifically to the aeronautical activities at the airport. The airport and employees cater to both aeronautical and non-aeronautical activities. Therefore, it would not be fair to consider this cost as entirely aeronautical. Since these vehicles and the consumables are primarily used by the employees, the Employee ratio would be more appropriate for the allocation of these expenses. Accordingly, the allocation was revised. The impact of this change is as follows.

**Table 32: Reallocated A&G expenses based on Employee ratio**

Expense (INR Cr.)	Allocation	FY 17	FY 18	FY 19	FY 20	FY 21 (till COD)	Total
<b>Aeronautical as per AAI</b>							
POL-Other Vehicles (A)	100% Aero	0.12	0.14	0.06	0.03	-	0.34
CONS.-PAPER GLASS (B)		0.05	0.07	-	-	-	0.12
Total (C = A + B)		0.16	0.21	0.06	0.03	-	0.47
<b>Revised Aeronautical as per Study*</b>							
POL-Other Vehicles (D)	Employee ratio	0.10	0.12	0.06	0.02	-	0.31
CONS.-PAPER GLASS (E)		0.04	0.07	-	-	-	0.11
Total (F = D + E)		0.14	0.19	0.06	0.02	-	0.41
Overall impact (C – F)		0.02	0.02	0.01	0.00	-	0.05

\*After reallocating the expenses to Common and bifurcating on the basis of Employee Ratio

Source: True up submissions of AAI

5.3.16. Certain A&G expenses such as Other consumables were allocated as 100% aeronautical. However, the consumables get utilised across the terminal building and airport and allocating it as 100% aeronautical means that they primarily pertain to aeronautical activities, which is not true. Since the consumables are

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primarily used within the terminal building, the Terminal Area Ratio would be more appropriate for the allocation of this expense. Accordingly, the allocation was revised. The impact of this change is as follows

**Table 33: Reallocated A&G expenses based on Terminal area ratio**

Expense (INR Cr.)	Allocation	FY 2017	FY 2018	FY 2019	FY 2020	FY 21 (till COD)	Total
<b>Aeronautical as per AAI (A)</b>	100% Aero	0.19	0.18	0.23	0.32	-	0.93
<b>Revised Aeronautical as per Study* (B)</b>	Terminal area ratio	0.18	0.17	0.22	0.29	-	0.86
Overall impact (A – B)		0.01	0.01	0.02	0.02	-	0.07

\* After reallocating the expenses to Common and bifurcating on the basis of Terminal area ratio

Source: True up submissions of AAI

5.3.17. The following table summarizes the impact on the A&G expenses after making the adjustments to the line items listed below:

**Table 34: Summary of the impact on the A&G expenses as per the Study**

Particulars (in INR Cr.)	Refer	FY 17	FY 18	FY 19	FY 20	FY 21 (till COD)	Total
A&G expenses* (A)	Table 25	8.95	13.41	15.98	27.55	26.00	91.89
Impact due to:							
Municipal taxes (B)	Table 28	0.01	0.01	0.01	0.31	1.03	1.38
“Cons. Of Elec. Spares”, Legal fees and arbitration expenses (C)	Table 29	0.00	0.02	0.11	0.01	0.01	0.16
CSR Capex (D)	Table 30	-	-	-	-	-	-
Exclusion of penalty (E)	Table 31	0.00	-	-	2.68	-	2.68
“POL-Other Vehicles” and “CONS.-PAPER GLASS” (F)	Table 32	0.02	0.02	0.01	0.00	-	0.05
Other consumables (G)	Table 33	0.01	0.01	0.02	0.02	-	0.07
Total impact due to reallocation (H = B + C + D + E + F + G)		0.05	0.08	0.15	3.02	1.04	4.33
Revised A&G expenses (A – H)		8.90	13.33	15.84	24.53	24.96	87.55

\* Note: The A&G expenses submitted by AAI were adjusted in para 5.2.3 and 5.2.7 due to revision in terminal area and employee ratio

### Repair & Maintenance Expenses

5.3.18. As per the Tariff Order (Order No. 14/2018-19) for the Second Control period, the Authority had proposed to exclude ANS-related expenses for collection charges, R&M other buildings and R&M Sec equipment from aeronautical expenses. AAI was asked to clarify if any ANS expenses have been included under O&M expenses for the period of FY 17-FY 21 to which they stated the following vide their email dated 16<sup>th</sup> June 2022: “AAI accounts Airport related cost and revenue under segment code under 40000 and ANS related cost and revenue are accounted under segment code 10000. The expenditure accounted under 40000 does not related to ANS related expenditure.”

5.3.19. Certain R&M expenses such as “Power and generation set”, “auto equipment” etc were allocated as 100% aeronautical. These expenses are incurred towards the maintenance and upkeep of buildings, equipment back-up power systems, and special repairs that benefit all activities at the airport and not just the aeronautical activities. Therefore, these charges should be treated as Common. In the absence of sufficient justifications from AAI to retain these expenses as Aeronautical, these have been allocated in the Gross Block Ratio considering that the benefits are accrued to the entire airport. Accordingly, the impact of this change is as follows:

**Table 35: Reallocated R&M expenses based on Gross block ratio**

Expense (INR Cr.)	Allocation	FY 17	FY 18	FY 19	FY 20	FY 21 (till COD)	Total
<b>Aeronautical as per AAI</b>							

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Expense (INR Cr.)	Allocation	FY 17	FY 18	FY 19	FY 20	FY 21 (till COD)	Total
R&M-TB&OTH.BLDGS-Ops (A)	100% Aero	2.31	1.89	3.90	4.25	2.60	14.96
R&M-OTH.BLDG (B)		0.06	0.00	-	-	-	0.06
R & M: CIVIL:GENERAL (C)		1.64	2.16	1.22	0.34	-	5.37
R & M: Spl Repairs (D)		2.07	-	5.50	0.77	0.03	8.36
R&M:POWR SU.&GEN.SET (E)		0.06	0.09	0.05	0.01	-	0.22
R & M: ELEC.:OTHERS (F)		0.01	0.00	0.06	0.05	-	0.12
R & M: Spl Repairs (G)		0.05	-	-	0.00	0.00	0.05
R&M:P&M/FOR./RR/GR. (H)		-	-	0.07	0.02	0.00	0.10
R & M: F&F-T.Bldg (I)		-	0.00	0.01	0.00	-	0.01
R&M:-Auto.Eqpts (J)		-	0.00	0.00	0.00	0.01	0.02
R&M:-Facil.Eqpts (K)		0.03	0.00	0.00	0.01	0.25	0.29
R&M: COMP., IT H/W (L)		0.07	0.11	0.56	0.99	0.03	1.76
Total (M=A+B+C+D+E+F+G+H+I+J+K+L)		6.31	4.26	11.38	6.43	2.93	31.31
<b>Revised Aeronautical as per Study*</b>							
R&M-TB&OTH.BLDGS-Ops (N)	Gross Block	1.96	1.57	3.25	3.57	2.18	12.54
R&M-OTH.BLDG (O)		0.05	0.00	-	-	-	0.05
R & M: CIVIL:GENERAL (P)		1.40	1.80	1.02	0.28	-	4.50
R & M: Spl Repairs (Q)		1.75	-	4.59	0.64	0.03	7.01
R&M:POWR SU.&GEN.SET (R)		0.05	0.07	0.04	0.01	-	0.18
R & M: ELEC.:OTHERS (S)		0.01	0.00	0.05	0.04	-	0.10
R & M: Spl Repairs (T)		0.05	-	-	0.00	0.00	0.05
R&M:P&M/FOR./RR/GR. (U)		-	-	0.06	0.01	0.00	0.08
R & M: F&F-T.Bldg (V)		-	0.00	0.01	0.00	-	0.01
R&M:-Auto.Eqpts (W)		-	0.00	0.00	0.00	0.01	0.02
R&M:-Facil.Eqpts (X)		0.02	0.00	0.00	0.01	0.21	0.24
R&M: COMP., IT H/W (Y)		0.06	0.09	0.47	0.83	0.02	1.47
Total (Z=N+O+P+Q+R+S+T+U+V+W+X+Y+Z)		5.35	3.54	9.50	5.40	2.45	26.24
<b>Overall impact (M – Z)</b>		0.95	0.72	1.88	1.04	0.48	5.07

\*After reallocating the expenses to Common and bifurcating on the basis of Gross Block Ratio

Source: True up submissions of AAI

5.3.20. Certain R&M expenses related to “residential building”, “cars” etc were allocated as 100% aeronautical. However, these expenses are incurred towards the maintenance and upkeep of vehicles, offices and residential buildings that are used by the employees at the airport. Therefore, these charges should be treated as Common. In the absence of sufficient justifications from AAI to retain these expenses as Aeronautical, these have been allocated using the Employee ratio. The impact of this change is as follows:

**Table 36: Reallocated R&M expenses based on Employee ratio**

Expense (INR Cr.)	Allocation	FY 17	FY 18	FY 19	FY 20	FY 21 (till COD)	Total
<b>Aeronautical as per AAI</b>							
R&M-RESDL.BLDG (A)	100% Aero	0.59	0.95	0.61	1.21	0.98	4.34
R & M: CARS (FBT) (B)		0.00	0.00	0.00	0.17	-	0.17
R&M:PICKUP VAN/BUSES (C)		0.00	0.00	0.00	-	-	0.00
R & M: VEHICLE:OTHER (D)		0.03	0.01	0.01	0.05	-	0.09
R & M: F&F-Office (E)		0.06	0.00	0.05	0.06	-	0.17
Total (F = A + B + C + D + E)		0.67	0.96	0.67	1.49	0.98	4.77



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Expense (INR Cr.)	Allocation	FY 17	FY 18	FY 19	FY 20	FY 21 (till COD)	Total
<b>Revised Aeronautical as per Study*</b>							
R&M-RESDL.BLDG (G)	Employee ratio	0.52	0.85	0.55	1.09	0.88	3.90
R & M: CARS (FBT) (H)		0.00	0.00	0.00	0.15	-	0.16
R&M:PICKUP VAN/BUSES (I)		0.00	0.00	0.00	-	-	0.00
R & M: VEHICLE:OTHER (J)		0.02	0.01	0.01	0.04	-	0.08
R & M: F&F-Office (K)		0.05	0.00	0.05	0.05	-	0.15
Total (L = G + H + I + J + K)		0.59	0.86	0.61	1.34	0.88	4.28
Overall impact (F – L)		0.08	0.11	0.06	0.14	0.10	0.49

\*After reallocating the expenses to Common and bifurcating on the basis of Employee Ratio

Source: True up submissions of AAI

5.3.21. Certain R&M expenses related to “communication equipment”, “navigation equipment” etc were allocated as 100% aeronautical. However, these expenses are incurred in the provision of Air Navigation Services (ANS). These services are managed separately by AAI and are not part of the current tariff determination process. Therefore, such expenses have been excluded. Accordingly, the allocation was revised. The impact of this change is as follows:

**Table 37: Reallocated R&M expenses related to ANS\***

Expense (INR Cr.)	Allocation	FY 17	FY 18	FY 19	FY 20	FY 21 (till COD)	Total
<b>Aeronautical as per AAI</b>							
R&M-Comm. Eqpts (A)	100% Aero	0.01	0.01	0.03	0.03	-	0.08
R&M:-Nav.Eqpts (B)		-	0.00	0.01	0.01	-	0.03
R&M-Other CNS Eqpt (C)		0.00	0.01	0.01	0.02	0.05	0.09
Total (D = A + B + C)		0.01	0.02	0.06	0.06	0.05	0.20
<b>Revised Aeronautical as per Study</b>							
R&M-Comm. Eqpts (E)	ANS*	-	-	-	-	-	-
R&M:-Nav.Eqpts (F)		-	-	-	-	-	-
R&M-Other CNS Eqpt (G)		-	-	-	-	-	-
Total (H = E + F + G)		-	-	-	-	-	-
Overall impact (D-H)		0.01	0.02	0.06	0.06	0.05	0.20

Source: True up submissions of AAI

\*ANS activities are not part of the tariff determination exercise, therefore, ANS related expenses have been excluded from O&M expenses.

5.3.22. The following table summarizes the impact on the R&M expenses after making the adjustments to the line items explained above:

**Table 38: Summary of the impact on the R&M expenses as per the Study**

Particulars (in INR Cr.)	Refer	FY 2017	FY 2018	FY 2019	FY 2020	FY 21 (till COD)	Total
R&M expenses* (A)	Table 25	28.64	31.67	40.84	35.51	18.84	155.51
Reallocation from Aeronautical to Common (Gross Block Ratio) (B)	Table 35	0.95	0.72	1.88	1.04	0.48	5.07
Reallocation from Aeronautical to Common (Employee Ratio) (C)	Table 36	0.08	0.11	0.06	0.14	0.10	0.49
Exclusion of ANS Expenses (D)	Table 37	0.01	0.02	0.06	0.06	0.05	0.20
Total impact due to reallocation		1.04	0.85	2.01	1.24	0.63	5.76

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Particulars (in INR Cr.)	Refer	FY 2017	FY 2018	FY 2019	FY 2020	FY 21 (till COD)	Total
(E = B + C + D)							
Revised R&M expenses (A – E)		27.60	30.82	38.83	34.27	18.22	149.75

\* Note: The R&M expenses submitted by AAI were adjusted in para 5.2.3 and 5.2.7 due to revision in terminal area and employee ratio

Source: True up submissions of AAI

5.3.23. However, as observed in Para 4.5.14, the R&M expenses incurred by AAI were significantly higher than the projections approved by AERA in the Tariff Order for the Second Control Period. Therefore, these expenses have been further scrutinised in Para 5.6.

### Utility expenses

5.3.24. AAI has confirmed vide their email dated 10<sup>th</sup> June 2022 that the recoveries from concessionaires have been netted off from the utility expenses. For the bifurcation of the utility expenses between aeronautical and ANS, AAI has used a ratio named “Electricity Ratio” and has given the following justification in this regard – “Ratio for bifurcation of Electricity expenses into ANS and AERO is prepared based on the average consumption of units by the Equipment used for ANS Directorate”.

5.3.25. Additionally, AAI was requested to provide the rationale behind the computation of the electricity ratio and the calculation of this ratio to which they stated the following vide their email dated 16<sup>th</sup> June 2022: “AAI does not have bifurcated meters for ANS, Airports, cargo, Non-Aero and Aero. The electricity ratio has been arrived at based on the load assessed by the electrical department of AAI. Since Non-Aero Revenue is accounted against electricity cost hence there was need to allocate cost towards Non Aero.”

5.3.26. AAI had listed the following table which shows the calculation of the electricity ratio

**Table 39: Calculation of the electricity ratio as per AAI**

FY	2016-17	2017-18	2018-19	2019-20	2020-21
Aero	88.11%	88.11%	88.11%	88.11%	86.13%
Non Aero	0.91%	0.89%	0.89%	0.89%	0.89%
ANS	9.00%	9.00%	9.00%	9.00%	11.00%
Cargo	2.00%	2.00%	2.00%	2.00%	2.00%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: Clarifications received from AAI

5.3.27. Certain Utility expenses such as water charges were allocated using the employee ratio. However, since this charge is common to the airport and is not incurred specifically towards offices or employees, the Gross Block ratio would be more appropriate for the allocation of this expense. Accordingly, the allocation was revised. The impact of this change is as follows:

**Table 40: Reallocated Utility expenses based on Gross Block ratio as per the Study**

Expense (INR Cr.)	Allocation	FY 17	FY 18	FY 19	FY 20	FY 21 (till COD)	Total
Water charges		0.24	0.24	0.25	0.23	0.12	1.07
<b>Aeronautical as per AAI (A)</b>	Employee ratio	0.21	0.21	0.22	0.21	0.11	0.96
<b>Revised Aeronautical as per Study* (B)</b>	Gross block ratio	0.20	0.20	0.21	0.20	0.10	0.90
Overall impact (A – B)		0.01	0.01	0.02	0.02	0.01	0.06

\*After reallocating the expenses to Common and bifurcating on the basis of Gross Block Ratio

Source: True up submissions of AAI

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5.3.28. The following table summarizes the impact on the utility expenses after making the adjustments to the line item as listed below:

**Table 41: Summary of the impact on the Utility expenses as per the Study**

Particulars (INR Cr.)	Refer	FY 17	FY 18	FY 19	FY 20	FY 21 (till COD)	Total
Utility expenses* (A)	Table 25	18.48	19.91	20.31	20.79	10.05	89.54
Impact due to reallocation (B)	Table 40	0.01	0.01	0.02	0.02	0.01	0.06
Revised utility expenses (A – B)		18.47	19.89	20.30	20.77	10.04	89.47

*\*Note: The utility expenses submitted by AAI were adjusted in para 5.2.3 and 5.2.7 due to revision in terminal area and employee ratio*

*Source: True up submissions of AAI*

### Miscellaneous and other outflows

5.3.29. For the expense items included under Miscellaneous and other outflows, the Study evaluated the ratios that AAI used to allocate the expenses and found the same to be appropriate. Hence, no adjustment was carried out in the Study for the Miscellaneous and other outflows.

### CHQ/RHQ expenses

5.3.30. As per the true up submissions of AAI, the CHQ/RHQ expenses were allocated as 95% aeronautical and 5% non-aeronautical. For further analysis of this expense, AAI was requested to share the breakup of CHQ/RHQ expenses and the same was provided by AAI vide their email dated 16<sup>th</sup> June 2022. It was noticed that the CHQ/RHQ expenses also included legal expenses and expenses related to Mumbai JVC Cell which were driving up the CHQ/RHQ expenses significantly.

5.3.31. In the tariff order for Pune airport for the Third Control period (Para 2.8.21 of Order No. 45/2021-22 dated 17<sup>th</sup> March 2022), AERA noted that the legal and arbitration expenses incurred at CHQ/RHQ level should be analysed and distributed on a case-to-case basis. Since, such a breakup has not been provided by AAI, the Study has excluded the legal expenses from CHQ/RHQ expenses, considering that users should not have to bear the cost of services that are not availed by them.

5.3.32. Further, in the tariff order for Pune airport, the Authority had also noted that the portion of JVC employee costs were to be paid by MIAL as per Operation, Maintenance and Development Agreement (OMDA) and that it sees no value addition in general of such JVC cells in the tariff determination process or for the provision of aeronautical services at the respective airports. Since these expenses do not bear any cost-relatedness to the aeronautical services provided at the respective airports, the Study has excluded the Mumbai JVC cell expenses from the CHQ/RHQ expenses.

5.3.33. AAI had excluded pay and allowances of employees involved in ATM, CNS & Cargo department at CHQ/RHQ while working out the allocation to airport. However, no exclusion has been done for support services of department relating to HR, Finance, Civil etc. AAI had considered 5% of expenses (net off revenue) towards non-aeronautical income. Manpower of CHQ/RHQ is also providing services to activities that are not aeronautical i.e., ATC, CNS cadres at respective airports for which appropriate adjustment was not carried out. In order to give effect to the reallocation as mentioned, it is considered that 20% of CHQ/RHQ pay and allowances be excluded towards the following:

- Support services to ANS, Cargo & Commercial at CHQ, RHQ and airport
- Officials of Directorate of Commercial

5.3.34. The Study has considered the remaining balance of 80% of CHQ/RHQ expense to be allocated to the airport. This approach is also in alignment with the decision taken by AERA in the matter of determination of aeronautical tariffs for Pune airport for the Third Control period (Para 2.8.17-2.8.20 of Order No. 45/2021-22 dated 17<sup>th</sup> March 2022).

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5.3.35. Accordingly, these adjustments were carried out in the Study which showed the following impact:

**Table 42: Allocation of CHQ/RHQ expenses as per AAI vs the Study**

Expense (INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 21 (till COD)	Total
<b>Revised as per the Study*</b>						
Total CHQ/RHQ (A)	79.13	64.31	61.84	90.49	46.96	342.73
Less: Legal (B)	0.25	0.66	0.71	0.32	0.36	2.31
Less: Mumbai JVC (C)	35.60	14.05	29.33	43.39	1.45	123.82
Revised CHQ/RHQ (D = A - B - C)	43.28	49.60	31.80	46.77	45.16	216.60
Employee Related (E)	45.08	48.96	42.06	50.07	42.19	228.36
20% of employee related expenses (F = 20%*E)	9.02	9.79	8.41	10.01	8.44	45.67
Aero CHQ/RHQ (G = D - F)	34.26	39.80	23.39	36.76	36.72	170.92
<b>As per AAI</b>						
Aero as per AAI (H)	75.17	61.09	58.75	85.97	44.65	325.63
Total impact (H - G)	40.91	21.29	35.36	49.21	7.93	154.71

\*After excluding legal and Mumbai JVC expenses and bifurcating employee expenses in the 80 : 20 ratio (aero : non-aero)

Source: True up submissions of AAI, Clarifications received from AAI

**Summary of reallocation of expenses:**

5.3.36. Based on the observations and reasoning described in Para 5.3, the following table summarises the impact on expenses after their reallocation:

**Table 43: Impact of reallocation of expenses as per the Study**

Particulars (INR crore)	Allocation as per		FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 (till COD)	Total
	AAI	Study						
Employee expenses-Retirement benefits (A)	Aeronautical	95 :5 (aero : non aero)	0.04	0.23	0.43	-	0.16	0.86
A&G expenses (B)	Aeronautical	Reclassified as per Table 27	0.01	0.01	0.01	0.31	1.03	1.38
	Aeronautical	Gross Block	0.00	0.02	0.11	0.01	0.01	0.16
	Employee ratio	Average aero PBT	-	-	-	-	-	-
	Employee ratio	Excluded	0.00	-	-	2.68	-	2.68
	Aeronautical	Employee	0.02	0.02	0.01	0.00	-	0.05
	Aeronautical	Terminal area	0.01	0.01	0.02	0.02	-	0.07
Repair & Maintenance Expenses (C)	Aeronautical	Gross Block	0.95	0.72	1.88	1.04	0.48	5.07
		Employee	0.08	0.11	0.06	0.14	0.10	0.49
		Excluded	0.01	0.02	0.06	0.06	0.05	0.20
Utility expenses (D)	Employee ratio	Gross Block	0.01	0.01	0.02	0.02	0.01	0.06
CHQ/RHQ expense (E)	95 :5 (aero : non aero)	Reallocated as per Table 42	40.91	21.29	35.36	49.21	7.93	154.71
Total (A+B+C+D+E)			42.05	22.46	37.96	53.49	9.76	165.72

Source: True up submissions of AAI

#### 5.4. Overall impact of reallocation of expenses

5.4.1. The total year-wise impact on various heads under O&M expenses as a result of the proposed reallocation stated in Para 5.2 and 5.3 is shown below.

**Table 44: Overall impact of reallocation of expenses**

Particulars (INR Cr.)	Refer	FY 2017	FY 2018	FY 2019	FY 2020	FY 21 (till COD)	Total
Aeronautical expenses as per AAI (A)	Table 18	155.80	159.52	174.72	212.05	116.39	818.48
Impact of terminal area revision (B)	Table 20	0.08	0.08	0.10	0.18	0.14	0.58
Impact of employee ratio revision (C)	Table 24	2.13	2.64	2.43	3.45	0.95	11.60
<b>Total impact due to terminal area revision and employee ratio revision (B + C)</b>		2.21	2.72	2.53	3.63	1.09	12.18
Total aeronautical expenses after terminal area revision and employee ratio revision (D = A – B – C)		153.59	156.80	172.18	208.42	115.30	806.30
Impact due to reallocation of:							
Employee expenses-Retirement benefits (E)	Table 26	0.04	0.23	0.43	-	0.16	0.86
Administrative & Other Expenses (F)	Table 34	0.05	0.08	0.15	3.02	1.04	4.33
Repairs & Maintenance (G)	Table 38	1.04	0.85	2.01	1.24	0.63	5.76
Utility Expenses (H)	Table 41	0.01	0.01	0.02	0.02	0.01	0.06
Miscellaneous & Other Outflows (I)	Para 5.3.29	0	0	0	0	0	0
CHQ/RHQ expense (J)	Table 42	40.91	21.29	35.36	49.21	7.93	154.71
<b>Total impact of reallocation (K = E + F + G + H + I + J)</b>		42.05	22.46	37.96	53.49	9.76	165.72
<b>Aeronautical O&amp;M Expenses post reclassification as per the Study</b>	D – K	111.53	134.34	134.23	154.93	105.55	640.58

#### 5.5. Summary of segregation of expenses proposed by the Study

5.5.1. Thus, based on observations and reasoning described above, the summary of reallocation of expenses and their impact as per the Study is given below.

**Table 45: Basis for allocation of expenses as revised by the Study**

Expense Category	Expense Sub-Category / Description	Expenses classification as per		Impact (INR Cr.)
		AAI	Study	
Manpower expenses	Salary, wages & bonus	Common (Employee Ratio)	Common (Employee Ratio)	
	Retirement benefits	Aeronautical	95 :5 (aero : non aero)	0.86
A&G Expenses	Rent; Communication Expense; Travelling and Conveyance; Advertisement; Printing and Stationary	Common (Employee Ratio)	Common (Employee Ratio)*	
	Collection Charges – UDF	Aeronautical	Aeronautical	-
	Consumption Of electrical spares , Arbitration expenses and Legal Fee	Aeronautical	Common (Gross block)	0.16
	Municipal Taxes	Aeronautical	Reclassified as per Table 27	1.38
	Int./Penalties-Government	Common (Employee Ratio)	Common (Excluded)	2.68
	CSR-Capex	Common (Employee Ratio)	Common (Average aero PBT)	-
	Fuel expenses and office consumables	Aeronautical	Common (Employee Ratio)	0.05

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Expense Category	Expense Sub-Category / Description	Expenses classification as per		Impact (INR Cr.)
		AAI	Study	
	Other consumables	Aeronautical	Common (Terminal ratio)	0.07
R&M Expenses	R&M costs for buildings, Plant & Machinery and Roads, and culverts	Aeronautical	Aeronautical	-
	Buildings, common equipment power back-up systems, special repairs	Aeronautical	Common (Gross block)	5.07
	Communication and navigation equipment	Aeronautical	Common (Excluded)	0.20
	Vehicles, offices and residential buildings	Aeronautical	Common (Employee Ratio)	0.49
CHQ/RHQ Expenses	CHQ/RHQ expenses allocated to SVPIA	Common (95%)	Reallocated as per Table 42	154.17
Utility Expenses	Power, fuel and DG set charges	Common (Electricity Ratio)	Common (Electricity Ratio)	-
	Water Charges	Common (Employee Ratio)	Common (Gross block)	0.06
<b>Total</b>	<b>Impact of reallocation of expenses</b>			<b>165.72</b>

*Note: The recomputation of the terminal area ratio has led to the reduction of INR 0.58 Cr (Refer table 20) in the aeronautical O&M expenses as per the Study and the recomputation of employee ratio has led to the reduction of INR 11.60 Cr (Refer table 24) in the aeronautical O&M expenses as per the Study.*

5.5.2. The aeronautical expenses as per the Study after post revision of terminal area ratio & employee ratio and the reallocation of expenses is given below.

**Table 46: Aeronautical expenses for AAI FOR SCP till COD as reallocated by the Study**

Particulars (INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 (Till COD)	Total
Employee Benefit	21.69	29.00	35.74	38.14	15.22	139.79
Administrative & Other Expenses	8.90	13.33	15.84	24.53	24.96	87.55
CHQ/RHQ	34.26	39.80	23.39	36.76	36.72	170.92
Repairs & Maintenance	27.60	30.82	38.83	34.27	18.22	149.75
Utility Expenses	18.47	19.89	20.30	20.77	10.04	89.47
Miscellaneous & Other Outflows	0.62	1.49	0.13	0.47	0.39	3.09
<b>Total</b>	<b>111.53</b>	<b>134.34</b>	<b>134.23</b>	<b>154.93</b>	<b>105.55</b>	<b>640.58</b>

5.5.3. As seen above, there was an impact of INR 177.9 Cr. (INR 165.72 Cr + INR 12.18 Cr) on the O&M expenses due to the revision in the terminal area ratio, employee ratio and the reallocation of expenses. However, it was observed that the R&M expenses are unreasonably high from an internal benchmarking perspective. This expense has been further adjusted in the next paragraph.

## 5.6. Rationalisation of allowable expenses based on benchmarking by the Study

5.6.1. It was observed in para 4.5.14 that the R&M expenses incurred by AAI in SCP was unreasonably high. For further analysis, the R&M expenses as determined in Table 46 are taken as a % of the opening RAB of AAI. It is to be noted that this R&M expense is exclusive of the runway recarpeting expense as the runway recarpeting expense is not an annual recurring expense and is treated as an exceptional case. Further, the original runway was constructed in 1990 and has fully depreciated. Therefore, it's contribution in the opening RAB is nil. The following table shows the R&M expense exclusive of Runway recarpeting expense as a % of opening RAB.

**Table 47: R&M expense as a % of opening RAB as per the Study**

Particulars (INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 (Till COD)	Total
R&M expense (A) (Refer table 46)	27.60	30.82	38.83	34.27	18.22	149.75
Runway recarpeting expense (B) (Refer table 13)	6.76	6.76	6.76	6.76	6.76	33.82

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Particulars (INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 (Till COD)	Total
R&M expense exclusive of Runway recarpeting expense (C = A – B)	20.84	24.06	32.07	27.51	11.45	115.92
Opening RAB of AAI* (D)	293.75	299.09	288.39	295.62	328.92	
R&M expense as a % of opening RAB (C ÷ D × 100)	7.09%	8.04%	11.12%	9.31%	3.48%	

\*As determined by the Study on Allocation of Assets for SVPIA

5.6.2. It can be observed from the above table that the R&M expense as a % of opening RAB are higher than 7% except for FY 2021 (till COD). It is seen that in the case of Pune (Order No. 45/2021-22 dated 17<sup>th</sup> March 2022) and Calicut (Order No. 39/2021-22 dated 11<sup>th</sup> February 2022), AERA has considered the R&M expenses to be reasonable provided that they are within 6% of the Opening RAB for each Tariff Year. Therefore, the Study has considered 6% of Opening RAB to be the reasonable benchmark for R&M expenses.

5.6.3. Accordingly, the Study has considered the rationalisation of R&M expenses based on 6% of the opening RAB of AAI, in the absence of sufficient justification for the significant deviation.

5.6.4. The adjustments as mentioned in the above paras are shown in the following table:

**Table 48: Rationalisation of R&M expense of AAI based on benchmarking as per the Study**

Particulars (INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 (Till COD)	Total
R&M expense (Refer table 47) (A)	20.84	24.06	32.07	27.51	11.45	115.92
Opening RAB of AAI (B)	293.75	299.09	288.39	295.62	328.92	
6% of the opening RAB of AAI as per the Study (C = 6% * B)	17.62	17.95	17.30	17.74	19.74	90.35
<b>As per the Study</b>						
Rationalized R&M expenses (D = Minimum of A, C)	17.62	17.95	17.30	17.74	11.45	82.06
Rationalized R&M expenses inclusive of runway recarpeting expense	24.39	24.71	24.07	24.50	18.22	115.88
<b>Impact due to capping of R&amp;M expenses (A - D)</b>	3.21	6.11	14.76	9.77	-	33.86

5.6.5. It is observed from the above table that there was an impact of INR 33.86 Cr. on the O&M expenses due to the rationalisation of R&M expenses that were unreasonably high and for which AAI had not provided valid justifications.

## 5.7. Summary of allocation of expenses of AAI as per the Study

5.7.1. The overall impact as a result of the proposed reallocation and rationalisation of the O&M expenses by the Study is shown below.

**Table 49: Overall impact on O&M expenses of AAI as per the Study**

Particulars (INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 (till COD)	Total
Total aeronautical expenses as per AAI (A) (Refer table 18)	155.80	159.52	174.72	212.05	116.39	818.48
Impact of terminal area revision (B) (Refer table 20)	0.08	0.08	0.10	0.18	0.14	0.58
Impact of employee ratio revision (C) (Refer table 24)	2.13	2.64	2.43	3.45	0.95	11.60
<b>Total impact due to terminal area revision and employee ratio revision (B + C)</b>	2.21	2.72	2.53	3.63	1.09	12.18

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Particulars (INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 (till COD)	Total
Total aeronautical expenses after terminal area revision and employee ratio revision (D = A – B – C)	153.59	156.80	172.18	208.42	115.30	806.30
<b>Total impact of reallocation (Refer table 45) (E)</b>	42.05	22.46	37.96	53.49	9.76	165.72
Aeronautical O&M Expenses post reclassification as per the Study (F = D – E) (Refer table 46)	111.53	134.34	134.23	154.93	105.55	640.58
<b>Impact due to rationalisation of R&amp;M expenses (Refer table 48) (G)</b>	3.21	6.11	14.76	9.77	-	33.86
Aeronautical O&M Expenses as per the Study (F-G)	108.32	128.23	119.46	145.16	105.55	606.72
<b>Total impact of Study (B + C + E + G)</b>	47.48	31.29	55.26	66.89	10.85	211.76

5.7.2. The aeronautical expenses of AAI as per the Study after taking into account the revision of ratios, re-allocation of expenses and the rationalisation of R&M expenses is shown in the following table.

**Table 50: Aeronautical expenses for AAI for SCP till COD as per the Study**

Particulars (INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 (Till COD)	Total
Employee Benefit	21.69	29.00	35.74	38.14	15.22	139.79
Administrative & Other Expenses	8.90	13.33	15.84	24.53	24.96	87.55
CHQ/RHQ	34.26	39.80	23.39	36.76	36.72	170.92
Repairs & Maintenance	24.39	24.71	24.07	24.50	18.22	115.88
Utility Expenses	18.47	19.89	20.30	20.77	10.04	89.47
Miscellaneous & Other Outflows	0.62	1.49	0.13	0.47	0.39	3.09
<b>Total</b>	<b>108.32</b>	<b>128.23</b>	<b>119.46</b>	<b>145.16</b>	<b>105.55</b>	<b>606.72</b>

5.7.3. As can be seen in the table above, the aeronautical O&M expenses for AAI in SCP till COD was determined to be INR 606.72 Cr. as against INR 818.48 Cr. submitted by AAI. There was an impact of INR 211.76 Cr. due to the revisions made by the Study.



## 6. ASSESSMENT OF O&M EXPENSES OF AIAL FOR FY 2021 POST COD

### 6.1. Background

- 6.1.1. In February 2019, the Adani Enterprises-led Adani Airport Limited (AAL) won the rights of operations, management and development of the airport under the public-private partnership (PPP) model for a period of 50 years. On 14<sup>th</sup> February 2020, Concession Agreement was signed between Airport Authority of India (AAI) and Adani Ahmedabad International Airports Limited (AAIAL) and the Commercial Operation Date (COD) was achieved on 07<sup>th</sup> November 2020.
- 6.1.2. Accordingly, the O&M expense submission has been made by AIAL for the period from 07<sup>th</sup> November 2020 till 31<sup>st</sup> March 2021.
- 6.1.3. Further, vide their email dated 20<sup>th</sup> April 2022, AIAL requested that. *“We found that we have missed to include the Bank and Other finance Charges in the True-Up for FY21, though the same is included while projecting the next control period ARR. The amount can be verified from Financial statements schedule 22 and also from the MYTP sheet “Master Actuals Cell J107”. You may kindly consider the same while assessing the True-up for FY21.”*
- 6.1.4. Accordingly, the Bank and Other finance Charges have been taken into consideration for the assessment of O&M expenses of AIAL for FY 2021.
- 6.1.5. Similarly, vide their email dated 07<sup>th</sup> June 2022, AIAL requested that, *“We noted that we have missed to include Utility Charges of Rs. 4.34 Lakhs and O&M Expenses of Rs. 12.36 Lakhs (both pertaining to Cargo) in the True Up for FY 21, though the same included while projecting the next control period ARR. The amount can be verified from the MYTP sheet “Master\_Actuals-Linked” Cell “J82” and “J84” respectively for utility charges and O&M expenses. You may kindly consider the same while assessing the True-up for FY21.”*
- 6.1.6. Accordingly, the cargo related expenses have been taken into consideration for the assessment of O&M expenses of AIAL for FY 2021.
- 6.1.7. The following table shows the breakup of the various O&M expenses as submitted by AIAL.

**Table 51: Breakup of the various O&M expenses as per AIAL**

FY ending March 31 (INR Cr.)	AIAL 2020-21 (Post COD)
Manpower expenses - AAI employees	12.13
Manpower expenses – AIAL employees	13.58
Utility expenses	6.26
IT expenses	1.78
Rates & taxes	1.20
Security expenses	1.46
Security others	-
Corporate Allocation	6.98
Administrative Expenses	3.94
Insurance	0.85
R&M	10.37
Others	10.27
Runway recarpeting	-
Utility expenses (Cargo)	0.04
Cargo expenses	0.12
Bank and Other finance Charges	2.12
<b>Total</b>	<b>71.11</b>

Source: Submissions of AIAL

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6.1.8. The major expenses of AIAL have been analysed separately in the following paragraphs.

**Employee expenses**

6.1.9. In FY 2021, AIAL had operated the airport for a period of five months post COD within which they had incurred a substantial amount of INR 25.71 Cr.

6.1.10. AIAL was asked to justify this substantial increase in employee expenses to which they responded vide their email dated 07<sup>th</sup> April 2022 that:

*“Please note that cost towards AAI employees is an obligation mandated as per Concession Agreement. The cost towards AAI employees is paid based on actual invoices raised by AAI. It would be observed that there is close to 13% increase in AAI salary cost itself (Post COD) as compared with AAI salary cost (pre-COD). With respect to salary cost of AIAL employees, please note below:*

*1. As per Concession Agreement, post COD, AAI employees ranking DGM and above were at the Airport for 3 months post which they were taken back by AAI, against which AIAL has appointed HOD's for all the departments and also hired employees at the Airport.*

*2. Also, there are various functions, responsibilities, performance measures which are not performed by AAI and are now added as part of Private Airport Operator responsibility. This results in addition to headcounts and eventually the costs.*

*3. AIAL is a new Airport Operator who needs to build its manpower to run the Airport operations. AIAL needs to hire all people from outside who come at 25%-30% higher salaries. According to a recent Michael Page report titled “Talent Trends 2021,” better remuneration is the top reason for changing jobs. The report highlights that job seekers on an average expect around 20% salary hike at middle levels and 19% increase at director, Vice President and CXO levels from their current or last salary drawn. Even non-managerial level employees’ expectations are an average of 20%.”*

*4. AIAL would like to highlight the difficulties faced by airport operators while hiring a new workforce. This is indicative of the fact that the labour force suitable for the aviation sector is very limited. In the aviation sector while it is easy to get workforce for accounts, finance, administration etc. divisions, it is very difficult to get skilled workforce in airfield and terminal operations, engineering and maintenance and safety. To obtain and retain competent employees, it is imperative to compensate them well”.*

6.1.11. As clarified by AIAL, the employee expenses consist of cost towards both AAI and AIAL employees. Around 47% of employee costs are incurred towards AAI employees and ~53% of employee costs are incurred towards AIAL employees.

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

**Table 52: Analysis of employee cost incurred by AIAL towards AAI and AIAL employees post COD**

<b>FY ending March 31</b>	<b>AAI</b>	<b>AIAL*</b>	<b>Total</b>
Aeronautical payroll expenditure (in INR Cr.) (A)	12.13**	13.58	25.71
<b>Headcount as on 31 March 2021*:</b>			
Aero (B)		77	225
Non-Aero (C)		4	6
Common (D)		41	71
<b>Total</b>	<b>180**</b>	<b>122</b>	<b>302</b>
<b>Allocation of Common:</b>			
Aero% [E = B ÷ (B + C)]	100%	95%	
Non-Aero% [F = C ÷ (B + C)]	0%	5%	
<b>Total after adding allocation of Common:</b>			
Aero (G = B + E × D)	180	116.0	296

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FY ending March 31	AAI	AIAL*	Total
Non-Aero (H = C + F × D)		6.0	6
Total (I = G + H)	180	122	302
Aero% (G ÷ I)	100%	95%	
Non-Aero% (H ÷ I)	0%	5%	
Aeronautical salary expense per employee (INR Cr.) (A ÷ G)	0.07	0.12	

\* As per submission of AIAL vide email dated 23<sup>rd</sup> April 2022

\*\*The employees of AAI have been considered as aeronautical as per AIAL since the expenses are pass-through as per Concession Agreement

- 6.1.13. As can be seen from the table above, the average salary per AIAL employee is higher than that of AAI by more than ~70%. However, it is observed that the average salary of AIAL is comparable to that at the other PPP airports.
- 6.1.14. AIAL has considered the expenses incurred towards the Select employees as 100% Aeronautical, in line with the Clause 6.5 of the Concession Agreement between AAI and AIAL.
- 6.1.15. With regard to the employee expenses of the Select employees, the Study examined the extract of the relevant clauses of the Concession Agreement which reads as follows:

- Clause 6.5.1. states that:
  - i. **"Select Employees"** shall mean those employees of the Authority as set forth in Schedule S (of the rank of assistant general manager and below) who are posted at the Airport by the Authority and shall be deployed at the Airport for the duration of the Joint Management Period and Deemed Deputation Period. The Select Employees shall stand reduced to the extent of employees who retire, are deceased or otherwise separated from Authority's services during the Joint Management Period or Deemed Deputation Period. It is clarified that the Select Employees shall not be reduced to the extent of employees who are transferred by AAI."
  - ii. **"Joint Management Period"** shall mean the period commencing from the COD and ending on the date which is 1 (one) calendar year after the COD.
  - iii. **"Deemed Deputation Period"** shall mean the period commencing from the expiry of the Joint Management Period and ending on the date which is 2 (two) calendar years therefrom.

- 6.1.16. The Study has considered the employee expenses of AAI employees up to 'Deemed Deputation Period' as Common, since the employee expenses of AAI pertains to both Aeronautical and Non-aeronautical activities. Accordingly, the Study has bifurcated the employee expenses of AAI employees up to 'Deemed Deputation Period' in the employee ratio of 98.67 : 1.33 (Aeronautical: Non-aeronautical) as submitted by AIAL (Refer table 90 for the detailed computation of the employee ratio of the Select employees as per AIAL).
- 6.1.17. For the bifurcation of the employee expenses of AIAL, the Airport Operator has used the employee ratio of 97 : 3 (aeronautical : non aeronautical) in its MYTP. As per the clarification regarding the employee ratio vide email dated 23<sup>rd</sup> April 2022, AIAL had revised the employee ratio to 95.06 : 4.94 (aeronautical : non aeronautical). The following table shows the classification of departments as per AIAL and the basis for the computation of the employee ratio.

**Table 53: Employee ratio as per submission of AIAL**

Departments	As per AIAL	Number of AIAL employees
Chief Airport Office (CAO office)	Aero	
Air Cargo	Aero	3
Environment & Sustainability	Aero	1
Horticulture	Aero	1

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Departments	As per AIAL	Number of AIAL employees
Techno Commercial (Procurement department)	Common	5
Corporate communication	Common	1
Corporate Affairs	Common	
Security	Aero	16
Legal	Common	4
Safety	Aero	
Quality	Aero	1
Customer Engagement	Common	
Information Technology	Common	8
Airside Management	Aero	1
Regulatory	Aero	3
Terminal and Operation	Aero	20
Non-Aero Commercial	Non-Aero	4
Human Resources and Admin	Common	12
Finance	Common	11
Engineering & Maintenance	Aero	10
Airline Marketing	Aero	1
Aviation Rescue and Fire Fighting (ARFF)	Aero	
Fire Fighters	Aero	
ILBS / Screeners	Aero	20
<b>Total</b>		<b>122</b>
<b>Aero (A)</b>		<b>77</b>
<b>Non-Aero (B)</b>		<b>4</b>
<b>Common (C)</b>		<b>41</b>
<b>Total (D= A+B+C)</b>		<b>122</b>
Aero% (E= A/A+B)		95.06%
Non-Aero% (F=B/A+B)		4.94%
Aero (G= A+E*C)		116
Non-Aero (H= B+ F*C)		6
<b>Total (I= G+H)</b>		<b>122</b>
<b>Aero% (G/I)</b>		<b>95.06%</b>
<b>Non-Aero% (H/I)</b>		<b>4.94%</b>

Source: Clarifications received from AIAL

- 6.1.18. The Study analysed the classification of the departments as per AIAL and made the following observation – as per the MYTP submission of AIAL, there are 180 Select employees (from AAI) who are deployed at SVPIA since COD. Since these employees are expected to continue serving the airport until the end of the Deemed Deputation Period (i.e., till 3 years from COD), the need for 122 AIAL employees over and above the abovementioned 180 Select employees seems unreasonably high, especially in the first five months of operations. Hence, the Study has carefully examined the employee allocation of AIAL and made certain adjustments and reclassifications (Refer Table 91 in Annexure 1). Accordingly, the

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employee ratio of AIAL was recomputed as shown in the following table (For the detailed calculation of the employee ratio of AIAL as per the Study, refer Table 92 in Annexure 1).

**Table 54: Employee ratio of AIAL as per the Study**

Particulars (INR Cr.)	FY 2021 (post COD)
<b>Employee Ratio (Aero : Non Aero)</b>	
Aero	93.22%
Non-Aero	6.78%

6.1.19. As seen from the above table, the employee ratio of AIAL as determined by the Study is 93.22 : 6.78 (aeronautical : non-aeronautical). The adjustments to the employee cost of AIAL is shown in the following table.

**Table 55: Adjustment made by the Study to the employee expense submission of AIAL**

S. No.	Employee expenses for FY 2021 post COD (INR Cr.)	As per AIAL			As per the Study		
		Total	Allocation (% aero)	Aero	Allocation (% aero)	Aero	Impact
		A	B	C = A x B	D	E = A x D	C - E
1	Manpower expenses - AAI employees	12.13	100% Aero	12.13	Employee ratio of 98.67%	11.97	0.16
2	Manpower expenses - AIAL employees	14.00	Employee ratio of 97%	13.58	Refer Table 93 in Annexure 1	9.95	3.63
	<b>Total</b>	<b>26.13</b>		<b>25.71</b>		<b>21.92</b>	<b>3.79</b>

6.1.20. As per the submission of AIAL, the aeronautical employee expenses as per AIAL is INR 25.71 Cr. Certain reclassifications have been carried out in the Study as can be seen from the table above as a result of which the aeronautical employee expenses as per the Study is INR 21.92 Cr. This led to an overall reduction of INR 3.79 Cr in the employee expenses.

### A&G expenses

6.1.21. In FY 2021, AIAL had operated the airport for a period of five months post COD within which they had incurred an amount of INR 6 Cr.<sup>11</sup> However, when compared with the expenses incurred by other PPP airports such as Hyderabad International Airport Limited (HIAL), Mumbai International Airport Limited (MIAL) and Delhi International Airport Limited (DIAL), the A&G expenses of AIAL appear to be at reasonable levels.

6.1.22. AIAL was requested to share the breakup of A&G expenses to which they listed the following table vide their email dated 21<sup>st</sup> April 2022.

**Table 56: Breakup of Administrative expenses as per AIAL**

S. No.	Particulars (INR Cr.)	Nature/purpose	FY 2020-21 (post COD)	Aero Expense
1	Professional and Consultancy Charges (Refer Annexure 2)	Professional and Consultancy charges for Talent Acquisition, ASQ survey Environment Monitoring, Filing & Listing Fees, Membership & Subscription	1.99	1.94
2	Office Expenses	Routine office expenses including Printing & Stationery, Water charges, Books & periodicals	0.72	0.70
3	Consumption of Stores & Spares	Consumption of Diesel, Oil, Electrical & other misc. items	0.71	0.69
4	Travelling and Conveyance	Staff travelling & conveyance expenses and Vehicle hiring exp	0.59	0.58
5	Foreign Exchange Loss (net)		0.01	0.01

<sup>11</sup> A&G expenses include rates and taxes, insurance and administrative expenses

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S. No.	Particulars (INR Cr.)	Nature/purpose	FY 2020-21 (post COD)	Aero Expense
6	Payment to Auditors		0.01	0.01
	<b>Sub-total:</b>		<b>4.03</b>	<b>3.94</b>
7	Rates and Taxes		1.27	1.20
8	Insurance		0.87	0.85
	<b>Total</b>		<b>6.17</b>	<b>6.00</b>

Source: Clarifications received from AIAL

6.1.23. For the bifurcation of expenses between aeronautical and non-aeronautical, AIAL has used the Gross Block ratio of 97.7 : 2.3 (aeronautical : non aeronautical) for Administrative Expenses and Insurance. For the bifurcation of Rates and Taxes, AIAL has used the Terminal Area Ratio of 94.9 : 5.1 (aeronautical : non aeronautical). However, the Study has bifurcated the A&G expenses on the basis of the Gross Block ratio considering that the Taxes are applicable for the airport as a whole and not just for the terminal building. The Gross Block ratio was determined by the Study on Allocation of Assets for SVPIA as 93.66 : 6.34 (aeronautical : non aeronautical). The following table shows the adjustment made by the Study to the A&G Expense submission of AIAL.

**Table 57: Adjustment made by the Study to the A&G expense submission of AIAL**

S. No.	A&G Expenses for FY 2021 post COD (INR Cr.)	As per AIAL			As per the Study		
		Total	Allocation (% aero)	Aero	Allocation (% aero)	Aero	Impact
		A	B	C = A × B	D	E = A × D	C – E
1.	Administrative expenses						
(a)	Professional and Consultancy Charges	1.99	Gross Block Ratio of (97.7%)	1.94	Gross Block Ratio (93.66%)	1.86	0.08
(b)	Office Expenses	0.72		0.70		0.67	0.03
(c)	Consumption of Stores & Spares	0.71		0.69		0.66	0.03
(d)	Travelling and Conveyance	0.59		0.58		0.56	0.02
(e)	Foreign Exchange Loss (net)	0.01		0.01		0.01	0.00
(f)	Payment to Auditors	0.01		0.01		0.01	0.00
2	Insurance	0.87		0.85		0.82	0.04
3	Rates and taxes	1.27	Terminal Area Ratio (94.9%)	1.20		1.19	0.02
	<b>Total A&amp;G expenses</b>	<b>6.18</b>		<b>6.00</b>		<b>5.78</b>	<b>0.21</b>

Source: MYTP Submissions of AIAL

6.1.24. As per the submission of AIAL, the aeronautical A&G expenses as per AIAL is INR 6 Cr. Certain reclassifications have been carried out in the Study as can be seen from the table above as a result of which the aeronautical A&G expenses as per the Study is INR 5.78 Cr. This led to an overall reduction of INR 0.21 Cr in the A&G expenses.

### Corporate Support Service (CSS) expenses

6.1.25. As per the MYTP submission of AIAL, the following can be observed regarding Corporate Support Services:

- “AIAL 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

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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.

- AIAL 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.”

6.1.26. For further analysis, vide email dated 02<sup>nd</sup> June 2022, AIAL was requested to clarify the nature and the purpose of this expense. Vide email dated 07<sup>th</sup> June 2022, AIAL 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 AIAL 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 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.”

6.1.27. The break-up of Corporate costs submitted by AIAL for FY 2021 is as follows:

**Table 58: Breakup of CSS expenses as per AIAL**

<b>FY ending March 31 (INR Cr.)</b>	<b>AIAL 2020-21 (Post COD)</b>
Administrative Expenses	1.77
Personnel Expenses	5.38
Total prior to adjustment (A)	7.14
Initial RAB Ratio (B)	97.7%
Total post adjustment (A × B)	6.98

6.1.28. 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 the 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 standardisation of processes across the Group
- Monitoring annual budgeting process

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- 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 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 AODB, FIDS, software used in AOCC, etc.
- Support HO/Corporate IT team in the areas of IT Strategy, delivery and Governance.

6.1.29. It is noted that AEL on 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 AIAL as reasonable.

6.1.30. It is noted that AIAL vide email dated 25<sup>th</sup> August 2022 stated that “Please note the in-house legal team cost is of Rs. 0.44 Crs included in the Corporate Cost allocation for FY 20-21.” However, the employee expenses towards the inhouse legal team of AIAL has already been allowed (Refer table 92) 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 59: CSS expenses post the exclusion of legal costs as per the Study**

FY ending March 31 (INR Cr.)	AIAL 2020-21 (Post COD)
Total prior to adjustment (A)	7.14
Legal cost (B)	0.44
CSS post exclusion of legal cost (A - B)	6.70

6.1.31. AIAL has segregated expenses towards Corporate Allocation Cost in the Initial RAB ratio of 97.7:2.3 (aeronautical : non- 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



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Headcount. Accordingly, the Study has recomputed the aeronautical Corporate Cost Allocation as follows:

**Table 60: Adjustment made by the Study to the Corporate Support Service Expense submission of AIAL**

S. No.	Expense for FY 2021 post COD (INR Cr.)	As per AIAL			As per the Study		
		Total	Allocation (% aero)	Aero	Allocation (% aero)	Aero	Impact
		A	B	C	D	E = A x D	C – E
1	Corporate Support Service Expense (post exclusion of legal cost)	6.70	Refer table 58	6.98	93.22%	6.25	0.73

6.1.32. As per the submission of AIAL, the aeronautical Corporate Support Service expense is INR 6.98 Cr. However, the Study has made certain adjustment to this expense which led to an overall reduction of INR 0.73 Cr in the CSS expense.

### Repairs and Maintenance expenses

6.1.33. In FY 2021, AIAL had operated the airport for a period of five months post COD within which they had incurred a substantial amount of INR 10.37 Cr. The amount appears to be high when compared to other PPP airports as well.

6.1.34. AIAL was requested to justify this significant R&M expenses to which they responded vide their email dated 7<sup>th</sup> April 2022 that:

*"We observe that there are certain expense items of R&M nature being classified as Operating Exp in True Up Claim submitted by AAI. Thus, the increase of 287% will substantially reduce to only 30% once the expense items are re-classified. Eg. "R & M: ELEC. INSTAL." of Rs. 7.59 Cr is categorized under "Operating Expenses" instead of "R&M Expenses". Further, approved cost as per tariff order for SCP is Rs. 27.8 Cr for FY 20-21 and also past trend indicates expenses in similar range."*

6.1.35. In order to understand the nature of works undertaken, AIAL was asked to share the breakup of R&M expenses, to which they responses with the following table vide their email dated 19<sup>th</sup> April 2022.

**Table 61: Breakup of R&M expenses as per AIAL**

Particulars (in INR Cr.)	FY 2020-21 (post COD)
All Inclusive Comprehensive Maintenance of Bukaka make PBBs, VDGs / AVDGs and Operations	1.06
Operation & Maintenance of E&M Installations of Terminal Building, Sub-Station, Pump House, ITL of Terminal - 2	0.82
Service Order for AMC T-1 Building & Power House	0.81
Service Order For Operation and Maintenance of E & M Installations of Operational Area, Terminal-3, Terminal-4, & Other Ancillary Buildings	0.71
Service Order for Operation & CMC of HVAC System of T-2 and ITL at SVPI Airport	0.65
Annual Repairs and Maintenance of Civil Works for Terminal-1, Terminal-3, Terminal-4 etc. and Adjoining Areas	0.53
Annual repairs and maintenance of Civil works for Terminal-2, MT building, Adjoining Areas etc.	0.47
Service Order for wildlife hazard control by use of crackers, cartridges, laser guns, zon guns, vehicle etc.	0.45
Annual Repairs and Maintenance of Civil Works for Cargo Buildings, CISF Barrack, etc.	0.45
Service Order for Comprehensive maintenance & Operation contract of Baggage Handling System (imported make- vanderlande) at Domestic	0.37
Services Order for Job Work for Passenger Baggage Trolley (PBT) Retrieval services	0.37
Comprehensive maintenance of Lifts	0.32
Energy Performance Agreement with EESL (Energy Efficiency Services Ltd) and AAI under Building Energy Efficiency Programme	0.28
Service Order for Appointment of Contractor for Onetime painting, quick repair & rectification, plumbing and other miscellaneous work	0.28

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Particulars (in INR Cr.)	FY 2020-21 (post COD)
Service Order for Appointment of Contractor for Onetime painting, quick repair & rectification, plumbing and other miscellaneous	0.27
Service Order for Operation & Annual Comprehensive Maintenance of Central AC plant of Terminal - 1 Building	0.27
Comprehensive AMC for AOCC systems	0.19
Operation and Comprehensive Maintenance of Radar AC plant And Maintenance of Split AC Units and Water Coolers	0.14
Comprehensive Maintenance of Fire Alarm System and Fire Fighting System Installed at T-1 & T-2	0.12
Other misc works (individually less than Rs. 10L)	2.37
<b>Total</b>	<b>10.94</b>

Source: Clarifications received from AIAL

6.1.36. As seen in the table above, AIAL has initiated several maintenance activities post taking over the operations of the Airport. During the visit site, it was observed that several of these activities were underway.

6.1.37. AIAL has used the terminal area ratio of 94.9 : 5.1 (aeronautical : non aeronautical) for the allocation of R&M expenses irrespective of the nature of expenses. The Study has reallocated certain expenses based on the nature of expenses according to the following criteria:

- If the expense item pertained to only the aeronautical activities at the airport, then it was readjusted with the allocation ratio of 100% Aeronautical.
- If the expense item pertains primarily to the terminal buildings and associated areas of the airport, the same was reallocated using the Terminal Area ratio of 92.5 : 7.5 (aeronautical : non aeronautical).
- If the expense item was not specific to either aeronautical or non-aeronautical activities at the airport or the terminal building, then the same was reallocated using the Gross block ratio of 93.66 : 6.34 (aeronautical : non aeronautical).

6.1.38. The following table shows the adjustment made by the Study to the R&M expense submission of AIAL

**Table 62: Adjustment made by the Study to the R&M expense submission of AIAL**

R&M Expense for FY 2021 post COD (INR Cr.)	As per AIAL			As per the Study		
	Total	Allocation (% aero)	Aero	Allocation (% aero)	Aero	Impact
	A	B	C =AxB	D	E=AxD	C – E
All Inclusive Comprehensive Maintenance of Bukaka make PBBs, VDGs / AVDGs and Operations	1.06	Terminal Area Ratio (94.9%)	1.01	100% Aero	1.06	(0.05)
Service Order for wildlife hazard control by use of crackers, cartridges, laser guns, zon guns, vehicle etc.	0.45		0.43		0.45	(0.02)
Annual Repairs and Maintenance of Civil Works for Cargo Buildings, CISF Barrack, etc.	0.45		0.43		0.45	(0.02)
Service Order for Comprehensive maintenance & Operation contract of Baggage Handling System (imported make- vanderlande) at Domestic	0.37		0.35		0.37	(0.02)
Services Order for Job Work for Passenger Baggage Trolley (PBT) Retrieval services	0.37		0.35		0.37	(0.02)
Energy Performance Agreement with EESL (Energy Efficiency Services Ltd) and AAI under Building Energy Efficiency Programme	0.28		0.27		0.28	(0.01)
Comprehensive AMC for AOCC systems	0.19		0.18		0.19	(0.01)
Operation and Comprehensive Maintenance of Radar AC plant And Maintenance of Split AC Units and Water Coolers	0.14		0.13		0.14	(0.01)

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R&M Expense for FY 2021 post COD (INR Cr.)	As per AIAL			As per the Study		
	Total	Allocation (% aero)	Aero	Allocation (% aero)	Aero	Impact
	A	B	C =AxB	D	E=AxD	C – E
Comprehensive Maintenance of Fire Alarm System and Fire Fighting System Installed at T-1 & T-2	0.12		0.11		0.12	(0.01)
Operation & Maintenance of E&M Installations of Terminal Building, Sub-Station, Pump House, ITL of Terminal - 2	0.82		0.78	Terminal Area Ratio (92.5%)	0.76	0.02
Service Order for AMC T-1 Building & Power House	0.81		0.77		0.75	0.02
Service Order for Operation & CMC of HVAC System of T-2 and ITL at SVPI Airport	0.65		0.62		0.60	0.02
Comprehensive maintenance of Lifts	0.32		0.30		0.30	0.01
Service Order for Appointment of Contractor for Onetime painting, quick repair & rectification, plumbing and other miscellaneous work	0.28		0.27		0.26	0.01
Service Order for Appointment of Contractor for Onetime painting, quick repair & rectification, plumbing and other miscellaneous	0.27		0.26		0.25	0.01
Service Order for Operation & Annual Comprehensive Maintenance of Central AC plant of Terminal - 1 Building	0.27		0.26		0.25	0.01
Service Order For Operation and Maintenance of E & M Installations of Operational Area, Terminal-3, Terminal-4, & Other Ancillary Buildings	0.71		0.67	Gross Block Ratio (93.66%)	0.66	0.01
Annual Repairs and Maintenance of Civil Works for Terminal-1, Terminal-3, Terminal-4 etc. and Adjoining Areas	0.53		0.50		0.50	0.01
Annual repairs and maintenance of Civil works for Terminal-2, MT building, Adjoining Areas etc.	0.47		0.45		0.44	0.01
Other misc works (individually less than Rs. 10L)	2.37		2.25		2.22	0.03
<b>Total</b>	<b>10.94</b>		<b>10.37</b>		<b>10.42</b>	<b>(0.04)</b>

Source: Clarifications received from AIAL

- 6.1.39. As per the submission of AIAL, the aeronautical R&M Expense is INR 10.37 Cr. Certain reclassifications have been carried out in the Study as can be seen from the table above as a result of which the aeronautical R&M as per the Study as INR 10.42 Cr. This led to an overall increase of INR 0.04 Cr in the R&M Expense.
- 6.1.40. The aeronautical R&M expenses as per the Study (post reallocation) of INR 10.42 Cr. was compared as a percentage of the opening RAB of AIAL in a similar manner as done in Para 5.6, in the case of AAI. The extrapolated R&M expense (INR 26.23 Cr.) was found to be greater than 6% of the opening RAB of AIAL. Hence, the Study has rationalised the R&M expenses as shown in the table below.

**Table 63: Rationalisation of R&M expenses as per the Study**

Particulars for FY 2021 post COD (INR Cr.)	Amount
R&M expenses as per the Study (A)	10.42
Opening RAB of AIAL (B)	301.77*
Allowable R&M Expenses for FY 2021 i.e., 6% of Opening RAB (C = 6% × B)	18.11
Pro-rated allowable R&M Expenses for FY 2021 post COD (D = C × 145 ÷ 365)	7.19
R&M expenses of AIAL as considered by the Study (F = Minimum of A, D)	7.19
Impact due to capping of R&M expenses (A – F)	3.23

\* As determined by the Study on Allocation of Assets for SVPIA

- 6.1.41. It can be observed from the above table that the R&M expense as a % of opening RAB are higher than 6%. It is seen that in the case of Pune (Order No. 45/2021-22 dated 17th March 2022) and Calicut (Order

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No. 39/2021-22 dated 11th February 2022), AERA has considered the R&M expenses to be reasonable provided that they are within 6% of the Opening RAB for each Tariff Year (Refer Para 5.6.2).

6.1.42. In view of the above, the R&M expenses have been rationalised as shown in the above table which led to an overall reduction of INR 3.23 Cr in the R&M expenses.

### Utility expenses

6.1.43. Since AIAL has operated the airport for a period of only five months in the SCP, no major change is expected in the utility expenses as there have 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. The extrapolated utility expenses (INR 15.88 Cr.) incurred by AIAL appear to be reasonable and within the projections approved as per the Tariff Order for the Second Control Period (INR 23.2 Cr.).

6.1.44. AIAL was asked to clarify whether the recoveries from concessionaires have been netted off before considering the utility expenses as purely aeronautical. AIAL confirmed via email dated 19 May 2022 that:

*“Yes, it is confirmed that Utility expenses for FY 2021 are accounted after net off of recoveries. Total expense during the period was Rs. 6.61 Crs, whereas recoveries was Rs. 0.31 Crs. Hence net expenses in P&L is Rs. 6.30 Crs.”*

**Table 64: Utility expenses as per AIAL**

Particular for FY 2020-21 post COD (in INR Cr.)	Total expenses	Recoveries	Aero expenses	Aero expenses as per Study
	A	B	A – B	
Utility expenses	6.61	0.31	6.30	6.31*

Source: Clarifications received from AIAL

\*Difference is due to rounding off, the Study has considered the figures as per P&L

6.1.45. Therefore, the utility expenses of AIAL appear to be rational and the treatment for the same is in line with the approach followed by AERA.

### Other outflow expenses

6.1.46. In FY 2021, AIAL has operated the airport for a period of five months post COD within which they had incurred a substantial amount of INR 15.74 Cr.<sup>12</sup>

6.1.47. AIAL was requested to share the breakup of “Others”. AIAL vide their email dated 7<sup>th</sup> April 2022 shared the following table:

**Table 65: Breakup of “others” expense incurred by AIAL**

Sl.no	Particulars (INR Cr.)	Nature/purpose	FY 2020-21 (post COD)
1	Manpower Cost	Outsource Manpower Cost for Airport Operations	4.77
2	Horticulture Expenses	Trees and Plantation at the Airport	0.57
3	Housekeeping Expenses	Day to day upkeep of Airport	4.93
	<b>Total</b>		<b>10.27</b>

Source: Clarifications received from AIAL

6.1.48. In order to get more clarity on the other outflow expenses, AIAL was asked to explain the nature of these expenses and state whether these are recurring expenses. AIAL vide their email dated 7th June 2022 stated the following: *“The mentioned expense of Rs. 0.60 Cr (ie. Rs. 0.57 Cr after applying TBL Ratio) is mix of onetime expenses and regular expenses incurred on regular basis. Details are as under: 1. Towards contract for landscape development and maintenance work - Rs. 33.2 Lakhs 2. Supply and installation of various plants and pots including for initial phase of beautification during COD - Rs. 23.58*

<sup>12</sup> Other outflows includes – IT expenses, security expenses, cargo expenses, bank and other finance charges and others

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Lakhs 3. Appointment of agency for Trees Census Survey Services - Rs. 3 Lakhs and 4. Misc. Polybags, Pots, Planters, Insecticides etc. - Rs. 0.36 Lakhs”

**Table 66: Breakup of horticulture expenses incurred by AIAL**

Sl. no	Particulars (INR Cr.)	FY 2020-21 (post COD)
1	Towards contract for landscape development and maintenance work	0.33
2	Supply and installation of various plants and pots including for initial phase of beautification during COD	0.24
3	Appointment of agency for Trees Census Survey Services	0.03
4	Misc. Polybags, Pots, Planters, Insecticides etc	0.00
	<b>Total</b>	<b>0.60</b>

Source: Clarifications received from AIAL

6.1.49. Additionally, AIAL was requested to share the breakup of the “Housekeeping Expenses” amounting to INR 4.93 Cr. to which they listed the following table vide mail dated 11<sup>th</sup> June 2022:

**Table 67: Breakup of housekeeping expenses incurred by AIAL**

Sl. no	Particulars (INR Cr.)	FY 2020-21 (post COD)
1	Mechanized Environmental Support Services	1.60
2	(MESS) (Upkeeping) of Terminal-2 at SVPI Airport. Ahmedabad	1.81
3	Mechanized Environmental Support Services	0.24
4	(MESS) for Upkeeping of Terminal-1 at SVPI Air ort Ahmedabad	0.21
5	Service Order for Providing Off roll manpower for Road side cleaning Ahmedabad Airport.	0.14
6	Service Order for Mechanised Environmental Support Services (Up-Keeping) of Terminal-1 & ITL at S V P I Airport Ahmedabad	0.12
7	Appointment of Contractor for landside cleaning work at Ahmedabad Airport	1.08
	<b>Total</b>	<b>5.20</b>

Source: Clarifications received from AIAL

6.1.50. From the above table, the Study has considered “Appointment of Contractor for landside cleaning work at Ahmedabad Airport” expense item as non-aeronautical in nature as this activity pertains to the landside. This adjustment is shown in Table 70.

6.1.51. It can be observed from table 65 that the one of the major drivers of this “other” expense is outsourced manpower cost. Further, AIAL was requested to share the breakup of “Outsource Manpower Cost for Airport Operations”. AIAL 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 listed the following table vide their email dated 19<sup>th</sup> April 2022 and 07<sup>th</sup> June 2022

**Table 68: Breakup of Outsource Manpower Cost for Airport Operations incurred by AIAL and reasons for expenditure**

S. No.	Particulars (INR Cr.)	FY 2021 (post COD)	Reasons for expenditure
1	Security Services from - M/s Modern Veer (monthly deployment varies from 66 to 100 based on requirement)	1.34	"These are recurring expenses. These manpower are deployed for Kerbside traffic management at T1 and security checkpoint at Domestic Cargo Entry gate. Their overall role includes Kerbside management, traffic marshalling, traffic management, landside security, patrolling, Billing & accounting for NASFT, Co-ordination with CISF/Policy, Emergency Response etc."
2	Security Services from - M/s G4S Solutions (deployment of 61 manpower)	0.98	"These are recurring expenses. These manpower are deployed for Kerbside traffic management at T2. Their overall role includes Kerbside management, traffic marshalling, traffic management, landside security, patrolling etc."
3	ILBS Screeners from AAICLAS (for 68 screeners and 14 handyman)	1.76	"AAICLAS has been doing ILBS screening at Ahmedabad airport w.e.f. March 2020 (before COD).  Overall requirement for ILBS screeners is more than 125. Due to COVID, the traffic was affected and thus we have continued with

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S. No.	Particulars (INR Cr.)	FY 2021 (post COD)	Reasons for expenditure
			<i>lesser ILBS which was mix of inhouse and outsourced staff. Subsequently, after Sep'21, the ILBS screening activity is being carried out through inhouse team only."</i>
4	Cargo related loaders and supervisors from M/s Maruti Nandan Logistics	0.52	<i>"These are recurring expenses. These manpower are deployed for providing ground support for Cargo Terminal. Their overall role includes Handling of Inbound &amp; Outbound Cargo, Housekeeping &amp; Facility Maintenance at Cargo Terminal"</i>
5	Manpower for airside operations from M/s Avia Xpert (15 associates)	0.16	<i>" These are recurring expenses. 15 associates from M/s Avia Xpert were deployed for AOCC (Airport Operations Control Center) and Airside Operations"</i>
	<b>Total</b>	<b>4.77</b>	

Source: Clarifications received from AIAL

6.1.52. It can be observed from the above table that security services expense of INR 2.32 Cr. contributes towards a major portion of "Outsource Manpower Cost for Airport Operations". AIAL was asked to provide the purpose of the additional security employees that are being outsourced, to which they replied vide their email dated 21<sup>st</sup> April 2022:

*"While the security arrangement within the terminal is from CISF but for other purposes like Traffic Management, landside & Kerbside management, we need to deploy manpower which has been taken from outsourced agencies."*

6.1.53. The bifurcation ratio used by AIAL for "others" is the Terminal Area Ratio of 94.9 : 5.1 (aeronautical : non-aeronautical), while it has used the Gross Block Ratio of 97.7 : 2.3 (aeronautical : non- aeronautical) for IT expenses and security expenses. For cargo expenses and Bank and other finance charges, AIAL has considered these expenses as 100% aeronautical. The Study has reallocated certain expenses based on the nature of expenses according to the following criteria:

**Table 69: Reclassification of other outflow expenses of AIAL as per the Study**

S. No.	Other Expense for FY 2021 post COD (INR Cr.)	Classification as per the Study	Remarks as per the Study
1	Outsource Manpower Cost for Airport Operations		
a	Security Services from - M/s Modern Veer (monthly deployment varies from 66 to 100 based on requirement)	Ratio of 31.25% (aero : total employees in the security department)	This expense has been considered as Common, since the responsibilities mentioned by AIAL cover cityside activities as well as cargo and ASF billing etc. The Study has considered 5 employees (out of 16 employees) in the security department as aeronautical based on their actual responsibilities. Accordingly, this security related expense has also been bifurcated in the ratio of aero : total employees in the security department.
b	Security Services from - M/s G4S Solutions ((deployment of 61 manpower)	Non-aero	Since their responsibilities are limited to the cityside, the Study has considered this expense as non-aeronautical.
c	ILBS Screeners from AAICLAS (for 68 screeners and 14 handyman)		
d	Cargo related loaders and supervisors from M/s Maruti Nandan Logistics	100% aero	These expense items pertain to only the aeronautical activities at the airport; hence these have been classified as 100% Aeronautical.
e	Manpower for airside operations from M/s Avia Xpert (15 associates)		
2	Housekeeping Expenses- Appointment of Contractor for landside cleaning work at Ahmedabad Airport	Non-aero	This activity pertains to the landside; hence it is considered as non-aeronautical.

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S. No.	Other Expense for FY 2021 post COD (INR Cr.)	Classification as per the Study	Remarks as per the Study
3	Housekeeping Expenses- MESS and Service orders	Terminal Area Ratio (92.5%)	These expense items pertain primarily to the terminal buildings and associated areas of the airport, hence the same was reallocated using the Terminal Area ratio of 92.5 : 7.5 (aeronautical : non aeronautical).
	IT expenses		
4	Security expenses	100% aero	These expense items pertain to only the aeronautical activities at the airport; hence it was allocated as 100% Aeronautical.
5	Cargo expenses		
6	Bank and other finance charges- Expenses for providing Performance Bank Guarantee	Gross Block Ratio (93.66%)	This expense item is not specific to either aeronautical or non-aeronautical activities at the airport or the terminal building, hence the same was reallocated using the Gross block ratio of 93.66 : 6.34 (aeronautical : non aeronautical)
	Bank and other finance charges- Bank Processing Charges and other bank charges		

6.1.54. The following table shows the adjustment made by the Study to the other outflow expenses of AIAL

**Table 70: Adjustment made by the Study to the Other Operating Expenses of AIAL**

S. No.	Other Expense for FY 2021 post COD (INR Cr.)	As per AIAL			As per the Study		
		Total	Allocation (% aero)	Aero	Allocation (% aero)	Aero	Impact
		A	B	C = AxB	D	E=AxD	A – E
1	Outsource Manpower Cost for Airport Operations						
a	Security Services from - M/s Modern Veer (monthly deployment varies from 66 to 100 based on requirement)	1.41	Terminal Area Ratio (94.9%)	1.34	Ratio of 31.25% (aero : total employees of security dept.)	0.44	0.90
b	Security Services from - M/s G4S Solutions ((deployment of 61 manpower)	1.03		0.98	Non-aero	0	0.98
c	ILBS Screeners from AAICLAS (for 68 screeners and 14 handyman)	1.85		1.76	100% Aero	1.85	(0.09)
d	Cargo related loaders and supervisors from M/s Maruti Nandan Logistics	0.55	Terminal Area Ratio (94.9%)	0.52	100% Aero	0.55	(0.03)
e	Manpower for airside operations from M/s Avia Xpert (15 associates)	0.17		0.16		0.17	(0.01)
2	Horticulture Expenses	0.60	Terminal Area Ratio (94.9%)	0.57	Terminal Area Ratio (92.5%)	0.56	0.01
3	Housekeeping Expenses- MESS and Service orders	4.12	Terminal Area Ratio (94.9%)	3.91	Terminal Area Ratio (92.5%)	3.81	0.10
	Housekeeping Expenses- Appointment of Contractor for landside cleaning work at Ahmedabad Airport	1.08		1.02	Non-aero	0	1.02
4	IT expenses*	1.82	Gross Block Ratio (97.7%)	1.78	Terminal Area Ratio (92.5%)	1.68	0.09
5	Security expenses	1.49		1.46	100% Aero	1.49	(0.03)
6	Cargo expenses	0.12	100% aero	0.12	100% aero	0.12	-
7	Bank and other finance charges- Expenses for providing Performance Bank Guarantee**	1.51	100% aero	1.51	100% aero	1.51	-
	Bank and other finance charges- Bank Processing Charges and other bank charges**	0.61		0.61	Gross Block Ratio (93.66%)	0.57	0.04

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S. No.	Other Expense for FY 2021 post COD (INR Cr.)	As per AIAL			As per the Study		
		Total	Allocation (% aero)	Aero	Allocation (% aero)	Aero	Impact
		A	B	C = AxB	D	E=AxD	A – E
	<b>Total</b>	<b>16.37</b>		<b>15.74</b>		<b>12.76</b>	<b>2.98</b>

\*Refer Table 96 of Annexure 3 for the breakup of the IT expenses

\*\* Refer Table 95 of Annexure 3 for the breakup of the Bank and other finance charges

Source: Clarifications received from AIAL

6.1.55. As per the submission of AIAL, the aeronautical other outflow expenses as per AIAL is INR 15.74 Cr. Certain reclassifications have been carried out in the Study as can be seen from the table above, because of which, the aeronautical other outflow expenses as per the Study is INR 12.76 Cr. This led to an overall reduction of INR 2.98 Cr in the other outflow expenses.

6.1.56. It can be seen that AIAL has incurred several new expenses that were not prevalent when the airport was operated by AAI. The projections approved by AERA in the Tariff Order for the Second Control Period were in the context of the airport being operated by AAI. It is expected that the cost structure of a private player would be different from that of a government entity. Therefore, it is not fair to ascertain the reasonableness of these expenses of the airport operator based on the costs incurred over the first five months of operations, during which several one-time expenses would have been incurred towards repairs, modifications, and refurbishments. Rather, the performance of the Airport Operator needs to be monitored over a longer period of time to evaluate the efficiency of operations.

## 6.2. Summary

6.2.1. The total impact on various heads under O&M expenses as a result of the proposed reallocation stated in paragraphs 6.1.19, 6.1.23, 6.1.31, 6.1.38, 6.1.44, and 6.1.54 are shown below.

**Table 71: Summary of adjustment made by the Study to the O&M expenses submission of AIAL**

Expense Category (INR Cr)	Expense Sub-Category / Description	Expenses classification as per		Impact
		AIAL	Study	
Manpower expenses	Payroll expenditure – AAI employees	Aeronautical	Common (Employee ratio of 98.67%)	0.16
	Payroll expenditure – AIAL employees	Common (Department wise cost of 97%)	Common (Employee ratio of 93.22%)	3.63
A&G Expenses	Professional and Consultancy Charges	Common (Gross Block Ratio of 97.7%)	Common (Gross Block Ratio of 93.66%)	0.08
	Office Expenses			0.03
	Consumption of Stores & Spares			0.03
	Travelling and Conveyance			0.02
	Foreign Exchange Loss (net)			0.00
	Payment to Auditors			0.00
	Insurance	0.04		
	Rates and taxes	Common (Terminal Area Ratio of 94.9%)		0.02
R&M Expenses	R&M expenses related to Annual Repairs and Maintenance of Civil Works for Cargo Buildings, CISF Barrack, Services Order for Job Work for Passenger Baggage	Common (Terminal Area Ratio (94.9%))	Aeronautical	(0.18)



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Expense Category (INR Cr)	Expense Sub-Category / Description	Expenses classification as per		Impact	
		AIAL	Study		
	Trolley (PBT) Retrieval services etc.				
	R&M expenses related to Operation & Maintenance of E&M Installations of Terminal Building, Sub-Station, Service Order for AMC T-1 Building & Power House		Common (Terminal Area Ratio of 92.5%)	0.08	
	R&M expenses related to Annual repairs and maintenance of Civil works for Terminal-2, MT building, Adjoining Areas, misc work etc		Common (Gross Block Ratio of 93.66%)	0.05	
CHQ/RHQ Expenses	Corporate support services	Common (Gross Block Ratio of 97.7%)	Common (Employee ratio of 93.22%)	0.73	
Utility Expenses		Aero (net of recoveries)	Aero (net of recoveries)	-	
Other outflow expenses	Outsource Manpower Cost for Airport Operations- Security Services from - M/s Modern Veer	Common (Terminal Area Ratio of 94.9%)	Common (Ratio of 31.25%, i.e., aero : total employees of security dept.)	0.90	
	Outsource Manpower Cost for Airport Operations- Security Services from - M/s G4S Solutions		Non-aero	0.98	
	Outsource Manpower Cost- ILBS, Cargo and manpower		100% Aero	(0.13)	
	Horticulture Expenses		Common (Terminal Area Ratio of 92.5%)	0.01	
	Housekeeping Expenses-MESS and Service Order		Common (Terminal Area Ratio of 92.5%)	0.10	
	Housekeeping Expenses- Appointment of Contractor for landside cleaning work at Ahmedabad Airport		Non-aero	1.02	
	IT expenses		Common (Gross Block Ratio of 97.7%)	Common (Terminal Area Ratio of 92.5%)	0.09
	Security expenses			Aeronautical	(0.03)
	Cargo expenses		Aeronautical	Aeronautical	-
	Bank and other finance charges- Expenses for providing Performance Bank Guarantee		Aeronautical	Aeronautical	-
	Bank and other finance charges- Bank Processing Charges and other bank charges	Aeronautical	Common (Gross Block Ratio of 93.66%)	0.04	
<b>Total</b>				<b>7.68</b>	

6.2.2. As per the submission of AIAL, the aeronautical total expenses as per AIAL is INR 71.11 Cr. Certain reclassifications and revisions have been carried out in the Study as can be seen from the table above

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as a result of which the aeronautical total expenses as per the Study is INR 63.44 Cr. This led to an overall reduction of INR 7.68 Cr in the total expenses. The breakup of the expenses is provided below.

**Table 72: Aeronautical expenses for AIAL for SCP post COD as reallocated by the Study**

<b>FY ending March 31 (INR Cr.)</b>	<b>AIAL 2020-21 (Post COD)</b>
Payroll expenditure – AAI employees	11.97
Payroll expenditure – AIAL employees	9.95
A&G expense	5.78
CSS expense	6.25
Utilities	6.31
R&M expenditure	10.42
Other outflows	12.76
<b>Total</b>	<b>63.44</b>

- 6.2.3. The overall impact as a result of the proposed reallocation and rationalisation of the O&M expenses by the Study is shown below.

**Table 73: Overall impact on O&M expenses of AIAL as per the Study**

<b>Particulars (INR Cr.)</b>	<b>FY 2021 (till COD)</b>
Total aeronautical expenses as per AIAL (A) (Refer table 51)	71.11
Total impact of reallocation (Refer table 71) (B)	7.68
Aeronautical O&M Expenses post reclassification as per the Study (C = A – B) (Refer table 72)	63.44
Impact due to rationalisation of R&M expenses (Refer table 63) (D)	3.23
Aeronautical O&M Expenses as per the Study (C-D)	60.21
<b>Total impact of Study (B + D)</b>	<b>10.91</b>

- 6.2.4. As can be seen in the table above, the aeronautical O&M expenses for AIAL in SCP post COD was determined to be INR 60.21 Cr. as against INR 71.11 Cr. submitted by AIAL. There was an impact of INR 10.91 Cr. due to the revisions made by the Study.

**Table 74: Breakup of O&M expenses of AIAL as per the Study**

<b>FY ending March 31 (INR Cr.)</b>	<b>AIAL 2020-21 (Post COD)</b>
Payroll expenditure – AAI employees	11.97
Payroll expenditure – AIAL employees	9.95
A&G expense	5.78
CSS expense	6.25
Utilities	6.31
R&M expenditure	7.19
Other outflows	12.76
<b>Total</b>	<b>60.21</b>

### 6.3. Conclusion

- 6.3.1. In FY 2021, AIAL has operated the airport for a period of five months post COD within which they had incurred an amount of INR 71.11 Cr towards O&M expenses. The Other Expenses and employee expenses primarily contribute towards this amount. The major expenses were analysed separately to ascertain their reasonableness.
- 6.3.2. The average salary per AIAL employee is higher than that the Select Employees (of AAI) by more than ~ 70%. However, it is observed that the average salary of AIAL is comparable to that at the other PPP airports.

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- 6.3.3. The Study has considered the Select employees as common and bifurcated the employee expenses towards them in the employee ratio of 98.67%. Further, it was observed that within the first five months of operations itself, AIAL had onboarded 122 employees over and above the 180 Select employees who would continue serving the airport till the end of the Deemed Deputation Period. Hence, the Study carefully examined the employee allocation of AIAL and made certain adjustments and reclassifications. The adjustments in the Study led to an overall reduction of INR 3.79 Cr on the employee expenses
- 6.3.4. Since AIAL has operated the airport for a period of only five months in the SCP, no major change is expected in the utility expenses as there have 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. The extrapolated utility expenses (INR 15.88 Cr.) incurred by AIAL seems reasonable and is within the projections approved as per the Tariff Order for the Second Control Period (INR 23.2 Cr.).
- 6.3.5. As per the submission of AIAL, the aeronautical A&G expenses as per AIAL is INR 6 Cr. Certain reclassifications have been carried out in the Study as can be seen from the table above as a result of which the aeronautical A&G expenses as per the Study is INR 5.81 Cr. This led to an overall reduction of INR 0.18 Cr in the A&G expenses.
- 6.3.6. The aeronautical Corporate Support Service expense, as per the MYTP submission of AIAL, is INR 6.98 Cr. However, the Study has made certain adjustment to this expense which led to an overall reduction of INR 0.73 Cr in the CSS expense.
- 6.3.7. As per the submission of AIAL, the aeronautical other outflow expenses as per AIAL is INR 15.74 Cr. Certain reclassifications have been carried out in the Study, because of which, the aeronautical other outflow expenses as per the Study is INR 12.76 Cr. This led to an overall reduction of INR 2.98 Cr in the other outflow expenses.
- 6.3.8. The R&M expenses of AIAL post reclassification as per the Study were greater than 6% of the opening RAB of AIAL. Therefore, this expense was rationalized, resulting in an overall reduction of INR 3.23 Cr in the R&M expenses.
- 6.3.9. As per the submission of AIAL, the aeronautical O&M expenses as per AIAL is INR 71.11 Cr. Certain reclassifications have been carried out in the Study, because of which, the aeronautical O&M expenses as per the Study is INR 60.21 Cr. This led to an overall reduction of INR 10.91 Cr in the aeronautical O&M expenses.
- 6.3.10. It would be pertinent to note that AIAL has operated the airport for only five months in the Second Control Period. It is expected that there would be several one-time expenses incurred towards repairs, modifications or refurbishments when a new operator takes over the operations of an airport. The assessment of reasonableness of these expenses would require the analysis of trends over a longer period of time. Therefore, it is not possible to conclude on the efficiency of an airport operator using the data of just five months. However, the broad level assessment does not suggest any alarming deviations from the trends observed at SVPIA in the past.

## **7. EXTERNAL BENCHMARKING OF EXPENSES OF AAI**

### **7.1. Background**

7.1.1. 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 SVPIA. 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
- Privatized 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)

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

7.1.3. 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.
- For those airports for which Tariff Orders are issued for the Third Control Period, actual values during the period FY 2017-20 in the Order are considered. Tariff Orders for the Third Control Period have already been issued by AERA for Pune, Goa, Bangalore, Chennai, Cochin, Hyderabad, and Kolkata.
- All expenses are related to aeronautical activities.

7.1.4. 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.

### **7.2. Analysis of O&M expenses**

7.2.1. The following table summarizes the average traffic (in million) from FY 17 to FY 20, Terminal Area, Closing RAB of FY 2020 and total revenue from FY 17-20 across select airports considered in this study.

**Table 75: Various parameters across select domestic airports**

<b>Airport location</b>	<b>Traffic (Mn) (Avg. of FY 17-20)</b>	<b>Terminal Area (lakh sqm)</b>	<b>Closing RAB of FY 2020 (INR Cr.)</b>	<b>Total Revenue FY 17-20 (INR Cr)</b>
Pune	6.54	0.22	102.09	681.92
Goa	7.82	0.65	401.38	717.29
Cochin	9.72	2.21	1,517.64	2,268.94

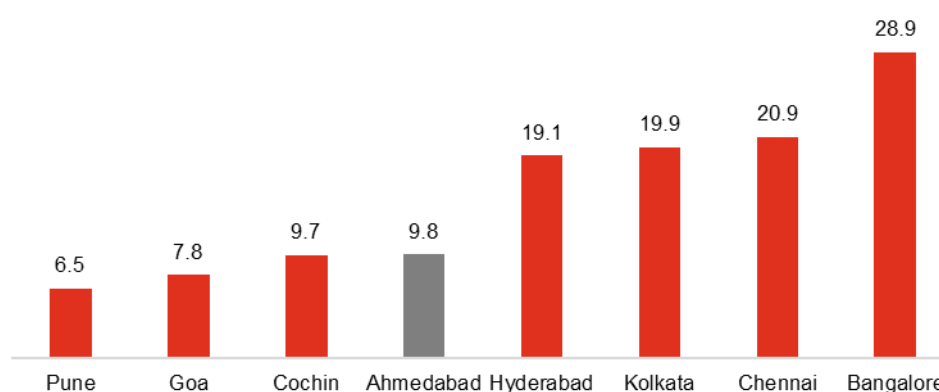
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Airport location	Traffic (Mn) (Avg. of FY 17-20)	Terminal Area (lakh sqm)	Closing RAB of FY 2020 (INR Cr.)	Total Revenue FY 17-20 (INR Cr)
Ahmedabad	9.80	0.70	328.92	1,068.58
Hyderabad	19.08	1.17	1,937.87	5,688.29
Kolkata	19.90	2.24	2,173.86	4,851.32
Chennai	20.88	1.75	1,840.12	3,725.25
Bangalore	28.87	1.50	4,086.69	5,772.95

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

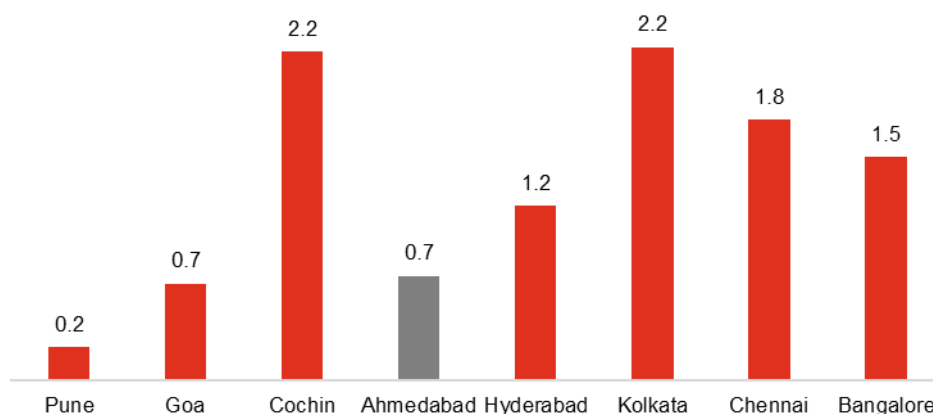
Source: AAI traffic news, True up submission of AAI, Tariff orders and Consultation papers

**Figure 14: Average PAX traffic across the select airports (Mn)**



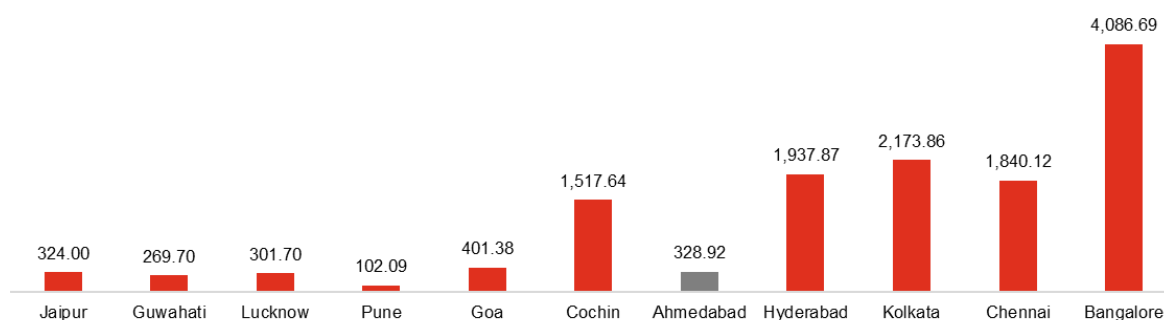
7.2.2. The comparable airports in terms of passenger traffic are Cochin, Goa and Pune. However, Pune and Goa airports are civil enclaves, so their cost structure may not be comparable to that of typical AAI airports. Nevertheless, these airports have also been included to have a wider peer group for comparison.

**Figure 15: Terminal area across the select airports (Lakh SQM)**



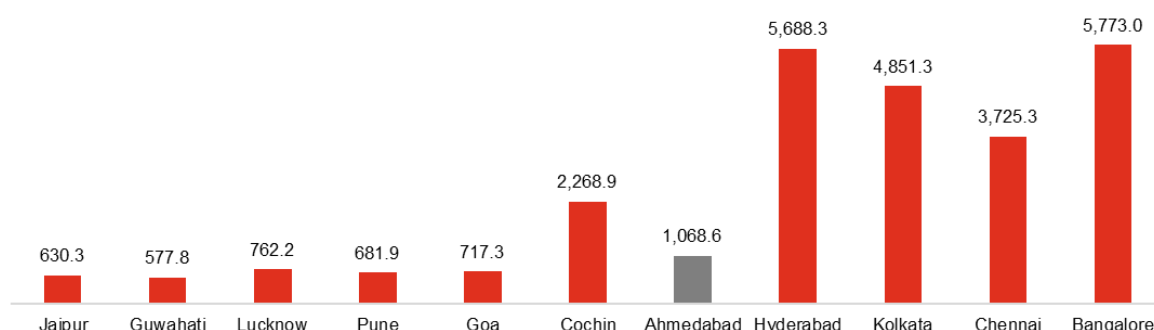
7.2.3. Only Goa airport is comparable to SVPIA in terms of terminal area (size).

**Figure 16: Closing RAB of FY 2020 across the domestic airports**



7.2.4. There are no comparable airports in the peer group in terms of the aeronautical assets managed. The closest to SVPIA is Goa Airport in terms of aeronautical assets managed. In order to have wider peer comparison, Guwahati, Lucknow and Jaipur airports have also been included for this analysis, given that the quantum of fixed assets at these airports are comparable to that of Ahmedabad.

**Figure 17: Total revenue during FY 17-20 across the select airports (INR Cr.)**



7.2.5. Even in terms of revenue, there are no comparable airports for SVPIA, the closest to SVPIA is Goa Airport. Therefore, Guwahati, Lucknow and Jaipur airports have also been included for this analysis in order to have a wider peer comparison to ascertain the reasonableness of the expenses.

7.2.6. The major expense items from FY 17-20 under O&M expenses across the select airports considered above are summarised in the table below:

**Table 76: Major expense items comparison across select domestic airports**

Expense per PAX (INR Cr.)	Employee		R&M*		Utilities		A&G		CHQ/RHQ*		Total Value
	Value	%	Value	%	Value	%	Value	%	Value	%	
Jaipur			40.00	18%					30.5	14%	223.3
Guwahati			66.80	24%					53	19%	277
Lucknow			52.40	17%					55.6	18%	315.8
Pune**	122.98	44%	19.72	7%	37.90	14%	13.55	5%	80.67	29%	279.45
Goa**	53.33	21%	45.08	18%	48.37	19%	13.42	5%	84.61	34%	249.15
Cochin	257.19	39%	79.30	12%	102.37	16%	87.84	13%		0%	653.8
Ahmedabad	134.60	19%	136.66	19%	79.56	11%	67.46	10%	280.98	40%	702.09
Hyderabad	315.7	21%	169.44	11%	71.88	5%	261.01	17%		0%	1514.85
Kolkata	638.4	44%	301.10	21%	258.24	18%	95.61	7%	138.56	10%	1438.16
Chennai	591.52	39%	338.61	23%	344.4	23%	110.2	7%	35.59	2%	1499.63
Bangalore	529.42	40%	396.02	30%	147.45	11%	139.37	11%		0%	1324.76

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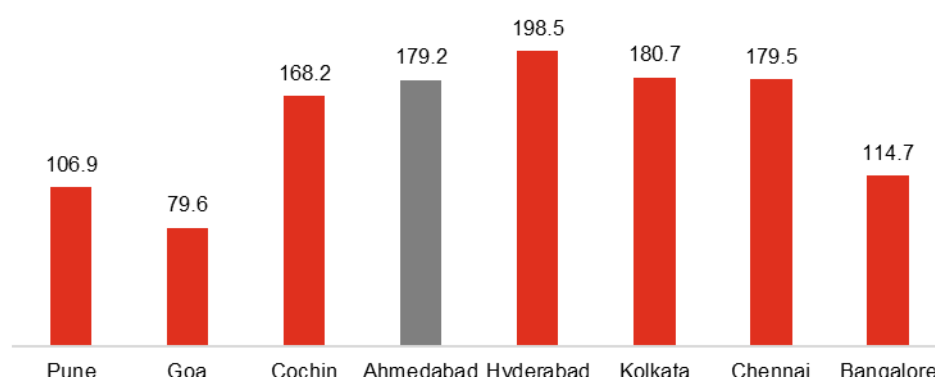
*\*Note: Though, the airports of Jaipur, Guwahati and Lucknow were not part of the selected peer group, they were included in the analysis of R&M and CHQ/RHQ expenses to have a wider peer comparison to ascertain the reasonableness of expenses.*

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

*Source: True up submission of AAI, Tariff orders and Consultation papers*

- 7.2.7. From the above table and figures the following observations may be gathered:
- 7.2.8. Among the comparable airports in terms of PAX traffic (i.e., Cochin, Goa and Pune), SVPIA has the highest O&M expenses in the Second Control Period. Among these airports, the employee expenses of Ahmedabad are lower than that of Cochin. Therefore, the employee expenses and total O&M expenses needs to be further examined.
- 7.2.9. The A&G expenses of SVPIA are higher than Goa and Pune, while it is lower than all the other airports. The closest airport in terms of total O&M expenses is Cochin, however, the A&G expenses of CIAL are higher than those of SVPIA even though the total O&M expenses at CIAL are lower than those for SVPIA. Hence, it is not possible to conclude on the reasonableness of A&G expenses of SVPIA without further scrutiny.
- 7.2.10. Jaipur, which is the closest airport in terms of the aeronautical assets managed, has a much lower R&M expense when compared to SVPIA (SVPIA has incurred ~3x R&M expenses of that of Jaipur). From this preliminary analysis, it seems that the R&M expenses for SVPIA are on the higher side and would need further analysis.
- 7.2.11. When compared to Goa Airport, the only airport that is comparable in terms of terminal area, the utility expenses of SVPIA are high. This would require further analysis to understand the reasonableness of these expenses.
- 7.2.12. With respect to CHQ/RHQ expenses, the expenses of SVPIA are much higher than Jaipur, Lucknow, Pune and Goa Airport (closest in terms of total revenue). In fact, the CHQ/RHQ expenses for SVPIA are the highest among all the comparable airports. Therefore, the CHQ/RHQ expenses would require further study.
- 7.2.13. At an overall level, the O&M expenses per PAX of SVPIA are comparable to those of Hyderabad, Kolkata, Chennai and Cochin. The comparison is shown below.

**Figure 18: Comparison of total O&M expenses per PAX (INR)**



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

### **7.3. Analysis of Employee expenses**

- 7.3.1. Employee expenses are driven primarily by two factors. The first being the employee utilisation 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

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- Average salary per employee

7.3.2. The following table summarises the employee expenses with reference to the above-mentioned parameters for the period FY 2017-20 across select airports considered in this study:

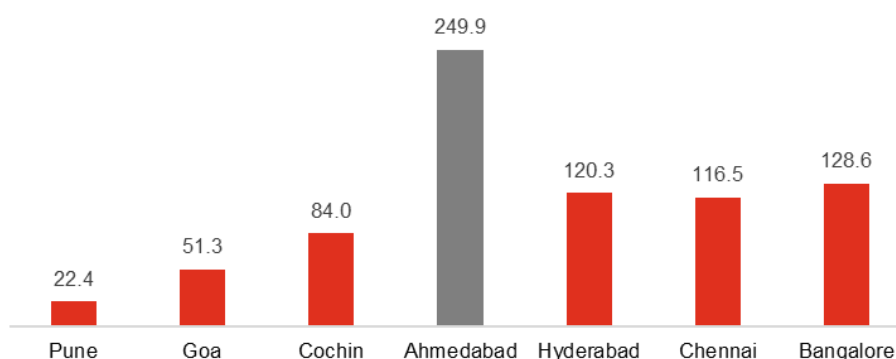
**Table 77: Employee expense comparison across select domestic airports**

Airport location	No of passengers per employee (in '000)*	Average salary per employee (in INR Cr)	Employee expense per PAX (in INR)
Pune	22.4	0.02	47.04
Goa	51.33	0.01	17.05
Cochin	83.9	0.14	66.16
Ahmedabad	249.9	0.22	34.40
Hyderabad	120.3	0.13	41.37
Kolkata		0.1	80.20
Chennai	116.53	0.21	70.81
Bangalore	128.65	0.15	45.85

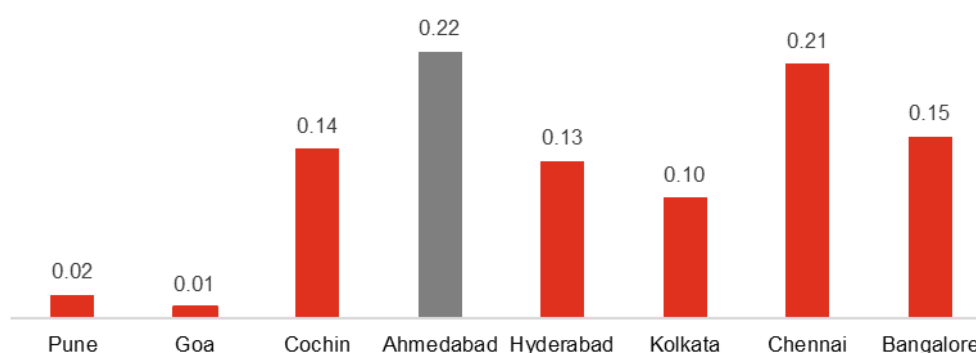
\*Note: Due to unavailability of information, the analysis could not be performed for Kolkata

Source: True up submission of AAI, Tariff orders and Consultation papers

**Figure 19: No of passengers per employee (in '000)**

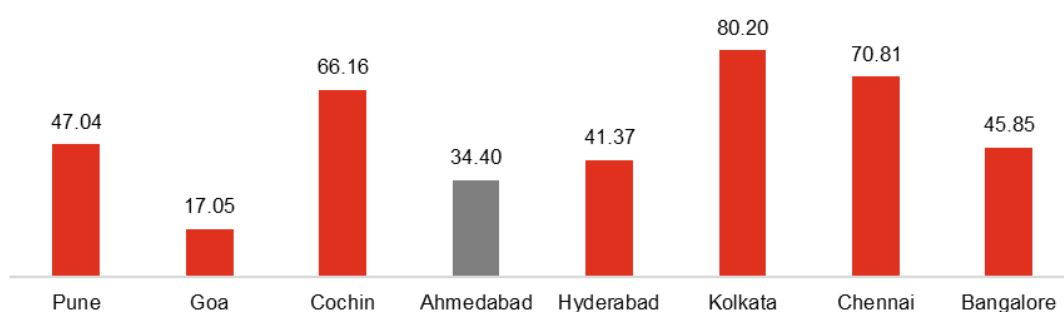


**Figure 20: Average salary per employee (in INR Cr.)**





**Figure 21 : Employee expenses per PAX (in INR)**



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

- Though Ahmedabad airport has the highest average salary among the comparable airports, it is the most understaffed among them. SVPIA handles the highest number of passengers per employee (~250k PAX per employee) which is nearly 3x of that of Cochin, almost 2x of that of Bangalore, Hyderabad and Chennai Airports.
- Among the comparable airports, only Goa airport has a lower employee expense per PAX than SVPIA. However, Goa airport is a civil enclave, so its cost structure may not be comparable to that of typical AAI airports.
- Further, the overall employee expenses incurred in the Second Control Period are well within the projections approved by the Authority in the Tariff Order for the Second Control Period.
- Therefore, the employee expenses for Ahmedabad airport seem reasonable when compared with other similar airports.

#### **7.4. Analysis of A&G expenses**

7.4.1. 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.

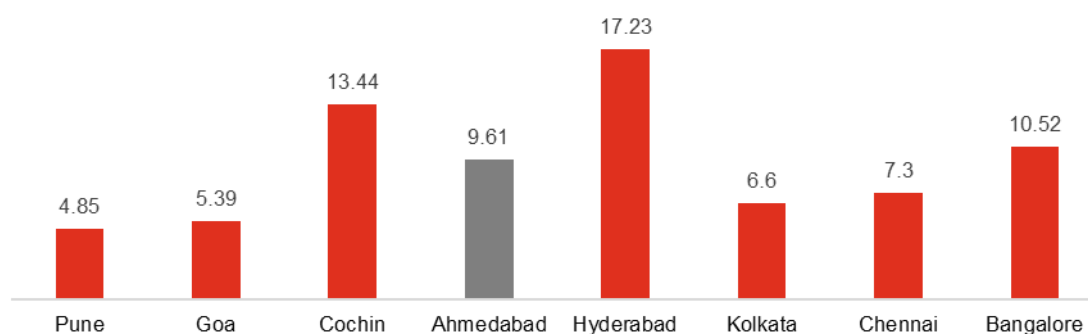
7.4.2. The following table elaborates the comparison based on the above-mentioned parameter.

**Table 78: A&G comparison across select domestic airports**

Airport location	A&G expenses per total expenses (%)
Pune	4.85
Goa	5.39
Cochin	13.44
Ahmedabad	9.61
Hyderabad	17.23
Kolkata	6.6
Chennai	7.3
Bangalore	10.52

Source: True up submission of AAI, Tariff orders and Consultation papers

**Figure 22: A&G expenses as percentage of the total expenses (%)**



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

- A&G expenses of Ahmedabad Airport (9.61% of total expenses) when compared as a % of the total expenses, are higher than that of Pune, Goa, Kolkata and Chennai. However, Pune and Goa airports are civil enclaves, so their cost structure may not be comparable to that of typical AAI airports.
- The closest airport in terms of total O&M expenses is Cochin and A&G expenses of Ahmedabad Airport (9.61% of total expenses) when compared as a % of the total expenses, are lower than that of Cochin. Further, the expenses are also lower when compare to that of Hyderabad and Bangalore.
- Based on the above, there is no evidence to suggest that the A&G expenses for SVPIA are unreasonable.

## 7.5. Analysis of R&M expenses

7.5.1. Repairs and maintenance expenses grow in proportion of the assets being operated. This is further exacerbated by the gradual ageing of assets and the consequent expenses for upkeep of the same. External factors such as exposure to weather and the level of utilisation of the assets also have an impact on R&M expenses. Notwithstanding the same, the R&M expenses have been analysed as a percentage of the average RAB.

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

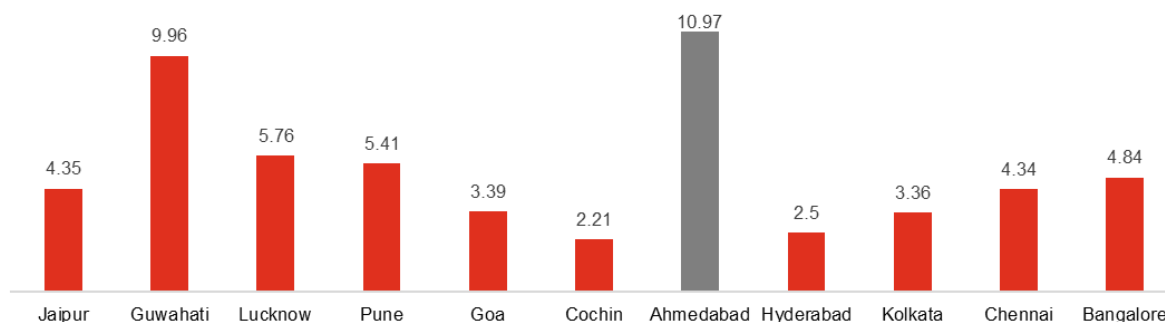
**Table 79: R&M comparison across select domestic airports**

Airport location	R&M expenses per average RAB (%)
Jaipur	4.35
Guwahati	9.96
Lucknow	5.76
Pune	5.41
Goa	3.39
Cochin	2.21
Ahmedabad	10.97
Hyderabad	2.50
Kolkata	3.36
Chennai	4.34
Bangalore	4.84

*Values are for the period FY 2017-20*

*Source: True up submission of AAI, Tariff orders and Consultation papers*

**Figure 23: R&M expenses per average RAB (%)**



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

- For R&M expenses per average RAB, it observed that for Ahmedabad Airport it is the highest when compared to those of other similar airports. SVPIA incurs 2-3x of R&M expenses per average RAB when compared to that of Jaipur and Lucknow Airports that have a similar RAB.
- Therefore, the R&M expenses incurred by SVPIA seem to be unreasonably high. It is seen that significant costs were incurred towards R&M expenses for electrical installation and security equipment, which are driving up the total R&M expenses (Refer para 4.5.14).
- Even from an external benchmarking point of view, it can be concluded that the R&M expenses incurred by AAI is unreasonably high. However, these expenses were rationalized in the fifth chapter (Refer Para 5.6). In future Control Periods, the Authority may consider capping the allowable expenses considering global/regional benchmarks.

## 7.6. Analysis of CHQ/RHQ expenses

7.6.1. 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 for FY 17-20 and
- Total CHQ/RHQ expenses as percentage of total revenue for FY 17-20

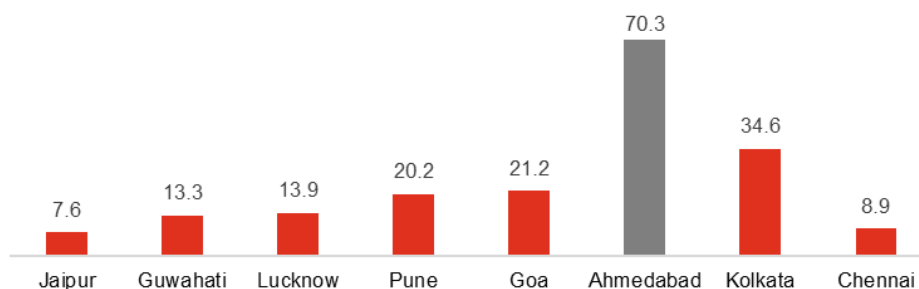
7.6.2. The following table elaborates the comparison based on the above-mentioned parameters

**Table 80: CHQ/RHQ expense comparison across select domestic airports**

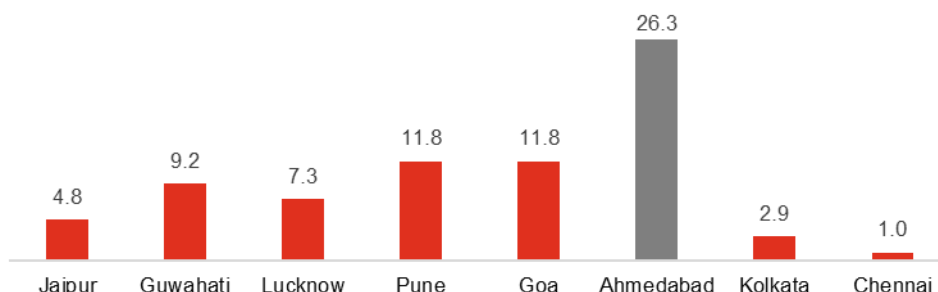
Airport location	Average CHQ/RHQ (INR Cr.)	Total CHQ/RHQ expenses per total revenue (%)
Jaipur	7.63	4.84%
Guwahati	13.25	9.17%
Lucknow	13.9	7.29%
Pune	20.17	11.8%
Goa	21.15	11.8%
Ahmedabad	70.25	26.3%
Kolkata	34.64	2.9%
Chennai	8.90	1.0%

*Note: CHQ/RHQ expenses are not applicable to Cochin, Bangalore, and Hyderabad airports, hence these airports are excluded.  
Source: True up submission of AAI, Tariff orders and Consultation papers*

**Figure 24: Average CHQ/RHQ expenses for FY 17-20 (INR Cr.)**



**Figure 25: Total CHQ/RHQ expenses for FY 17-20 as percentage of total revenue for FY 17-20 (%)**



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

- Ahmedabad has the highest average CHQ/RHQ expense among its peer group.
- SVPIA also has the highest CHQ/RHQ expenses per total revenue when compared to its peer group.
- Even from an external benchmarking perspective, it seems that SVPIA is incurring unreasonably high CHQ/RHQ expenses among its peer group. AAI had given their justifications for the exorbitant CHQ/RHQ expenses as mentioned in para 4.5.17. The explanation given by AAI accounts for the deviation of only ~ INR 199 Cr. whereas the actual deviation was ~INR 256 Cr.
- Further, the CHQ/RHQ expenses are allocated on a revenue basis, it doesn't make sense that the expense as a percentage of revenue is alarmingly high for SVPIA, when compared to the other airports. However, these expenses have been readjusted in the fifth chapter (Refer Table 42). Since the airport was privatized during the Second Control Period, these expenses would not appear as part of the O&M expenses in future Control Periods. However, AIAL does incur corporate support service expenses towards its parent companies. If it is observed that such expenses do not seem reasonable, the Authority may consider capping the allowable expenses based on suitable global/regional benchmarks at the time of determination of tariffs for future Control Periods.

## 7.7. Analysis of utility expenses

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

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

**Table 81: Average PAX and terminal area of the selected airports**

Airport location	Average PAX Traffic (Mn)	Terminal area (in Lakhs sqm)
Pune	6.54	0.22
Goa	7.82	0.65
Cochin	9.72	2.21
Ahmedabad	9.80	0.70

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Airport location	Average PAX Traffic (Mn)	Terminal area (in Lakhs sqm)
Hyderabad	19.08	1.17
Kolkata	19.90	2.24
Chennai	20.88	1.75
Bangalore	28.87	1.50

7.7.3. 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 utilisation 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.

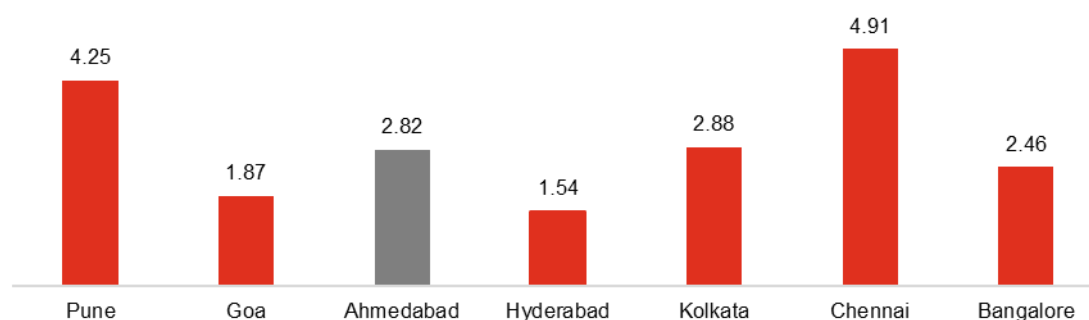
7.7.4. The following table elaborates the comparison based on the utility expense per terminal area:

**Table 82: Utility expense per unit terminal area for the selected airports**

Airport location	Utility expense per terminal area (INR per 1000 sqm)
Pune	4.25
Goa	1.87
Ahmedabad	2.82
Hyderabad	1.54
Kolkata	2.88
Chennai	4.91
Bangalore	2.46

Source: True up submission of AAI, Tariff orders and Consultation papers

**Figure 26: Utility expense per terminal area (INR per SQM)**



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

- SVPIA's terminal area is comparable to Goa but SVPIA incurs higher utilities expense per terminal area (2.82 INR per SQM) as compared to Goa (1.87). However, the power rates in Gujarat are generally higher than that in Goa<sup>13</sup>. Additionally, it is to be noted that Goa airport is a civil enclave, so its cost structure may not be comparable to that of SVPIA.
- SVPIA's utilities expense per terminal area is comparable to Kolkata and lower than those of Pune and Chennai.
- Based on the above, there is no evidence to suggest that the utility expenses for SVPIA are unreasonable.

<sup>13</sup> <https://cercind.gov.in/2021/orders/01-SM-2021.pdf>

## 7.8. Global and regional benchmarking

7.8.1. A global and regional benchmarking has also been carried out for SVPIA in comparison with the airports across the world according to four parameters.

- Personnel expenses per PAX
- Maintenance expenses per PAX
- A&G expenses per PAX and
- Total expenses per PAX.

7.8.2. The regional and the global benchmarks are based on averages from data aggregated from airports across the world. Therefore, some deviations maybe expected when compared with individual airports.

7.8.3. The following table elaborates the above-mentioned parameters

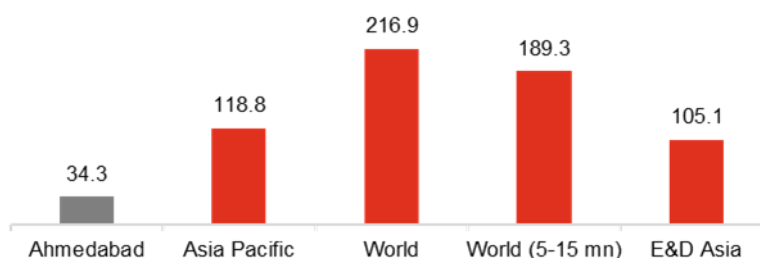
**Table 83: Global comparisons across various parameters**

Particulars (In INR)	Personnel expenses (insourced) per PAX	Maintenance expense per PAX*	A&G Expenses per PAX	Total expenses per PAX
Asia-Pacific	118.83	59.89	46.85	530.97
World	216.87	37.29	33.90	649.49
5–15m	189.27	31.52	40.14	608.34
Emerging and developing Asia	105.13	42.04	38.34	433.02
Ahmedabad	34.30	36.55	14.60	156.38

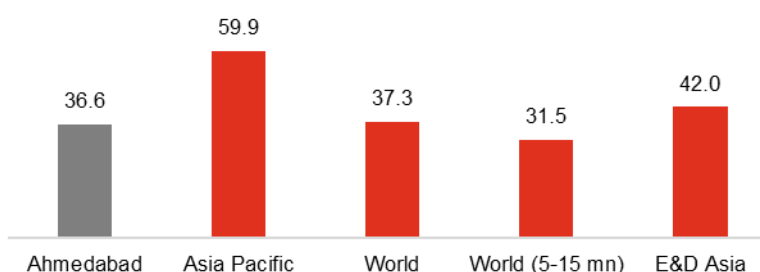
*Note: Average exchange rate for 2019 considered is 1\$=70.39 INR; \*excluding contracted services*

*Source: True up submission of AAI, ACI benchmarks*

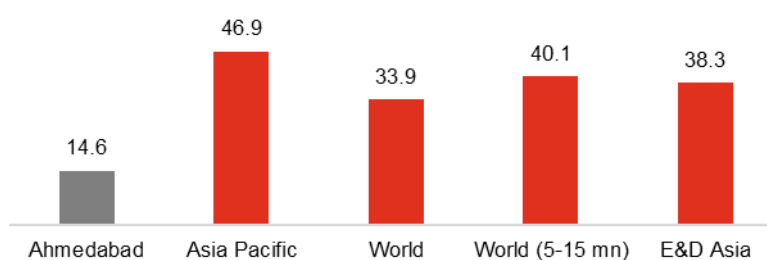
**Figure 27: Personnel expense per PAX (in INR)**



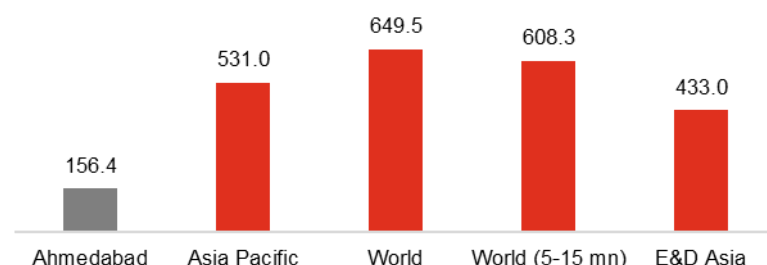
**Figure 28: Maintenance expense per PAX (in INR)**



**Figure 29: A&G expense per PAX (in INR)**



**Figure 30: Total expense per PAX (in INR)**



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

- Only for the parameter of Maintenance expense per PAX, Ahmedabad airport has higher Maintenance expense per PAX than that of world (5-15 Mn).
- However, when compared with the global and regional averages, Ahmedabad airport and all the other comparable airports seem to perform much better in terms of cost efficiency at an overall level.

## **7.9. Summary of External Benchmarking**

7.9.1. It is observed that, based on a per pax basis, SVPIA seems to have higher operational expenses with respect to select comparable peers. However, this is primarily due to the CHQ/RHQ expenses and R&M expenses that are quite high for Ahmedabad airport.

7.9.2. The employee expenses for Ahmedabad airport seem reasonable when compared with other similar airports.

7.9.3. The A&G expenses of Ahmedabad Airport are higher than that of Pune, Goa, Kolkata and Chennai. It is to be noted that Pune and Goa airports are civil enclaves, so their cost structure may not be comparable to that of SVPIA. However, the A&G expenses of Ahmedabad Airport are lower than that of Cochin, Hyderabad and Bangalore. Therefore, there is no evidence to suggest that the A&G expenses for SVPIA are unreasonable.

7.9.4. The R&M expenses for SVPIA are on a higher side and seem unreasonable when compared with similar airports. The expenses are primarily being driven up by R&M expense for electrical installation and security equipment. In the absence of proper justification from AAI, it can be concluded that the R&M expenses incurred is unreasonable. However, these expenses were rationalised in the fifth chapter (Refer Para 5.6). In future Control Periods, the Authority may consider capping the allowable expenses considering global/regional benchmarks.

7.9.5. SVPIA is incurring the highest CHQ/RHQ expenses among its peer group and the expenses seem unreasonable. However, these expenses have been readjusted in the fifth chapter (Refer Table 42). Since the airport was privatized during the Second Control Period, these expenses would not appear as part of the O&M expenses in future Control Periods. However, AIAL does incur corporate support service expenses towards its parent companies. If it is observed that such expenses do not seem reasonable, the Authority may consider capping the allowable expenses based on suitable global/regional benchmarks at the time of determination of tariffs for future Control Periods.

- 7.9.6. Based on external benchmarking, there is no evidence to suggest that the utility expenses for SVPIA are unreasonable.
- 7.9.7. When compared with the global and regional averages, Ahmedabad airport seems to be doing well in terms of cost efficiency except in the case of R&M expenses for which the cost incurred by Ahmedabad is marginally higher than the global average for airports in the traffic range of 5-15 MPPA.

## **7.10. Conclusion**

- 7.10.1. Based on the observations from external benchmarking, it can be concluded that the operations and maintenance expenses at SVPIA are reasonable except for R&M expenses and 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 Authority may still consider capping the allowable expenses based on suitable global/regional benchmarks at the time of determination of tariffs for future Control Periods.



## **8. OVERALL SUMMARY OF THE STUDY**

### **8.1. Internal benchmarking of expenses of AAI for Second Control Period**

- 8.1.1. The total operational expenses grew at a higher rate (~25%) than that of passenger (~15%) and ATM (~16%) traffic in the Second Control Period. As compared to the First Control Period, AAI has incurred nearly 2.03x growth in the total expenses in the Second Control Period till COD.
- 8.1.2. During the period FY16 to FY 20, the employee expenses have a lower CAGR (~10%) as compared to the growth in traffic and ATM. This is an improvement over the trend observed in the First Control Period.
- 8.1.3. The utility expenditure recorded a negative CAGR of -2.8% during the Second Control Period while the traffic was on an increasing trend. Also, when compared to the CAGR of 11.5% in First Control Period, the expenses seem to have been curtailed in the Second Control Period.
- 8.1.4. The average A&G expenses, CHQ/RHQ expenses, R&M expenses, other outflows and total expenses are higher in the Second Control Period as compared to the First Control Period.
- 8.1.5. The average CHQ/RHQ expenses, A&G expenses and R&M expenses incurred by AAI in the SCP are significantly higher when compared to the approved projections as per the Tariff Order for SCP.
- 8.1.6. The rise in CHQ/RHQ expenses, A&G expenses and R&M expenses are driving up the total expenses in the Second Control Period.
- 8.1.7. Even after adjusted for inflation, O&M expenses per PAX and O&M expenses per ATM have grown considerably (~19% and ~17%) respectively in FY 2020 vis-à-vis FY 2016.
- 8.1.8. Among the major expense items, employee expenses and utility expenses are reasonable and within the amount approved by the Authority in the Second Control Period.
- 8.1.9. The A&G expenses in FY 17 and FY 19 are lower than those incurred in the First Control Period. However, the expenses have increased significantly in FY 20 and FY 21 due to a steep increase in Municipal Taxes. AAI clarified that the local authorities raised a demand for taxes for previous years as well due to which there has been a sudden increase in A&G expenses in the last two years of the SCP. There are no other major expenses that are driving up the A&G expenses. The overall A&G expenses for SVPIA for SCP appear to be high. However, from an external benchmarking perspective, the A&G expenses of AAI seem to be at par with the expenses incurred by other comparable airports (The external benchmarking has been detailed in Para 7.4).
- 8.1.10. R&M expenses have shown a gradual upward trend over time. Though such a trend is expected with the ageing of assets, the expenses incurred in SCP are significantly high when compared to FCP and the projections approved in the Tariff Order for SCP. Certain expenses such as the R&M of electrical installation and security equipment are driving the costs up. Therefore, based on internal benchmarking, it is observed that AAI has incurred significantly higher expenses towards R&M as compared to what was approved by AERA in the Tariff Order for SCP. Even when compared with the FCP, the R&M expense levels have surged. Therefore, these expenses have been further examined in Para 5.3.18 to Para 5.3.22 and Para 5.6.
- 8.1.11. The CHQ/RHQ expenses have grown substantially in the Second Control Period as compared to the First Control Period. When compared as a % of revenue, the CHQ/RHQ expenses have more than doubled in the SCP. AAI stated that apportionment of CHQ/RHQ expenditure is made on the basis of actual expenditure incurred by CHQ/RHQ and that the increase may be due to the rise of salary and benefit payable to the employees in line with CPE instruction. However, the deviation is quite high. The explanation given by AAI in Para 4.5.17 accounts for the deviation of only ~ INR 199 Cr. whereas the actual deviation was ~INR 256 Cr. Therefore, these expenses need to be further scrutinized and the same has been carried out in Para 5.3.30 to Para 5.3.35.
- 8.1.12. The total expenses in the Second Control Period have grown significantly and the major driver of this is the steep rise in CHQ/RHQ expenses followed by the A&G and R&M expenses.

8.1.13. Based on the observations from internal benchmarking, it can be concluded that the operations and maintenance expenses for Second Control Period at SVPIA are reasonable except for the CHQ/RHQ expenses and R&M expenses that have increased significantly. Therefore, these expenses have been further examined in the fifth chapter (Refer Para 5.3.30 to Para 5.3.35 for CHQ/RHQ expenses and Para 5.3.18 to Para 5.3.22 and Para 5.6 for R&M expenses).

## **8.2. Reallocation of expenses for Second Control Period till COD**

8.2.1. Based on the principles laid out in Para 5.1.1 and the information collected from AAI based on query submissions, reclassifications and necessary adjustments are made to determine the efficient O&M expenses.

8.2.2. AAI had proposed the average Terminal Area Ratio as 94.83 : 5.17 (aeronautical : non-aeronautical). However, The Authority, at the time of determination of tariffs for the Second Control Period decided to adopt the Terminal Area Ratio as 92.5 : 7.5 (aeronautical : non-aeronautical) to encourage the growth of non-aeronautical revenues which would cross-subsidise aeronautical charges. However, AAI is yet to achieve such allocation as directed by the Authority. 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 Area Ratio has been revised to 92.5 : 7.5 (aeronautical : non-aeronautical) in line with the Authority's decision in Order No. 14/2018-19.

8.2.3. Based on the revision of the terminal area ratio, there is a reduction of INR 0.58 Cr in the aeronautical O&M expenses as per the Study.

8.2.4. The gross block ratio as computed by AAI and as per the Study (suggested in the Study on allocation of assets into Aeronautical and Non-Aeronautical assets) is shown in the table below:

**Table 84: Gross block ratio as per AAI vs the Study**

Particulars	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 (as on COD)
<b>As per AAI</b>					
Gross block ratio	85.17%	83.36%	83.80%	84.26%	84.09%
<b>As per the Study</b>					
Gross block ratio	84.88%	83.05%	83.46%	83.90%	83.73%

8.2.5. Certain expense items under A&G expenses as mentioned in Para 5.3.8, R&M expenses as mentioned in Para 5.3.19, and utility expenses as mentioned in Para 5.3.27 have been readjusted as per the Gross block ratio used in the Study.

8.2.6. The classification of departments as per AAI was found to be appropriate. However, it was noted that the costs directly pertaining to the ANS employees have already been excluded from the O&M expenses, but the common expenses are included. Accordingly, it is proposed to consider the common employees allocated to ANS as deemed non-aeronautical employees since such costs are not a subject of the Study report. Based on the above adjustment, the revised employee ratio computed by the Study is as follows:

8.2.7. The employee ratio as computed by AAI and as per the Study is shown in the table below:

**Table 85: Employee ratio as per AAI vs the Study**

Particulars	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 (as on COD)
<b>As per AAI</b>					
<b>Employee Ratio for (AERO : Non Aero)</b>					
Aero	96.60%	97.12%	97.37%	97.39%	96.99%
Non-Aero	3.40%	2.88%	2.63%	2.61%	3.01%
<b>As per the Study</b>					

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Particulars	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 (as on COD)
<b>Employee Ratio for (AERO : Non Aero)</b>					
Aero	88.50%	88.82%	90.35%	90.36%	90.24%
Non-Aero	11.50%	11.18%	9.65%	9.64%	9.76%

- 8.2.8. The employee ratio as considered by AAI for allocation of O&M expenses was changed due to reclassifications of department carried out in the Study. Based on the revision of the employee ratio there is a reduction of INR 11.60 Cr in the aeronautical O&M expenses as per the Study
- 8.2.9. Certain expense items were considered as 100% aeronautical by AAI which were revised using the employee ratio as per the Study as mentioned in Para 5.3.15 and 5.3.20.
- 8.2.10. The CSR expenses included under A&G expenses were reviewed by the Study based on the average aeronautical profit before tax. It was observed that the expenses incurred by AAI were within the allowable limits, therefore, the Study has considered the CSR expenses as submitted by AAI.
- 8.2.11. As per AAI, the municipal tax was considered as 100% aeronautical. However, the Study has reclassified this item on the basis of ratios as mentioned in Table 27, which led to the reduction of INR 1.38 Cr in the aeronautical O&M expenses as per the Study.
- 8.2.12. Expense items like "INT/Penalties-Govt" and R&M expenses related to "communication equipment", "navigation equipment" considered as ANS were excluded as it is not fair to pass on these expenses to the users.
- 8.2.13. As for the CHQ/RHQ expenses, it was allocated as 95% aeronautical and 5% non-aeronautical by the AAI. However, certain revisions such as exclusion of legal expenses and Mumbai JVC Cell and reallocation of employee related CHQ/RHQ expenses (80% aeronautical) were carried out by the Study. Accordingly, the impact of this reallocation was a reduction of INR 154.71 Cr in the aeronautical O&M expenses as per the Study.
- 8.2.14. The total year-wise impact on various heads under O&M expenses as a result of the reallocation of expenses by the Study is shown below:

**Table 86: Impact of reallocation of expenses of AAI as per the Study**

Particulars (INR Cr.)	Refer	FY 2017	FY 2018	FY 2019	FY 2020	FY 21 (till COD)	Total
Impact of							
Terminal area revision (A)	Table 20	0.08	0.08	0.10	0.18	0.14	0.58
Employee ratio revision (B)	Table 24	2.13	2.64	2.43	3.45	0.95	11.60
Revision of ratios (C = A + B)		2.21	2.72	2.53	3.63	1.09	12.18
Impact due to reallocation of:							
Employee expenses – Retirement benefits (D)	Table 26	0.04	0.23	0.43	-	0.16	0.86
Administrative & Other Expenses (E)	Table 34	0.05	0.08	0.15	3.02	1.04	4.33
Repairs & Maintenance (F)	Table 38	1.04	0.85	2.01	1.24	0.63	5.76
Utility Expenses (G)	Table 41	0.01	0.01	0.02	0.02	0.01	0.06
Miscellaneous & Other Outflows (H)	Para 5.3.29	0	0	0	0	0	0
CHQ/RHQ expense (I)	Table 42	40.91	21.29	35.36	49.21	7.93	154.71
Total impact of reallocation (J = D + E + F + G + H + I)		42.05	22.46	37.96	53.49	9.76	165.72
Total impact due to revision of ratios and reallocations by the Study (C + J)		44.26	25.18	40.49	57.12	10.85	177.90

Note: Differences are due to rounding off

- 8.2.15. It was observed that the R&M expense as a % of opening RAB are higher than 7% except for FY 2021 (till COD). Whereas AERA has considered the R&M expenses to be reasonable if they are within 6% of

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opening RAB in the case of Pune airport (Order No. 45/2021-22 dated 17th March 2022) and Calicut airport (Order No. 39/2021-22 dated 11th February 2022).

- 8.2.16. Therefore, the Study has considered the rationalisation of R&M expenses based on 6% of the opening RAB of AAI, in the absence of sufficient justification for the significant deviation. This led to an impact of INR 33.86 Cr.

**Table 87: Overall impact as per the Study on O&M expenses of AAI for SCP**

Particulars (INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 (till COD)	Total
Total aeronautical expenses as per AAI (A) (Refer table 18)	155.80	159.52	174.72	212.05	116.39	818.48
Impact of terminal area revision (B) (Refer table 20)	0.08	0.08	0.10	0.18	0.14	0.58
Impact of employee ratio revision (C) (Refer table 24)	2.13	2.64	2.43	3.45	0.95	11.60
<b>Total impact due to terminal area revision and employee ratio revision (B + C)</b>	<b>2.21</b>	<b>2.72</b>	<b>2.53</b>	<b>3.63</b>	<b>1.09</b>	<b>12.18</b>
Total aeronautical expenses after terminal area revision and employee ratio revision (D = A – B – C)	153.59	156.80	172.18	208.42	115.30	806.30
<b>Total impact of reallocation (Refer table 45) (E)</b>	<b>42.05</b>	<b>22.46</b>	<b>37.96</b>	<b>53.49</b>	<b>9.76</b>	<b>165.72</b>
Aeronautical O&M Expenses post reclassification as per the Study (F = D – E) (Refer table 46)	111.53	134.34	134.23	154.93	105.55	640.58
<b>Impact due to rationalisation of R&amp;M expenses (Refer table 48) (G)</b>	<b>3.21</b>	<b>6.11</b>	<b>14.76</b>	<b>9.77</b>	<b>-</b>	<b>33.86</b>
Aeronautical O&M Expenses as per the Study (F-G)	108.32	128.23	119.46	145.16	105.55	606.72

- 8.2.17. The aeronautical expenses of AAI for SCP till COD as per the Study after taking into account the over re-allocation and rationalisation of R&M expenses is shown in the following table:

**Table 88: Aeronautical expenses of AAI for SCP till COD as per the Study**

Particulars (INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 (Till COD)	Total
Employee Benefit	21.69	29.00	35.74	38.14	15.22	139.79
Administrative & Other Expenses	8.90	13.33	15.84	24.53	24.96	87.55
CHQ/RHQ	34.26	39.80	23.39	36.76	36.72	170.92
Repairs & Maintenance	24.39	24.71	24.07	24.50	18.22	115.88
Utility Expenses	18.47	19.89	20.30	20.77	10.04	89.47
Miscellaneous & Other Outflows	0.62	1.49	0.13	0.47	0.39	3.09
Total	108.32	128.23	119.46	145.16	105.55	606.72

### 8.3. Assessment of O&M expense of AIAL for FY 2021 post COD

- 8.3.1. The Study analysed the costs incurred by AIAL who had operated the airport for a period of 145 days in FY 2021, within which they had incurred an amount of INR 71.11 Cr towards O&M expenses. The Other Expenses and employee expenses primarily contribute towards this amount. The major expenses were analysed separately to ascertain their reasonableness.
- 8.3.2. AIAL had operated the airport for a period of five months post COD within which they had incurred substantial employee expenses amounting to INR 25.71 Cr. AIAL justified this higher employee cost

stating that the cost towards AAI employees is an obligation mandated as per Concession Agreement Clause 6.5 and it is paid based on actual invoices raised by AAI.

- 8.3.3. The average salary per AIAL employee is higher than that of the Select Employees (of AAI) by more than ~70%. However, it is observed that the average salary of AIAL is comparable to that at the other PPP airports.
- 8.3.4. The Study made certain adjustments and reclassifications towards the employee expenses of the Select employees and AIAL employees which led to an overall reduction of INR 3.79 Cr on the employee expenses.
- 8.3.5. As per the submission of AIAL, the aeronautical A&G expenses is INR 6 Cr. Certain reclassifications have been carried out in the Study, as a result of which the aeronautical A&G expenses as per the Study is INR 5.81 Cr. This led to an overall reduction of INR 0.18 Cr in the A&G expenses.
- 8.3.6. The aeronautical Corporate Support Service expense, as per the MYTP submission of AIAL, is INR 6.98 Cr. However, the Study has made certain adjustment to this expense which led to an overall reduction of INR 0.73 Cr in the CSS expense.
- 8.3.7. As per the submission of AIAL, the aeronautical R&M expenses as per AIAL is INR 10.37 Cr. Certain reclassifications have been carried out in the Study, as a result of which the aeronautical R&M expenses as per the Study is INR 10.42 Cr. This led to an overall increase of INR 0.04 Cr in the R&M expenses.
- 8.3.8. The R&M expenses of AIAL post reclassification as per the Study were greater than 6% of the opening RAB of AIAL. Therefore, this expense was rationalized, resulting in an overall reduction of INR 3.23 Cr in the R&M expenses.
- 8.3.9. Since AIAL has operated the airport for a period of only five months in the SCP, no major change is expected in the utility expenses as there have 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. The extrapolated utility expenses (INR 15.88 Cr.) incurred by AIAL seems reasonable and is within the projections approved as per the Tariff Order for the Second Control Period (INR 23.2 Cr.). The utility expenses of AIAL appear to be rational and the treatment for the same is in line with the approach followed by AERA.
- 8.3.10. As per the submission of AIAL, the aeronautical other outflow expenses as per AIAL is INR 15.74 Cr. Certain reclassifications have been carried out in the Study, because of which, the aeronautical other outflow expenses as per the Study is INR 12.76 Cr. This led to an overall reduction of INR 2.98 Cr in the other outflow expenses.
- 8.3.11. The aeronautical O&M expenses as per AIAL is INR 71.11 Cr. Certain reclassifications have been carried out in the Study, because of which, the aeronautical O&M expenses as per the Study is INR 60.21 Cr. This led to an overall reduction of INR 10.91 Cr in the aeronautical O&M expenses.
- 8.3.12. It can be seen that AIAL has incurred several new expenses that were not prevalent when the airport was operated by AAI. The projections approved by AERA in the Tariff Order for the Second Control Period were in the context of the airport being operated by AAI. It is expected that the cost structure of a private player would be different from that of a government entity. Therefore, it is not fair to ascertain the reasonableness of these expenses of the airport operator based on the costs incurred over the first five months of operations, during which several one-time expenses would have been incurred towards repairs, modifications, and refurbishments. Rather, the performance of the Airport Operator needs to be monitored over a longer period of time to evaluate the efficiency of operations. AERA may consider rationalising the allowable O&M expenses based on regional or global benchmarks in the event that the private player is not able to achieve operational efficiencies as expected.

#### **8.4. External benchmarking of expenses of AAI for Second Control Period**

- 8.4.1. Among the comparable airports in terms of PAX traffic (i.e., Cochin, Goa and Pune), employee expenses per PAX of Ahmedabad are lower than that of Cochin and Pune. Though Ahmedabad airport has the highest average salary among the comparable airports, it is the most understaffed among them.

Therefore, the employee expenses for Ahmedabad airport seem reasonable when compared with other similar airports.

- 8.4.2. A&G expenses of Ahmedabad Airport (9.61% of total expenses) when compared as a % of the total expenses, are higher than that of Pune, Goa, Kolkata and Chennai. However, the closest airport in terms of total O&M expenses is Cochin and A&G expenses of Ahmedabad Airport (9.61% of total expenses) when compared as a % of the total expenses, are lower than that of Cochin. Further, the expenses are also lower when compare to that of Hyderabad and Bangalore. Based on the above, there is no evidence to suggest that the A&G expenses for SVPIA are unreasonable.
- 8.4.3. The R&M expenses per average RAB is the highest for SVPIA. It is seen that significant costs were incurred towards R&M expenses for electrical installation and security equipment, which are driving up the total R&M expenses. Even from an external benchmarking point of view, this expense is on the higher side. It can be concluded that the R&M expenses incurred by AAI is unreasonable. However, these expenses were rationalized in the fifth chapter (Refer Para 5.6). In future Control Periods, the Authority may consider capping the allowable expenses considering global/regional benchmarks.
- 8.4.4. CHQ/RHQ expense was compared with respect to two parameters: Average CHQ/RHQ for FY 17-20 and Total CHQ/RHQ expenses as percentage of total revenue for FY 17-20. SVPIA is incurring unreasonably high CHQ/RHQ expenses among its peer group. AAI had given their justifications for the exorbitant CHQ/RHQ expenses as mentioned in Para 4.5.17. The explanation given by AAI accounts for the deviation of only ~ INR 199 Cr. whereas the actual deviation was ~INR 256 Cr. However, these expenses have been readjusted in the fifth chapter (Refer Table 42). Since the airport was privatized during the Second Control Period, these expenses would not appear as part of the O&M expenses in future Control Periods. However, AIAL does incur corporate support service expenses towards its parent companies. If it is observed that such expenses incurred over a period of time do not seem reasonable, the Authority may consider capping the allowable expenses based on suitable global/regional benchmarks at the time of determination of tariffs for future Control Periods.
- 8.4.5. The utility expenses depend on capacity of the airport and also on certain externalities such as weather. It has been analysed with respect to average utility expense per SQM of terminal area. SVPIA's terminal area is comparable to Goa but SVPIA incurs higher utilities expense per terminal area (2.82 INR per SQM) as compared to Goa (1.87). However, it is to be noted that power rates in Gujarat are generally higher than that in Goa. It's utilities expense per terminal area is comparable to Kolkata and lower than those of Pune and Chennai. Further, the overall utility expenses incurred in the Second Control Period are well within the projections approved by the Authority in the Tariff Order for the Second Control Period. Based on these observations, there is no evidence to suggest that the utility expenses for SVPIA are unreasonable.
- 8.4.6. Among the comparable airports in terms of Passenger traffic (i.e., Cochin, Goa and Pune), SVPIA has the highest O&M expenses in the Second Control Period. Also, the total O&M expenses exceeds the approved amount as stated in the Tariff Order. The major driver of this is the steep rise in CHQ/RHQ expenses followed by R&M expenses.
- 8.4.7. It is to be noted that the regional and the global benchmarks are based on averages from data aggregated from airports across the world. Therefore, some deviations maybe expected when compared with individual airports. When compared with the global and regional averages in terms of Personnel expenses (insourced) per PAX, A&G Expenses per PAX and Total expenses per PAX, Ahmedabad airport and all the other comparable airports seem to perform much better in terms of cost efficiency. Ahmedabad airport is incurring marginally higher expenses towards R&M expenses when compared to the global average for airports handling traffic in the range of 5-15 MPPA.
- 8.4.8. Hence, based on external benchmarking, the operations and maintenance expenses of SVPIA are reasonable except for R&M expenses and 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 Authority may still consider capping the allowable expenses based on suitable global/regional benchmarks at the time of determination of tariffs for future Control Periods.

## 8.5. Conclusion

8.5.1. Based on the analysis of the submissions of AAI and AIAL, the O&M expenses for SVPIA for the Second Control Period was determined by the Study to be INR 666.93 Cr. (INR 606.72 Cr. by AAI and INR 60.21 Cr. by AIAL). The break-up of the O&M expenses is given below.

**Table 89: O&M Expenses submitted by AAI & AIAL for SCP post regrouping of expenses by the Study**

FY ending March 31 (INR crore)	2017	2018	2019	2020	2021 until COD	2021 post COD <sup>14</sup>	2021 (Total)	Total (till COD)	Total in SCP
<b>As per AAI &amp; AIAL:</b>									
O&M Expenses (A)	155.80	159.52	174.72	212.05	116.39	71.11	187.50	818.48	889.59
<b>As per the Study:</b>									
Employee Benefit	21.69	29.00	35.74	38.14	15.22	21.92	37.14	139.79	161.71
Administrative & General Expenses	8.90	13.33	15.84	24.53	24.96	5.78	30.75	87.55	93.34
CHQ/RHQ Expenses	34.26	39.80	23.39	36.76	36.72	6.25	42.97	170.92	177.17
Repairs and Maintenance Expenses	24.39	24.71	24.07	24.50	18.22	7.19	25.41	115.88	123.08
Utility Expenses	18.47	19.89	20.30	20.77	10.04	6.31	16.35	89.47	95.78
Other Outflows	0.62	1.49	0.13	0.47	0.39	12.76	13.15	3.09	15.85
<b>Total (B)</b>	108.32	128.23	119.46	145.16	105.55	60.21	165.76	606.72	666.93
<b>Impact (A-B)</b>	47.48	31.29	55.26	66.89	10.85	10.91	21.74	211.76	222.66

<sup>14</sup> For AIAL, Administrative and other expenses include rates and taxes, insurance and administrative expenses, CHQ/RHQ expenses consists of corporate costs allocated to AIAL and Other outflows includes – IT expenses, security expenses, cargo expenses, bank and other finance charges and others.

## 9. GLOSSARY

Abbreviation	Full Form
A&G	Administrative & General
AAI	Airports Authority of India
AAL	Adani Airport Limited
AAIAL	Adani Ahmedabad International Airport Limited
AERA	Airports Economic Regulatory Authority
AGL	Airfield Ground Lighting
AIAL	Ahmedabad International Airport Limited
ANS	Air Navigation Services
ATM	Air Traffic Movement
BHS	Baggage Handling System
CAGR	Compounded Annual Growth Rate
CHQ	Corporate Headquarters
CISF	Central Industrial Security Force
COD	Commercial Operation Date
CSR	Corporate Social Responsibility
CSS	Corporate Support Service
DIAL	Delhi International Airport Limited
FCP	First Control Period
FY	Financial Year
GFA	Gross Fixed Asset
HIAL	Hyderabad International Airport Limited
IATA	International Air Transport Association
IMG	Inter-Ministerial Group
INR	Indian Rupee
IT	Information Technology
MoU	Memorandum of Understanding
MIAL	Mumbai International Airport Limited
MPPA	Million Passengers Per Annum
MYTP	Multi Year Tariff Proposal
NCAP	National Civil Aviation Policy
OPEX	Operational Expenditure
OMDA	Operation, Maintenance and Development Agreement
O&M	Operation and Maintenance
PAX	Passenger
PPP	Public-private partnership
R&M	Repair and Maintenance
RHQ	Regional Headquarters
RAB	Regulatory Asset Base
RFP	Request for Proposal
SCP	Second Control Period
SQM (sqm)	Square meters
TO	Tariff Order



## ANNEXURE 1: ANALYSIS OF EMPLOYEE EXPENSES OF AIAL

The following headcount summary was provided by AIAL via email dated 23<sup>rd</sup> April 2022 and some of the remarks were shared vide email dated 26<sup>th</sup> June 2022.

**Table 90: Headcount summary as per AIAL**

Department	Classification	As on 31 <sup>st</sup> March 2021		Remarks by AIAL
		AAI Employees	AIAL Employees	
Air Cargo	Aero		3	AIAL is handling it's own cargo facility on 24x7 basis as the AAICLAS facility has been carved out. Accordingly, inhouse manpower (3 employees) for planning and monitoring of day-to-day operations is deployed.
Environment & Sustainability	Aero		1	As per Clause 18.1.1 (o) of CA, AIAL is expected to protect and conserve the environment. Also there is requirement to get the Environment Audit done as per clause 18.13. Accordingly, the manpower requirement has been considered.
Horticulture	Aero		1	As part of environmental sustainability measures to develop SVPIA as a green airport, statutory requirements of tree transplantation/plantation and to create natural ambience befitting a landmark international airport, the manpower requirement has been considered. While the annual maintenance and upkeep is outsourced, 1 in-house resource is deployed for planning and monitoring of day-to-day operations and to ensure quality in work performed by contractors.
Techno Commercial (Procurement department)	Common		5	"AAI do not have any local purchase department at site. All the procurement at AAI are done centrally through tendering process. Techno commercial function is responsible for procurement of various requirement of user department, management of contract, RFP issue, onboarding of vendor, etc."
Corporate communication	Common		1	As per Clause 18.1.1 (q) of CA, AIAL is required to have public relation officer who will interface with various stakeholders. The same has been considered to fulfill the mandated requirement.
Security	Aero	1	16	<p>"Currently there is no person deputed for carrying out Security function at the Airport. At present AAI was only performing pass section function with an outsourced support. However there are various activities which need to be performed by AIAL like 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, BCAS Compliance requirements.</p> <p>AIAL will be carrying out functions with a combination of Onroll and outsourced employees.</p> <p>Sovereign agencies and security set up of the airport operator have clearly defined mandates. NACASP 2018 vide Para4.2.2(xxii) stipulates that the Airport Operator is responsible for implementation of security controls at the airports through the CSO. The Asset CSO is bestowed with all the powers to implement security controls at the airport level and overall coordination with other agencies at the airport(Para5.2.1(ii)ofNCASPrefers).</p> <p>AIAL has assumed employees onrolls is a composition of CSO, Pass Section, Avsec Audit and Compliances, Loss Prevention and Automation, landside operations and others.</p> <p>Other operations like Kerb side, Tout Management, Traffic Management, Encroachment Prevention, Security System Maintenance etc. are expected to be mix of in-house and outsourced.</p> <p>Further there is New Integrated Passenger Terminal is expected to get operationalise in FY25-26."</p>
Legal	Common		4	"AAI does not have legal positions at the Airport. Composition includes 1 HoD and 3 department supporting staff."
Quality	Aero		1	"Under clause 23.1 of concession Agreement, AIAL is obligated to monitor and measure quality of service on the parameters prescribed in the Concession Agreement. Further as per Concession Agreement, AIAL is expected to maintain relevant ISO certification and other quality certifications for all the facilities controlled and managed by AIAL. Composition includes Quality Expert and its associates."
Information Technology	Common	1	8	AAI does not have Information technology team to support the IT functioning of the Airport. IT is a backbone of the Aviation and all the critical systems need to be running with zero downtime. Critical systems includes AODB, FIDS, PDAs, SAP, Business Analytistics, Integation with

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Department	Classification	As on 31 <sup>st</sup> March 2021		Remarks by AIAL
		AAI Employees	AIAL Employees	
				ATC, VGDS, Radio Sets, Desktops, Laptops, Billing Softwares, Document Management System, Access Control System etc.
Airside Management	Aero		1	<p>"As per Clause 18.1.1 (d), (f) and (g), AIAL is responsible to maintain and operate Airside including Runway, Taxiways, Apron, Approach Areas etc. Also it is mentioned in the CNS-ATM Agreement about the airside obligations to be performed by AIAL.</p> <p>AIAL is responsible to establish Apron Management Service, Airside safety, aerodrome safeguarding and aeronautical information services. Previously some of these services were performed by ANS team of AAI and some of the services were not done at all. Post CoD all these functions are to be performed by AIAL.</p> <p>Further these activities are strictly regulated by DGCA as part of legal framework of Aerodrome Operating License under CAR section 4, series F part 1.</p> <p>Lastly as a part of capex expansion plan, there are new Airside facilities need to be made like Part Parallel Taxi Track, New Apron, RESA, Taxiway C, Apron Expansion, Utilities etc. There will be requirement for additional manpower to operate these facilities.</p> <p>The composition includes In Charge Airside, Duty Managers, Duty Officers, Airside Executive, Airside Ground Maintenance, Aerodrome Licencing, Aerodrome Safeguarding, Wildlife Hazard Management, Environment Sustainability</p> <p>Further there is New Integrated Passenger Terminal is expected to get operationalise in FY25-26."</p>
Regulatory	Aero		3	New position to support in regulatory filing with AERA.
Terminal and Operation	Aero	21	20	<p>"AIAL is expected to maintain and improve quality of service to passengers. In that connection, AIAL will deploy various positions of Terminal Managers, Duty Managers, Shift Incharge, Protocol services. Two terminal T1 and T2 will have increase in area by 20% as per Master Plan</p> <p>Further there is New Integrated Passenger Terminal is expected to get operationalise in FY25-26."</p>
Non-Aero Commercial	Non-Aero	2	4	AIAL is expected to deploy various strategies/innovations to monitor the Non-Aeronautical Income and development of city side area. There is likelihood of increase in Manpower over time.
Human Resources and Admin	Common	23	12	AIAL is expected to consolidate and automate various positions/functions and will employ limited staff which will be comprising of HoD, HR Operations, Talent Acquisition, Compliances and Admin purposes.
Finance	Common	6	11	Composition includes 1 HoD, and support staff for various functions under finance and accounts
Engineering & Maintenance	Aero	39	10	<p>"Currently AAI has approx. 10-12 people each in Civil, Technical and Engineering sections.</p> <p>AIAL is expected to outsource some of the non-core activities. Second there will be increase in Terminal Area by 20%, Increase in Airside Facilities, Increase in landside facilities, Utilities etc, there will be requirement of more manpower in Engineering and Maintenance department to cater to these increased facilities.</p> <p>Considering all the above factor, AIAL is expected to consolidate the function and will have only 20 people on-roll.</p> <p>Further there is New Integrated Passenger Terminal is expected to get operationalise in FY25-26."</p>
Airline Marketing	Aero		1	
Fire Fighters	Aero	87		<p>There is no deficiency of Fire Fighters at the AMD. The deficiency is in Fire Control room and Ambulance staff which will be outsourced.</p> <p>Keeping in view the importance of ARFF activities in the Airport, there is requirement of additional position to fill like Head of Department, Station In Charge, Fire Prevention, Training Cell, Shift Managers etc.</p>
ILBS / Screeners	Aero		20	<p>New department / positions.</p> <p>The ILBS screeners perform multi-level X-ray screening of the baggage, interview of passenger for uncleared / suspect baggage, interaction with AIAL &amp; Bomb Detection teams for suspect baggage. As per BCAS AVSEC circular - 07/2019 dated 27/06/2019, ILBS is a security sensitive matter and need to handled by Airport Operator with the certified personnel by</p>

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Department	Classification	As on 31 <sup>st</sup> March 2021		Remarks by AIAL
		AAI Employees	AIAL Employees	
				BCAS. In case Airport operator does not intend to operate the activity itself the same can be assigned to subsidiary or joint ventures of AAI or National Airline.  AAICLAS (subsidiary of AAI) has been doing ILBS screening at Ahmedabad airport w.e.f. March 2020 (before COD) as per BCAS requirements. Considering the advantages of better controls, enhanced security measures and enhanced customer experience, the Airport Operator decided to handle the activity itself and as mandated under the BCAS circular.  In view of the above, the activity was made inhouse in phased manner starting with a batch of 20 people by FY20-21 and then reaching to close to 84 in FY 21-22. For information, after Sep'21, the ILBS screening activity is being carried out through in-house team only.
<b>Total</b>		<b>180</b>	<b>122</b>	
<b>Aero (A)</b>		<b>148</b>	<b>77</b>	
<b>Non-Aero (B)</b>		<b>2</b>	<b>4</b>	
<b>Common (C)</b>		<b>30</b>	<b>41</b>	
<b>Total (D= A+B+C)</b>		<b>180</b>	<b>122</b>	
<b>Allocation of Common</b>				
Aero% (E= A/A+B)		98.67%	95.06%	
Non-Aero% (F=B/A+B)		1.33%	4.94%	
<b>Total after adding allocation of common</b>				
Aero (G= A+E*C)		177.6	116.0	
Non-Aero (H= B+F*C)		2.4	6.0	
<b>Total (I= G+H)</b>		<b>180.0</b>	<b>122.0</b>	
<b>Aero% (G/I)</b>		<b>98.67%</b>	<b>95.06%</b>	
<b>Non-Aero% (H/I)</b>		<b>1.33%</b>	<b>4.94%</b>	

Source: Clarifications received from AIAL

As per the MYTP submission of AIAL, there are 180 Select employees (from AAI) who are deployed at SVPIA since COD. Since these employees are expected to continue serving the airport until the end of the Deemed Deputation Period (i.e., till 3 years from COD), the need for 122 AIAL employees over and above the abovementioned 180 Select employees appears to be unreasonably high especially in the first five months of operations. Hence, the Study has carefully examined the employee allocation of AIAL and made certain adjustments and reclassifications as given below.

**Table 91: Summary of reclassifications of departments of AIAL as per the Study**

Department	Classification as per AIAL	Classification as per the Study	Remarks as per the Study
Air Cargo	Aero	Aero	
Environment & Sustainability	Aero	Aero	
Horticulture	Aero	Common	AIAL has not provided the location-wise break-up of these expenses. Given that that an improvement in sense of place provides commercial advantages through enhanced spending by passengers, the Study has considered this department as common.

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Department	Classification as per AIAL	Classification as per the Study	Remarks as per the Study
Techno Commercial (Procurement department)	Common	Common	
Corporate communication	Common	Common	
Security	Aero	5 employees engaged in aero activities considered as Aero	The Study compared the department wise head count at the other PPP airports and could not find reference to security departments at other airports. Prior to COD, AAI had deployed only one employee in the Security department. Therefore, the need for 16 AIAL employees in this department within the first five months of operation appears to be redundant, especially since the Security related matters are primarily managed by Central Industrial Security Force (CISF). AIAL has also mentioned that this function will be carried out with a mix of on-roll employees and outsourced employees. AIAL was requested to share the details regarding the deployment and responsibilities of each individual. Vide email dated 13 <sup>th</sup> July 2022, AIAL provided the break-up of responsibilities of individual employees in the Security Department. Based on the information provided, it is observed that there are 5 employees engaged in aero activities such as CISF liaising and ILBS. Therefore, the Study has considered these 5 employees as aero and the remaining employees have been excluded.
		Remaining employees excluded	
Legal	Common	Common	
Quality	Aero	Common	Matters of Quality do not pertain purely to aeronautical activities, it would also involve ensuring customer satisfaction and experience across the airport including commercial activities. Hence, this department has been reclassified as Common.
Information Technology	Common	Common	
Airside Management	Aero	Aero	
Regulatory	Aero	2 employees considered as Aero	Regulatory filing is a period activity, therefore, dedicated manpower would not be required throughout the Control Period. Further, it is also understood that AIAL has a regulatory team at the corporate level. Hence, the Study has considered two employees as aeronautical and has excluded one employee.
		1 employee excluded	
Terminal and Operation	Aero	Aero	
Non-Aero Commercial	Non-Aero	Non-Aero	
Human Resources and Admin	Common	3 employees considered as Common	When compared with the employee strength at other matured PPP airports such as HIAL, the number of employees in the HR department in AIAL seems to be quite high (on a per PAX level). It is observed that 23 Select employees are already involved in this department. Hence, the need for additional 12 AIAL employees over and above these 23 Select employees, within the first five months of operation is unjustified. It is understood that AIAL would need to acquire senior management level employees to supervise the Select employees. Based on these facts, 3 employees have been considered by the Study and the remaining 9 employees have been excluded.
		Remaining employees excluded	
Finance	Common	Common	
Engineering & Maintenance	Aero	2 employees considered as Aero	When compared with the employee strength at other matured PPP airports such as HIAL, the number of employees in the Engineering & Maintenance department in AIAL seems to be quite high (on a per PAX level). It is also observed that 39 Select employees are already involved in this department. Hence, the need for additional 10 AIAL employees over and above these 39 Select employees is unjustified. Vide email dated 13 <sup>th</sup> July 2022, AIAL provided the break-up of responsibilities of individual employees in the Engineering & Maintenance Department. Based on the information provided, it is observed that there are 2 employees engaged in aero activities such as Airfield Ground Lighting and Baggage Handling System. Hence, the Study has considered 2 employees as aeronautical, and the remaining 8 employees have been excluded.
		Remaining employees excluded	
Airline Marketing	Aero	Aero	
ILBS / Screeners	Aero	Aero	

Based on the above reclassifications, the employee ratio of AIAL was recomputed as shown in the following table.

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**Table 92: Employee ratio of AIAL as per the Study**

Departments	Total number of AIAL employees	Allowed	Excluded	Classification	Aero	Non-aero	Common
Air Cargo	3	3		Aero	3	-	-
Environment & Sustainability	1	1		Aero	1	-	-
Horticulture	1	1		Common	-	-	1
Techno Commercial (Procurement department)	5	5		Common	-	-	5
Corporate communication	1	1		Common	-	-	1
Security	16	5	11	Aero	5	-	-
Legal	4	4		Common	-	-	4
Quality	1	1		Common	-	-	1
Information Technology	8	8		Common	-	-	8
Airside Management	1	1		Aero	1	-	-
Regulatory	3	2	1	Aero	2	-	-
Terminal and Operation	20	20		Aero	20	-	-
Non-Aero Commercial	4	4		Non-Aero	-	4	-
Human Resources and Admin	12	3	9	Common	-	-	3
Finance	11	11		Common	-	-	11
Engineering & Maintenance	10	2	8	Aero	2	-	-
Airline Marketing	1	1		Aero	1	-	-
ILBS / Screeners	20	20		Aero	20	-	-
<b>Total</b>	<b>122</b>	<b>93</b>	<b>29</b>		<b>55</b>	<b>4</b>	<b>34</b>
<b>Aero (A)</b>	<b>55</b>						
<b>Non-aero (B)</b>	<b>4</b>						
<b>Common (C)</b>	<b>34</b>						
<b>Total (A + B + C)</b>	<b>93</b>						
<b>Allocation of Common</b>							
Aero% [D = A ÷ (A+B)]	93.22%						
Non-Aero% [E = B ÷ (A+B)]	6.78%						
<b>Total after adding allocation of common</b>							
Aero (F = A + D*C)	86.69						
Non-aero (G = B + E*C)	6.31						
Total (F+G)	<b>93</b>						
Aero% {(F ÷ (F+G))}	<b>93.22%</b>						
Non-aero% {G ÷ (F+G)}	<b>6.78%</b>						

As per the MYTP submission of AIAL, the employee expenses prior to adjustment of the AIAL employees is INR 14.00 Cr. Based on the recomputed employee ratio as given in the table above, the employee expenses of AIAL were recomputed as follows:

**Table 93: Adjustment towards the employee expenses of AIAL**

Particulars	Values
<b>As per AIAL</b>	
Employee expenses of AIAL* (INR Cr.) (A)	14.00
Adjustment towards employee expenses	

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Particulars	Values
No. of Excluded employees (B)	29
Total No. of AIAL employees (C)	122
Excluded employees as a % of total employees (D = B ÷ C)	23.77%
Excluded employee expenses (INR Cr.) (E = A * D)	3.33
Revised employee expenses (INR Cr.) (F = A – E)	10.68
Aero% (Refer table 92) (G)	93.22%
<b>As per Study</b>	
Aero employee expenses (INR Cr.) (G * F)	9.95

\* Towards AIAL employees only

As seen from the above table, the aeronautical employee expenses of AIAL (towards AIAL employees only) as per the Study is INR 9.95 Cr. This led to an overall reduction of INR 3.63 Cr. (INR 13.58 Cr – INR 9.95 Cr) in the employee expenses of AIAL.

## **ANNEXURE 2: DETAILED BREAKUP OF CONSULTANCY CHARGES AS SUBMITTED BY AIAL**

The following table shows the detailed breakup of the Professional & Consultancy charges as shared by AIAL vide email dated 11<sup>th</sup> June 2022.

**Table 94: Breakup of Professional and Consultancy Charges as per AIAL**

<b>Sl. No</b>	<b>Particulars (INR Cr.)</b>	<b>FY 2020-21 (post COD)</b>
1	Professional & Consultancy Fees for Talent Acquisition for various roles at AMD	0.39
2	IT Outsourcing Service - Application	0.25
3	IT Outsourcing Service - Infra	0.23
4	DGCA Licence Fees	0.19
5	Microsoft Licenses for On Premise HCI Solutions and Management Server	0.17
6	Membership of APAO	0.15
7	ACI – Airport Service Quality departure Main Survey Participation	0.14
8	Franking charges for PBG document	0.08
9	Consultant for Environment Monitoring	0.04
10	Other Misc.	0.35
	<b>Total</b>	<b>1.99</b>

Source: Clarifications received from AIAL

### **ANNEXURE 3: DETAILED BREAKUP OF BANK AND OTHER FINANCE CHARGES AND IT EXPENSES AS INCURRED BY AIAL**

The following table shows the detailed breakup of the bank and other finance charges as shared by AIAL vide email dated 27<sup>th</sup> June 2022.

**Table 95: Breakup of bank and other finance charges as per AIAL**

Sl. No	Particulars (INR Cr.)	Nature/Purpose of the expense	Classification as per AIAL	FY 2021 (post COD)
1	Expenses for providing Performance Bank Guarantee	As per Clause 9.1 of the Concession Agreement, performance bank guarantee to be provided from AIAL to AAI as a condition precedent to CoD. In this regard AIAL has arranged PBG is arranged for annual fees of 1.90% of the guarantee value.  9.1 Performance Security 9.1.1 The Concessionaire shall, for the performance of its obligations during Phase I hereunder, provide to the Authority, no later than 120 (one hundred and twenty) days from the date of this Agreement, an irrevocable and unconditional guarantee from a Bank for a sum equivalent to Rs. 130,00,00,000 (Rupees One Hundred and Thirty Crore) in the form set forth in Schedule E ("Performance Security"). Until such time the Performance Security is provided by the Concessionaire pursuant hereto and the same comes into effect, the Bid Security shall remain in force and effect, and upon such provision of the Performance Security pursuant hereto, the Authority shall release the Bid Security to the Concessionaire.	Aero as it is mandatory requirement	1.51
2	Bank Processing Charges	Charges paid to bank for escrow account processing fees.	Common	0.52
3	Other Bank Charges	Payment to NSDL and stamp duty on financing documents.	Common	0.09
	<b>Total</b>			<b>2.12</b>

Source: Clarifications received from AIAL

The following table shows the detailed breakup of the IT expenses as shared by AIAL vide email dated 27<sup>th</sup> June 2022.

**Table 96: Breakup of IT expenses as per AIAL**

Sl. No	Nature of Expenses	Amount (INR Cr.)
1	IT Outsourcing - Wipro & IBM	0.61
2	License Subscription Order for 9 Months under Enterprise Agreement	0.22
3	For Cloud Infra requirement for Airport Operation System Apps for Airport BU incl. AODB & Sitatex	0.22
4	AMC for Touch Screen Kiosk - Coforge	0.19
5	CUSS Kiosk & Information Kiosk - SITA	0.12
6	Mobile, Telephone, Datalink and Wifi Charges	0.08
7	Printer rental charges	0.06
8	Other Misc Charges	0.33
	<b>Total</b>	<b>1.82</b>

Source: Clarifications received from AIAL



## **ANNEXURE 4: NOTE ON CORPORATE COST ALLOCATION**

### **Corporate Allocation**

- i. Ahmedabad International Airport Limited (AIAL) is a group company of Adani Group. Adani Enterprises Limited (AEL) holds 51% shareholding in AIAL 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, Défense etc.
- iii. AAHL is a special purposes holding 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 various 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, Défense etc.
  - b. AAHL houses a team of specialised subject matter expert 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 much 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 cost related.

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- vii. These costs (except shareholders services and non-Aeronautical services) are recovered by AEL and AAHL through appropriate allocation method/keys. AEL and 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.) and Non-Aeronautical services.
- viii. 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.
- ix. Corporate cost allocation has various benefits like: -
1. Leveraging on best practices
  2. Centralized monitoring and control
  3. Efficiencies and economies of scale
- x. 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 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.
- xi. For FY20-21 i. e. from COD 07<sup>th</sup> Nov 2020 to 31<sup>st</sup> March 2021, it was first year of operations, Corporate cost of AAHL was bifurcated amongst Mangalore, Lucknow and Ahmedabad in proportion to the revenues earned by each of these Airports, which is also in line with the practice adopted by AAI to allocate its CHQ/RHQ costs to its Airports.

Below is the breakup of corporate cost allocation (Allocated in the ratio of revenue earned by Mangalore, Lucknow and Ahmedabad) from AAHL to AIAL from COD i.e. 07<sup>th</sup> Nov 2020 to 31<sup>st</sup> March 2021

Particulars	Amount (Rs. In Crs)
Admin	1.77
Personal Cost	5.38
<b>Total</b>	<b>7.14</b>

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xii. However in FY21-22 with the acquisition of Mumbai & Navi Airport and achievement of COD for Jaipur, Guwahati, and Thiruvanthapuram Airports, AAHL felt need to devise more robust allocation methodology and has hired an independent consultant 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.

Based on the above suggestions, allocation keys for FY21-22 onwards have been revised and given effect accordingly.