

Study on Efficient Operation and Maintenance Costs

(RFP no. 01/2020-21)

for

Hyderabad International Airport Limited
(Second Control Period from 01.04.2017 to 31.03.2021)



**By - CRISIL Risk and Infrastructure Solutions Limited, India
June 2021**

This page is intentionally left blank

Contents

1. Statement of Confidentiality.....	11
2. Background.....	12
2.1 Objective of report.....	12
2.2 About Rajiv Gandhi International Airport, Hyderabad.....	12
2.3 Traffic Profile.....	13
2.4 Summary.....	14
3. Terms of Reference and Our Work Performed.....	15
3.1 Extract of Terms of References.....	15
3.2 Expense Classification.....	15
3.3 Steps for our work performed.....	15
3.4 Basis for Segregation of Costs.....	16
4. Executive Summary.....	18
5. Segregation of costs for second control period.....	25
5.1 Allocation logics adopted by HIAL for the second control period.....	25
5.2 Reconciliation of total costs with audited financials.....	29
5.3 Revised methodology for operating expenditure allocation as per CRIS analysis.....	30
5.4 Revised Ratio used for segregation of common cost heads.....	34
5.5 Opex cost head wise segregation for 2 nd control period.....	34
5.6 Total Opex as per revised submission.....	51
5.7 Summary.....	54
6. Efficiency in O&M Expenses during second control period.....	55
6.1 Projected opex approved by AERA as per Order No. 34/2019-20 for the second control period vs actual Opex submitted by HIAL for 2nd control period.....	55
6.2 Cost measures adopted by HIAL.....	57
6.3 Summary.....	58
7. Trend analysis of Inflation Adjusted expenses.....	59
7.1 Review of actual expenses incurred by HIAL for second control period.....	59
7.2 Summary.....	68
8. Benchmarking of international and domestic airports.....	69
8.1 Internal Benchmarking.....	69

- 8.2 External Benchmarking 74
- 8.3 Summary 81
- 9. Overall Summary of the Study..... 82**
 - 9.1 Conclusion..... 83
- 10. Annexure..... 84**
 - 10.1 Operating expenditure as per HIAL allocation 84
 - 10.2 Auditor Certificate (Attached in next page)..... 94

List of tables

Table 1: Summary of shareholding structure of HIAL	13
Table 2 Traffic profile of RGI Airport for second control period.....	14
Table 3 Summary of the Study	18
Table 6: Summary of the key revisions for re-allocation of operating expenditure	19
Table 4 Aero as % of the operating expenditure as per revised segregation logic as per the study	20
Table 5 Change in the operational expenditure allocation ratio based on this study vis-a-vis those proposed by HIAL for the second control period.....	21
Table 6 Year wise adjusted operating and maintenance expenses for the second control period as per this study.	21
Table 7 Impact of the segregation methodology on operational expenditure incurred by HIAL as per this study vis-a-vis those proposed by HIAL for second control period.....	22
Table 8: Summary of cost centres and allocation as per HIAL’s submission	25
Table 9: Summary of the forex loss not allowed by the Authority as per HIAL’s submission.....	27
Table 10: Summary of the one-time cost towards refinancing of ECB and RTL as per HIAL’s submission.....	28
Table 11 O&M Aggregate Cost (FY17 to FY21) for the 2nd Control Period Submitted by HIAL.....	29
Table 12: Summary of classification of key departments.....	30
Table 13: Summary of the basis of apportionment of common costs for various expense line items	32
Table 14: Summary of the key revisions for re-allocation of operating expenditure.....	33
Table 15: Revised ratio used for segregation of common cost heads.....	34
Table 16: Revision in segregation logic of employee costs as per this study	35
Table 17: Revision in segregation logic of Administrative costs as per this study.....	36
Table 18: Revision in segregation logic of overall impact on aeronautical administrative costs as per this study	40
Table 19: Revision in segregation logic of utilities costs as per this study	41
Table 20: Revision in segregation logic of repair and maintenance cost as per this study	42
Table 21: Revision in segregation logic of stores and spares costs as per this study.....	43
Table 22: Revision in segregation logic of housekeeping costs as per this study	44
Table 23: Revision in segregation logic of manpower outsourcing costs as per this study.....	45
Table 24: Revision in segregation logic of insurance costs as per this study	45
Table 25: Revision in segregation logic of fuel farm operating costs as per this study.....	46
Table 26: Revision in segregation logic of other operating expenses costs as per this study	47
Table 27: Summary of the forex loss not allowed by the Authority as per HIAL’s submission.....	48
Table 28: Summary of the forex losses to be allowed as part of O&M.....	48
Table 29: Revision in segregation logic of Forex Losses costs as per this study	48

Table 30: Revision in segregation logic of CSR costs as per this study	49
Table 31: Summary of concession fee as per HIAL submission	50
Table 32: Summary of concession fee as per revised allocation	51
Table 33 Difference in aeronautical opex due to revision as per this study	51
Table 34 Revised aeronautical opex to be considered as part of trueup for second control period.....	52
Table 35 Revision in segregation logic of aeronautical opex costs including concession fees as per this study	53
Table 36: Projected O&M expenses approved by AERA for Second Control Period in order 34 2019/20.....	55
Table 37: Actual O&M expenses submitted by HIAL to AERA for true-up of second control period in the third control period tariff filing	56
Table 38: Difference between projected expenses approved Authority and O&M actual expenses submitted by HIAL for true-up of second control period in the third control period tariff filing	57
Table 39: Efficient cost measures adopted by HIAL	57
Table 40: WPI Index	59
Table 41 Department Wise Head Counts and CAGR	59
Table 42 Payroll Cost Pattern for HIAL during Second Control Period	60
Table 43 Administrative Cost Pattern for HIAL during Second Control Period	61
Table 44 Security Cost Pattern for HIAL during Second Control Period.....	62
Table 45 Finance Related Cost Pattern for HIAL during Second Control Period.....	63
Table 46: Utility Cost Pattern for HIAL during Second Control Period	63
Table 47 Repair and Maintenance Cost Pattern for HIAL during Second Control Period.....	64
Table 48 Stores and Spares Cost Pattern for HIAL during Second Control Period	65
Table 49 Housekeeping Cost Pattern for HIAL during Second Control Period.....	66
Table 50 Other Operating Cost Pattern for HIAL during Second Control Period.....	67
Table 51: Cost Movement of Administrative & General and Manpower Expenses at HIAL.....	69
Table 52 Movement of Passenger and Air Traffic at HIAL	70
Table 53 Break up for Passenger Mix for HIAL during 2012-2021	73
Table 54 Details of Domestic Airports for External Benchmarking	74
Table 55 Passenger Traffic for Comparable Airports in India in FY18.....	74
Table 56: Operating expenditure for FY2017 as per HIAL's submission	84
Table 57: Operating expenditure for FY2018 as per HIAL's submission.....	86
Table 58: Operating expenditure for FY2019 as per HIAL's submission	88
Table 59: Operating expenditure for FY2020 as per HIAL's submission.....	90
Table 60: Operating expenditure for FY2021 as per HIAL's submission	92

List of figures

Figure 1: Approach and methodology followed for the segregation of operating expenditure	16
Figure 2 Inflation Adjusted per PAX Manpower Cost during second control Period (Rs.).....	60
Figure 3 Inflation Adjusted per PAX Administrative Cost during second control Period (Rs.)	61
Figure 4 Inflation Adjusted per PAX Security Cost during second control Period (Rs.).....	62
Figure 5 Inflation Adjusted per PAX Finance Cost during second control Period (Rs.)	63
Figure 6 Inflation Adjusted per PAX Utility Cost during second control Period (Rs.)	64
Figure 7 Inflation Adjusted per PAX Repair and Maintenance Cost during second control Period (Rs.)	65
Figure 8 Inflation Adjusted per PAX Stores and Spares Cost during second control Period (Rs.)	66
Figure 9 Inflation Adjusted per PAX Housekeeping Cost during second control Period (Rs.).....	67
Figure 10 Inflation Adjusted per PAX Other Operating Cost during second control Period (Rs.).....	68
Figure 11 % change movement in Administrative and General and Manpower Expenses for a period 2012-2021 .	70
Figure 12 Passenger Traffic for the period 2012-2021 (in million pax).....	71
Figure 13 Air Traffic Movement for the period 2012-2021 (in thousand movement).....	71
Figure 14 CAGR of Total Cost to CAGR of Costs per PAX/per ATM.....	72
Figure 15 Passenger Terminal Capacity Utilisation (%).....	72
Figure 16 Graphical Representation of Passenger Mix for HIAL 2012-2021.....	73
Figure 17 O&M Cost per PAX in FY18 for comparable airports.....	75
Figure 18 O&M Cost per ATM in FY18 for comparable airports	75
Figure 19 Runway Length of Comparable airports (Sqm).....	76
Figure 20 Runway Breadth of Comparable airports (Sqm).....	76
Figure 21 Traffic growth in FY18 (%).....	77
Figure 22 Passenger Mix of Comparable airports (%)	78
Figure 23 Terminal Size of Comparable airports (Sqm).....	79
Figure 24 Terminal Capacity of Comparable airports in FY18 (%).....	79
Figure 25 Various Costs per PAX for Comparable airports in FY18.....	80
Figure 26 Various Costs per ATM for Comparable airports in FY18.....	80

Acronym	Definition
AERA	Airports Economic Regulatory Authority
AHU	Air Hauling Unit
AMC	Annual Maintenance Contract
ARR	Aggregate Revenue Requirement
ASQ	Airport Service Quality
ATC	Air Traffic Control
ATM	Air Traffic Movement
BIAL	Bangalore International Airport Limited
CAGR	Compounded Annual Growth Rate
CFL	Customer facilities & logistics
CGF	Cargo, Ground handling and Fuel
CIAL	Cochin International Airport Limited
CISF	Central Industrial Security Force
CMC	Consolidated Maintenance Contract
COO	Chief Operating Officer
CPD	Commercial Property Development
CRIS	CRISIL Risk and Infrastructure Solutions Limited
CSR	Corporate Social Responsibility
CUSS	Common Use Self Service
CUTE	Common Use Terminal Equipment
DIAL	Delhi International Airport Limited
ECB	External Commercial Borrowing
GOT	Government of Telangana
GPU	Ground Power Unit

HIAL	Hyderabad International Airport Limited
HVAC	Heating, ventilation, and air conditioning
IATA	International Air Transport Association
IDAT	Integrated Domestic Arrival Terminal
IIAT	Integrated International Arrival Terminal
IIDT	Integrated International Departure Terminal
MIAL	Mumbai International Airport Limited
MYTP	Multi Year Tariff Proposal
NOB	New Office Building
PAC	Precision Air Conditioners
PAX	Passengers
PMT	Project Management Team
PPP	Public Private Partnership
PSF	Passenger Service Fee
PTB	Passenger Terminal Building
RAB	Regulated Asset Base
RFP	Request for Proposal
RGIA	Rajiv Gandhi International Airport
RTL	Rupee Term Loan
SQD	Service Quality Dept.
SSA	State Support Agreement
STP	Sewage Treatment Plant
TDSAT	Telecom Disputes Settlement and Appellate Tribunal
UDF	User Development Fees
WPI	Wholesale Price Index

YPP	Yield per passenger
-----	---------------------

1. Statement of Confidentiality

This report has been prepared by M/s. CRISIL Risk and Infrastructure Solutions (CRIS), an Indian Infrastructure Advisory Firm as part of its deliverables under the engagement awarded as per RFP No. RFP No. 01/2020-21 floated by the Airports Economic Regulatory Authority of India. This document is being submitted to AERA for use in connection with the tariff determination of Hyderabad International Airport Limited (HIAL). This report or its contents may not be shared with anyone except with the consent of AERA. CRIS shall not have any liability for the unauthorized use or distribution of this document.

2. Background

2.1 Objective of report

The objective of this study is to conduct an independent study and analyse efficient operation and maintenance costs submitted by the operator and determine the allocation and their reasonableness which is important for effective execution of tariff determination for Aeronautical services. These expenditure tend to increase due to enhanced operations and constant expansion especially when the airport is in growing phase.

It is pertinent for the Authority to assess the Operation and Maintenance cost from time to time and determine their efficiency so as to avoid unnecessary passing of cost to the passengers as well as to ensure that the airport operator is able to recover its aeronautical expenses.

For the purpose of this exercise, the consultant has referred and reviewed the following documents:

1. The Airports Economic Regulatory Authority of India Act, 2008
2. Airports Economic Regulatory Authority of India (Terms and Conditions for Determination of Tariff for Airport Operators) Guidelines, 2011 and amendments and orders issued from time to time
3. Concession agreement signed between Ministry of Civil Aviation, Government of India and Hyderabad International Airport signed on 20th December, 2004
4. Orders of Telecom Disputes Settlement and Appellate Tribunal (TDSAT)
5. Audited Financial statements, documents and records of, and discussions with management of HIAL
6. Clarifications received from HIAL management from time to time

The present report is aimed at presenting the efficient O&M expenses including aeronautical and non-aeronautical activities as submitted by HIAL as well as the revised allocation as proposed by the Consultant basis the general principles and treatments as considered in previous tariff orders and other independent study commissioned by the Authority.

As part of the scope of work, the Consultant prepared this report and carried out the opex allocation study to arrive at the justified O&M building block as per the general principles of tariff determination. The present study has certain limitations which include reliance and dependence on the statutory auditor's certificate, contracts, reliance on the information provided on the department wise costs as submitted by HIAL.

2.2 About Rajiv Gandhi International Airport, Hyderabad

GMR Hyderabad International Airport Limited ("HIAL") is the concessionaire responsible for the design, finance, construction, operation and maintenance of the world-class green-field airport under the name and style of 'Rajiv Gandhi International Airport' ("RGIA") at Shamshabad, Hyderabad in public private partnership mode ("Project"). The concession agreement for the Project was signed between Ministry of Civil Aviation ("MoCA") and HIAL on **December 20, 2004** ("Concession Agreement" or "CA"). The airport commenced operations from 23rd March, 2008.

HIAL is a joint venture company having the following shareholding structure as of June 03, 2020:

Table 1: Summary of shareholding structure of HIAL

Holding Company	Percentage of Stake (%)
GMR Airports Limited	63
Airports Authority of India	13
Government of Telangana	13
Malaysia Airports Holding Berhad (Mauritius)	11
Total	100

Source: HIAL MYTP for third control period

The key agreements governing the functioning of HIAL inter alia include:

- Concession Agreement, executed between Government of India, MoCA and GHIAL, on 20th December 2004.
- Land Lease Agreement executed between the State Government (Lessor) and GHIAL (Lessee) on 30th September 2003.
- State Support Agreement (SSA) executed between the State Government and GHIAL on 30th September 2003.
- CNS / ATM Agreement executed between AAI and GHIAL on 11th August 2005. It defines the scope of services for Pre-Commissioning Phase, Commissioning Phase and Operation Phase.
- Shareholder's Agreement executed between State Government, AAI, GIL, MAHB and GHIAL on 30th September 2003.
- Sponsors' Agreement executed between GIL and MAHB on 30th September 2003. The Sponsors' Agreement defines the roles of GMR group and MAHB in the JV.

RGIA has completed its first control period from April 01, 2011 to March 31, 2016 ("First Control Period") and is currently in the second control period from April 01, 2017 to March 31, 2021 ("Second Control Period"). Therefore, in accordance with Clause 3 of the AERA Act and the Guidelines as issued from time to time, HIAL has submitted an application for the determination of aeronautical tariffs i.e. Multi Year Tariff Proposal ("MYTP") for the third control period (a period from 1st April 2021 to 31st March 2026) ("Third Control Period") to AERA.

2.3 Traffic Profile

RGIA is one of the busiest airports and gateway to the South eastern states of India. RGIA airport has been recently awarded the 'Best Airport by Size and Region' in Asia-Pacific region for 2020, in its category of 15-25 Million Passengers Per Annum (MPPA) in the Air Service quality by Airports Council of India.

RGIA has seen high growth in passenger traffic in last five years before the pandemic caused disruptions in traffic. The table below captures the passenger and Air Traffic movements for RGIA airport in last 5 years:

Table 2 Traffic profile of RGI Airport for second control period

Sr. No.	Particulars	2016-17	2017-18	2018-19	2019-20	2020-21	CAGR (FY17-FY20)
Traffic (Actual)							
1	Domestic Passenger (Mn)	11.73	14.47	17.42	17.73	7.47	14.8%
2	International Passenger (Mn)	3.37	3.69	3.99	3.92	0.57	5.2%
3	Total Passenger (Mn)	15.10	18.16	21.40	21.65	8.04	12.8%
ATM (Actual)							
1	Domestic ('000 nos)	108.45	124.79	153.72	157.69	78.34	13.3%
2	International ('000 Nos)	22.26	24.80	25.89	25.76	7.66	5.0%
3	Total ('000 Nos)	130.71	149.58	179.61	183.45	86.00	12.0%
CARGO (Actual)							
1	Domestic (MT)	52,936	54,964	60,172	61,413	46,756	5.1%
2	International (MT)	68,946	79,177	83,954	82,471	64,033	6.2%
3	Total (MT)	121,882	134,141	144,126	143,884	110,789	5.1%

The RGIA airport has grown at a growth rate of 12.8% for passenger traffic, 12.0% for ATM movements and 5.1% for cargo traffic between FY17 and FY20. The airport currently has a terminal capacity of 12 MPPA. The airport has an ultimate capacity in excess of 80 MPPA as envisaged in the airport master plan. The traffic in FY21 slipped to 8 million due to COVID-19 related restrictions on travel and limited operations.

2.4 Summary

- The concession agreement for the RGI Airport was signed between Ministry of Civil Aviation (“MoCA”) and HIAL on **December 20, 2004** (“Concession Agreement” or “CA”). The airport commenced operations from 23rd March, 2008.
- HIAL has submitted an application for the determination of aeronautical tariffs i.e. Multi Year Tariff Proposal (“MYTP”) for the third control period (a period from 1st April 2021 to 31st March 2026) (“Third Control Period”) to AERA.
- RGIA airport has grown at a growth rate of 12.8% for passenger traffic, 12.0% for ATM movements and 5.1% for cargo traffic between FY17 and FY20

3. Terms of Reference and Our Work Performed

3.1 Extract of Terms of References

AERA has outlined the scope of work for opex segregation between aero and non-aero and study on efficient operations and maintenance expenses in clauses 3.1(v) and 3.1(vi) of schedule 1 of their RFP No. 01/2020-2021 for engagement of consultants to assist AERA in determination of tariffs for aeronautical services at HIAL. The scope of work is as follows:

- 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.

Limitations to this study

- The report is based on analysis of the auditor reports, other relevant documents and auditor's certificates as submitted by HIAL with respect to operating expenditure. The work undertaken also has reliance on the information and clarifications provided by HIAL. Further, a site visit was undertaken to discuss the nature of operating expenditure with HIAL Management and the prime reasons for variation in cost vis a vis approved by the Authority.
- The work procedures conducted for the preparation of this report do not constitute an audit, examination or a review in accordance with generally accepted auditing standards or attestation standard as is expected under section 143 of the Companies Act, 2013.

3.2 Expense Classification

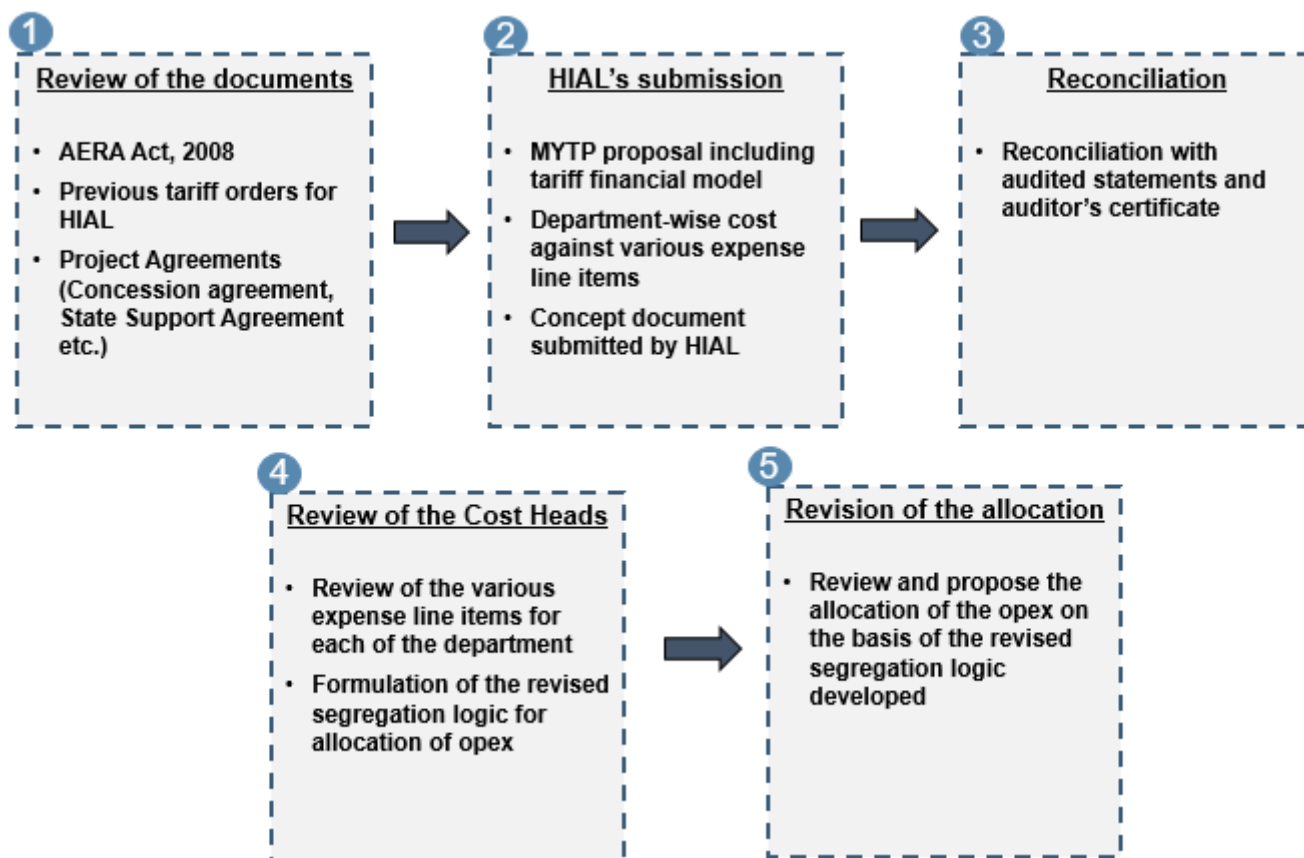
For the purpose of tariff determination and reporting the total operating and maintenance expenses of HIAL have been classified under the following categories:

- Payroll related expenses such as salaries and wages, training and recruitment charges, provident fund expenses, recruitment charges and staff and welfare charges etc.
- Administration and General Expenses such as lease rent, rates and taxes, security charges, advertising and sales promotion, CSR and donations, legal and professional fee, office maintenance, traveling and conveyance, management fee etc.
- Operating expenditure such as utilities, repair and maintenance, stores and spares cost, fuel farm O&M expenses, insurance etc.

3.3 Steps for our work performed

The Consultant followed a detailed and comprehensive methodology to segregate the costs between the aeronautical and non-aeronautical activities. A diagrammatic representation of the same is presented below:

Figure 1: Approach and methodology followed for the segregation of operating expenditure



Source: Consultant

3.4 Basis for Segregation of Costs

The Consultant has studied the various cost heads as well as the department wise allocation of these costs and developed a basis for classification of the operating expenditure into aeronautical and non-aeronautical activities. The Consultant has also determined the appropriate proportion of common operating expenditure that could be allocated to aeronautical activity, in order to determine the aeronautical operating expenditure. Broadly, the principles for segregation of assets are as follows:

Aeronautical Operating Expenditure

- All operating expenditure that are exclusively utilised for airport/aeronautical activities as per schedule 3 of the concession agreement are treated as aeronautical operating expenditure
- Cargo, Ground handling & Fuel Farm (CGF) related operating expenditure has been classified as aeronautical in nature. Further, the Common Use Terminal Equipment (CUTE), Common Use Self Service (CUSS), Ground Power Unit (GPU) are classified as aeronautical assets in accordance with the AERA order no. 34/2019-2020 for the second control period dated 27th March 2020, and hence costs related to them (if any) are also considered as aeronautical in nature
- Operating expenditure incurred to improve the service quality of the Airport except costs identified as non - aeronautical, which helps maintain the ASQ rating mandated by the project agreement are classified as Aeronautical operating expenditure

Non-aeronautical Operating Expenditure

- All costs that are exclusively utilised for non-aeronautical activities as per as per schedule 3 of the concession agreement as well as the AERA Act, 2008 are treated as non-aeronautical operating expenditure. Example are Commercial, Retail etc.

Common Operating Expenditure

- Operating expenditure for which the benefits can be attributed to both aeronautical and non-aeronautical services are classified as common operating expenditure
- Operating expenditure incurred for provision of aeronautical services but are also used for provision of non-aeronautical services are classified as Common Assets. For instance, expenses related to project management team, transportation etc.
- Costs which are used for general corporate purposes including legal, administration, and management affairs are treated as common costs.
- Common costs which are situated within the terminal buildings are apportioned to aeronautical activity in the ratio of the space allocated for aeronautical and non-aeronautical services. The percentages for aeronautical and non-aeronautical areas have been taken as 84.6% and 15.4% respectively. Example are customer facilities and logistics
- Common costs which are situated outside the terminal buildings are apportioned based on an appropriate driver such as the gross asset ratio or the expense ratio of aeronautical and non-aeronautical for the relevant year
- Other common costs such as the costs related to township are apportioned based on specific drivers such as the critical / non-critical staff ratio among others

Inadmissible Costs

Costs related to subsidiary/joint venture are disallowed. For example, the costs related to aviation academy are disallowed. Similarly, certain items which are notional in nature such as provisions for bad debts are also disallowed since they do not reflect true cash outflow.

4. Executive Summary

Objective

AERA is in the process of the tariff determination for RGI Airport, operated by HIAL for the 3rd control period (FY 2022 to FY2026). As a part of this exercise, reviewing and examining the O&M costs incurred by the airport (HIAL) for the previous control period (2nd control period – FY 2017 to FY2021) is one of the critical activity which has been undertaken by the consultant. HIAL has submitted the actual numbers the period FY17-FY21 based on its audited financial statements which have been used for this exercise.

The objective of this report is to allocate the operational expenditure incurred by HIAL into aeronautical and non-aeronautical components using the Authority's guidelines as well as to analyse the efficiency of the operational expenditure for the second control period before considering operating expenditure as a building block for the tariff determination process for HIAL.

The consultant has referred and analysed the following documents:

- The Airports Economic Regulatory Authority of India Act, 2008
- Airports Economic Regulatory Authority of India (Terms and Conditions for Determination of Tariff for Airport Operators) Guidelines, 2011 and amendments and orders issued from time to time
- Concession agreement signed between Ministry of Civil Aviation, Government of India and Hyderabad International Airport signed on 20th December, 2004
- Orders of Telecom Disputes Settlement and Appellate Tribunal (TDSAT)
- Audited Financial statements, documents and records of, and discussions with management of HIAL
- Clarifications received from HIAL management from time to time

Report Summary

Table 3 Summary of the Study

Particulars (In Rs. Crores)	FY2017	FY2018	FY2019	FY2020	FY2021	Total
Total operating expenses – As per MYTP submission of HIAL (refer Table 38)	349.43	679.93	456.19	550.07	399.35	2434.98
Total operating expenses – As per the study (refer Table 38)	313.43	495.51	458.88	550.20	396.15	2214.17
Aero operating expenses – As approved by AERA in 2 nd control period (Refer to table 40)	295.50	305.68	327.38	388.83	450.88	1768.27

Aero operating expenses – As per MYTP submission of HIAL (refer Table 38)	275.39	546.39	342.89	418.49	321.09	1904.25
Aero operating expenses – As per the study (Refer to table 38)	265.44	422.90	360.85	465.66	338.46	1853.32

Methodology

The operational expenditure allocation ratio submitted by HIAL as part of its MYTP submission is 78.20% on an aggregate basis. The detailed allocation methodology adopted by HIAL to allocate total operational expenditure between aeronautical and non-aeronautical operating expenditure is given in section 5.1. The consultant has used the total operational expenditure based on the audited financial statements as per section 5.3 for allocation between aeronautical and non-aeronautical components as given in Table 11. The consultant has reviewed the submissions by HIAL and allocation of the operation and maintenance costs based on its own methodology. The consultant has determined the revised approach for allocation of the operations and maintenance costs as detailed in section 5.3 of this report.

The consultant has allocated the operations and maintenance costs into aeronautical, non-aeronautical and common cost as per the guidelines issued by Authority from time to time as well as nature of expense. The allocation of the key departments into Aero, Non-Aero and Common is undertaken as explained in Table no.13. Post the reclassification of the departments, the Consultant segregated the costs directly attributable to aero and non-aero heads as well as the costs classified as common costs. The common costs were further allocated between aero and non-aero heads on the basis of relevant ratios such as the gross fixed asset ratio, aero-non-aero expense ratio as well as the terminal area ratio. Further, all the costs related to township were classified as common costs and were apportioned on the basis of the critical/non-critical ratio for the year. The table below summarises critical aspects of the revisions discussed and allocation methodology considered towards segregating the operating expense for HIAL for second control period.

Table 4: Summary of the key revisions for re-allocation of operating expenditure

S.no	Particular	Description
1.	Expenses related to Township	Apportioned on the basis of critical & non-critical staff ratio
2.	Expenses related to provisions on account of bad debt	Disallowed
3.	Expenses related to aviation academy	Disallowed
4.	Expenses related to donations	Disallowed
5.	Lease rent paid to GoT	Aero- 72.69%; Non-Aero 27.31% (1500 acres considered as non-aero)
6.	Expenses related to Landscaping, IT & guest relations departments	Common
7.	Expenses related to commercial property development	Non-Aero

8.	Expenses related to Cargo, Ground Handling & Fuel Farm	Aero
9.	Expenses related to Ground power unit & Cargo Satellite Building	Aero
10.	Collection charges (IATA, PSF & UDF)	Aero

The segregation of remaining expenses is undertaken as follows:

- Concession fees – the concession fees is calculated as 4% of the total aeronautical revenue. The total aeronautical revenue includes reclassification of CGF as aeronautical service.
- CSR Expense – CSR expense has been calculated based on computation of PBT of aeronautical P&L and taking 2% of average net profit of preceding 3 years.
- Forex Losses – Forex losses have been computed based on the maximum allowed RTL rate such that extent that the effective cost of borrowing in foreign currency net of forex gains, is not higher than the cost of RTL

Results of the study

The operational expenditure allocation ratio based on the revised segregation methodology is summarised in the table below:

Table 5 Aero as % of the operating expenditure as per revised segregation logic as per the study

Particulars	FY17	FY18	FY19	FY20	FY21
Employee Cost	88.94%	89.18%	88.32%	88.81%	90.88%
General Admin Cost	78.64%	80.37%	78.58%	74.88%	76.30%
Lease Rent to GoT	72.69%	72.69%	72.69%	72.69%	72.69%
Rates & Taxes	90.40%	90.33%	91.53%	92.50%	91.78%
Community Development	0.00%	0.00%	9.64%	100.00%	60.52%
Security Cost	88.06%	83.47%	87.96%	90.85%	91.54%
Bad Debts Written Off	0.00%	0.00%	0.00%	0.10%	98.64%
Bank Charges	90.40%	90.33%	91.53%	92.50%	91.83%
Utility Cost	100.00%	100.00%	100.00%	100.00%	100.00%
Total Repair & Maintenance Cost	93.02%	92.92%	92.48%	92.42%	93.93%
Stores & Repairs Cost	96.04%	97.17%	94.84%	96.00%	93.74%
Insurance cost	90.40%	90.33%	91.53%	92.50%	91.83%
Technical Services Cost	90.57%	91.47%	89.86%	90.79%	94.99%
Housekeeping Cost	85.48%	82.57%	84.01%	86.11%	85.87%
Fuel Farm Expenses	100.00%	100.00%	100.00%	100.00%	100.00%
Other Operating Cost	65.09%	65.14%	67.68%	59.19%	62.06%
Forex Losses	90.40%	90.33%	0.00%	0.00%	0.00%
Concession fees	70.42%	71.35%	71.22%	69.77%	47.69%
Total Operating Expenditure - Study	84.69%	85.35%	78.64%	84.63%	85.44%
Total Operating Expenditure - HIAL	78.81%	80.36%	75.16%	76.08%	80.40%

The change in the operational expenditure ratio for aero allocation (Ratio as per Study – Ratio as per HIAL's submission) based on the study is given below:

Table 6 Change in the operational expenditure allocation ratio based on this study vis-a-vis those proposed by HIAL for the second control period

Particulars	FY17	FY18	FY19	FY20	FY21
Employee Cost	8.18%	8.64%	10.98%	11.19%	8.85%
General Admin Cost	-4.12%	-0.51%	3.36%	-1.95%	-5.38%
Lease Rent to GoT	0.35%	-0.04%	-0.01%	0.53%	0.00%
Rates & Taxes	7.08%	6.90%	5.97%	5.34%	2.93%
Community Development	-82.37%	-81.43%	-68.39%	21.22%	-22.11%
Security Cost	7.27%	7.86%	12.18%	13.05%	8.29%
Bad Debts Written Off	-100.00%	-81.67%	0.00%	0.00%	0.00%
Bank Charges	7.08%	6.90%	5.97%	5.34%	3.27%
Utility Cost	5.09%	3.94%	1.86%	1.66%	1.18%
Total Repair & Maintenance Cost	-0.24%	-0.77%	0.07%	-0.08%	0.08%
Stores & Repairs Cost	2.37%	6.74%	3.70%	2.38%	2.32%
Insurance cost	7.08%	6.90%	5.97%	5.34%	3.27%
Technical Services Cost	-2.62%	-4.10%	-2.24%	-0.55%	-1.65%
Housekeeping Cost	2.01%	2.01%	2.49%	3.18%	3.34%
Fuel Farm Expenses	100.00%	100.00%	100.00%	100.00%	100.00%
Other Operating Cost	31.51%	36.70%	40.25%	32.81%	6.64%
Forex Losses	7.08%	6.90%	0.00%	0.00%	0.00%
Concession fees	10.90%	10.48%	12.15%	12.94%	6.87%
Total operational expenditure	5.88%	4.99%	3.47%	8.55%	5.04%

Note: The reclassification of CGF expenses into aeronautical expense, increase in gross fixed asset ratio and aero-non-aero opex ratio, addition of collection charges for UDF and PSF to aeronautical expenses are some of the key reasons for increase in aeronautical opex ratio.

The revised operational expenditure as per the study is given below:

Table 7 Year wise adjusted operating and maintenance expenses for the second control period as per this study

Particulars(in Rs. Crores)	FY17	FY18	FY19	FY20	FY21	Total
Employee Cost	53.44	64.40	89.68	108.18	101.76	417.46
General Admin Cost	42.44	60.52	65.29	84.23	54.76	307.23
Lease Rent to GoT	2.38	2.48	2.61	2.73	2.88	13.09
Rates & Taxes	5.13	5.35	5.38	6.13	5.01	27.00
Community Development	0.00	0.00	3.17	7.02	7.66	17.85
Security Cost	9.68	14.17	16.15	21.12	15.86	76.98
Bad Debts Written Off	0.00	0.00	0.00	0.00	0.20	0.20
Bank Charges	3.55	116.23	0.72	30.23	7.48	158.21
Utility Cost	17.49	16.33	19.35	18.71	11.10	82.97
Total Repair & Maintenance Cost	34.36	39.72	43.35	52.01	49.81	219.24
Stores & Repairs Cost	11.02	5.70	5.49	6.87	3.60	32.68
Insurance cost	1.67	2.20	2.09	2.57	4.44	12.97
Technical Services Cost	20.64	25.57	28.60	39.70	35.65	150.16

Housekeeping Cost	9.72	10.28	11.77	15.06	10.34	57.17
Fuel Farm Expenses	11.36	12.67	15.01	18.29	12.62	69.96
Other Operating Cost	4.85	5.50	8.06	7.92	4.96	31.28
Forex Losses	4.02	3.77	0.00	0.00	0.00	7.79
Concession fees	33.69	38.00	44.15	44.88	10.34	171.06
Total Operating Expenditure – Aero as per the study	265.44	422.90	360.85	465.66	338.46	1853.32
Total Operating Expenditure – Aero as per HIAL	275.39	546.39	342.89	418.49	321.09	1904.25

The impact of the revised segregation methodology (difference between aeronautical operational expenditure as per study and aeronautical operational expenditure as per HIAL's submission) is summarised in the table below:

Table 8 Impact of the segregation methodology on operational expenditure incurred by HIAL as per this study vis-a-vis those proposed by HIAL for second control period

Particulars (in Rs. Crores)	FY17	FY18	FY19	FY20	FY21	Total
Employee Cost	4.91	6.25	11.14	15.70	10.42	48.42
General Admin Cost	-2.43	-4.59	-0.69	-5.53	-4.45	-17.69
Lease Rent to GoT	0.00	0.00	0.00	0.06	0.00	0.07
Rates & Taxes	0.40	0.40	0.35	0.35	0.16	1.67
Community Development	-2.03	-5.44	-23.26	-1.33	-5.55	-37.61
Security Cost	0.80	1.34	2.23	3.03	1.44	8.84
Bad Debts Written Off	-0.04	-0.33	0.00	0.00	0.00	-0.37
Bank Charges	-2.22	7.60	-1.59	1.75	0.27	5.81
Utility Cost	0.89	0.64	0.36	0.32	0.13	2.34
Total Repair & Maintenance Cost	-0.09	-0.33	0.03	-0.04	0.04	-0.38
Stores & Repairs Cost	0.28	0.40	0.22	0.17	0.09	1.15
Insurance cost	0.13	0.17	0.14	0.15	0.16	0.74
Technical Services Cost	-0.60	-1.14	-0.72	-0.24	-0.62	-3.33
Housekeeping Cost	0.23	0.24	0.35	0.56	0.40	1.77
Fuel Farm Expenses	11.36	12.67	15.01	18.29	12.62	69.96
Other Operating Cost	3.53	4.32	6.59	5.96	1.13	21.52
Forex Losses	-31.26	-151.45	0.00	0.00	0.00	-182.71
Concession fees	6.19	5.77	7.80	7.97	1.14	28.87
Total Operating Expenditure - Aero	-9.95	-123.48	17.97	47.16	17.37	-50.93

The airport operator, i.e. HIAL has submitted the true up of total operating expenditure for the second control period as Rs. 2434.98 crore, out of which aeronautical operating expenditure are Rs. 1904.25 crore, non –aero operating expenditure are Rs. 496.70 crore and non-airport operating expenditure are Rs. 34.04 crore.

Based on the study, the total operational expenditure is Rs. 2214.71 crores (based on audited financial statements and revised allocation), and proposed aeronautical expenditure is Rs. 1853.32 crores resulting in total reduction of Rs. 50.93 crores for the second control period. The opex allocation ratio submitted by HIAL was 78.20% and revised opex allocation ratio is 83.70%.

Efficiency and trend analysis of O&M Expenses

The consultant has analysed the operational expenditure approved by AERA in the second control period order of HIAL and the actual expenditure incurred by HIAL for the second control period as given in section 6.1. It is observed that actual operational expenditure is more than the forecasted operational expenditure. Some of the key findings of this analysis are as given below:

- The increase in operational expenditure is due to significant growth in traffic which led to increased operations. Due to this momentum in traffic, the airport crossed the 20 million mark in FY19 itself which was the design capacity as per the previous expansion plans. Hence, HIAL reworked on their expansion plans and based on the expected traffic at the end of the third control period commenced their expansion for 34 million passengers.
- However, in order to cater to the rising traffic, HIAL commissioned two interim terminals to ensure seamless passenger experience. This led to increase in manpower and administrative costs.
- Further, HIAL also raised finances for the expansion project as well refinanced the existing debt which was previously approved by the Authority as one time time expenditure leading to an increase of Rs. 126 crores from the expenses approved by the Authority.
- Additionally, few cost heads such as utility cost, stores & spares, housekeeping costs etc. have decreased as compared to what was approved by the Authority indicating cost efficiency measures adopted by HIAL as detailed in section 6.2.

The consultant also performed trend analysis of various components of the inflation adjusted operational expenditure for the period FY2017 to FY2021 in comparison to the increase in the passenger traffic as given in section 8. The CAGR for these components is for the period FY2017-2020 as the consultant understands that the operational expenditure of FY2021 cannot be directly compared with the previous years as the utilisation of the asset has fallen substantially and the airport took some time to adjust to the existing conditions.

As per the analysis of the key components of O&M costs, the consultant has concluded that while the absolute cost has increased over the duration of the Second Control Period due to increased passenger traffic and ramping up of IIAT and IIDT operations, HIAL has been able to improve the efficiency of its operations, as evidenced by a lower growth or even decrease in costs on a per passenger basis on most of its key cost heads.

Internal and External Benchmarking

- The consultant has also analysed HIAL's O&M costs with respect to its performance (internal benchmarking) and observed that for the period FY12-FY21, the inflation adjusted costs per pax at HIAL has decreased for major heads due to the increase in utilisation at the airport. The passenger mix at HIAL is predominantly domestic as it accounts for about 80% of the total traffic at HIAL.
- The consultant undertook a study of HIAL's O&M costs with respect to the performance of its competition (External benchmarking) for FY2018. Similar private airports finalised for the aforementioned study are BIAL, CIAL, DIAL, and MIAL. The consultant understands that these airports may be different in terms to traffic profile, terminal capacity, airside infrastructure, expansion phases, operational strategy etc. and these factors will have an impact on the O&M cost of the airport.
- The findings of the study suggests that the increase in total costs has been higher than the growth in passenger traffic and Air Traffic Movements, however, the per pax cost and per ATM cost for most cost heads has been lower than the passenger growth rate over the same period.

Based on the analysis carried out in this report, it is concluded that O&M expenses submitted by HIAL are reasonable and HIAL has adopted measures to achieved further efficiency in operating cost. Additionally, the benchmarking of HIAL with other PPP airports suggests that HIAL ranks lower in most of the cost parameters which suggests that HIAL has managed its cost efficiently and adopted measures to keep the same within limits.

The consultant has relied on the auditor's certificate submitted by HIAL, audited financial statements of HIAL from FY2017 to FY2020, capex and opex submission for FY2021 based on auditors' certificate and the information available in the department wise breakup of operational expenses to verify the expenses incurred during the second control period and to understand the nature of the expenses. The consultant has not audited the operational expenses or any other underlying data submitted by HIAL and relied on auditor's certificate for the same.

5. Segregation of costs for second control period

This section discusses the segregation methodology and principles adopted by HIAL for purpose of true up of second control period in their tariff filing for third control period. Additionally, the section covers the revised methodology adopted by the consultant based on Authority's guidelines and previous tariff orders (1st and 2nd control period). The outcome of this section gives the difference in O&M cost as submitted by HIAL and post revised allocation by the consultant for evaluation of tariff for HIAL.

5.1 Allocation logics adopted by HIAL for the second control period

As part of its submission, HIAL has detailed the allocation methodology in Annexure 9 of the MYTP. The key points from HIAL's submission are presented below:

Aeronautical Operating Expenditure

The aeronautical operating expenditure are those expenses which are necessary or required for the performance of the aeronautical services at the airport and all other expenditure that the company may incur in accordance with the written direction of Government of India for or in relation to provision of any of the reserved activities.

Non - Aeronautical Operating Expenditure

The non-aeronautical expenditure has been assumed to include all the operating expenditure required or necessary for the performance of the non-aeronautical services at the airport.

Common Operating Expenditure

The common expenditure has been assumed to include all the operating expenditure that are not directly identifiable and used commonly for providing both aeronautical and non-aeronautical services.

Non-Airport Operating Expenditure

The non-airport expenditure has been assumed to include all the operating expenditure incurred towards development of non-airport activities carried out on 'landside' i.e. outside the airport and enlisted in Part 2 of Schedule 3 of the concession agreement.

Cost centres and allocation: The above allocation by HIAL is based on the below cost centres as per the books of HIAL

Table 9: Summary of cost centres and allocation as per HIAL's submission

S.no	Cost Centres	Allocation
1.	Aeronautical Cost Centres	<p>Below cost centres providing only aeronautical services:</p> <ul style="list-style-type: none"> • Airside Operations • Terminal Operations • AOCC • ARFF • COO Office • Terminal Operations • Airline Marketing & Business Development • Protocol • Safety Environment & Compliances

S.no	Cost Centres	Allocation									
		<ul style="list-style-type: none"> • Airport Service Quality • Technical Services • IT • Landscaping • Employee Township 									
2.	Non-Aeronautical Cost Centres	<p>Below cost centres providing only non-aeronautical services:</p> <ul style="list-style-type: none"> • Commercial • Cargo • Aero Related (Fuel Farm and Ground Handling) • Travel Services • Retail • Chief Commercial Office 									
3.	Common Cost Centres	<p>Cost centres pertaining to support functions:</p> <ul style="list-style-type: none"> • Admin, Facility Management • CFL (Customer facilities & logistics) • HR • Finance • Strategic Planning • Legal • Security • Transportation • Project Management • Knowledge Management • Corporate Communication • CEO's office, MD's office, Non-Exe Dir Office • Contract & Procurement • Corporate Relations • CSR <p>Apportionment of common expenses</p> <table border="1"> <tbody> <tr> <td>A.</td> <td>Allocated in the Asset Allocation Ratio</td> <td>Rates & Taxes, Insurance, repairs & maintenance, stores & spares, bank charges</td> </tr> <tr> <td>B.</td> <td>In the ratio of terminal area used for aeronautical and non-aeronautical (i.e. 84.6% and 15.4% respectively)</td> <td>Housekeeping cost pertaining to terminal building</td> </tr> <tr> <td>C.</td> <td>In the ratio of airport and non-airport land as per master plan</td> <td>Land Lease Rents payable to Govt. of Telangana</td> </tr> </tbody> </table>	A.	Allocated in the Asset Allocation Ratio	Rates & Taxes, Insurance, repairs & maintenance, stores & spares, bank charges	B.	In the ratio of terminal area used for aeronautical and non-aeronautical (i.e. 84.6% and 15.4% respectively)	Housekeeping cost pertaining to terminal building	C.	In the ratio of airport and non-airport land as per master plan	Land Lease Rents payable to Govt. of Telangana
A.	Allocated in the Asset Allocation Ratio	Rates & Taxes, Insurance, repairs & maintenance, stores & spares, bank charges									
B.	In the ratio of terminal area used for aeronautical and non-aeronautical (i.e. 84.6% and 15.4% respectively)	Housekeeping cost pertaining to terminal building									
C.	In the ratio of airport and non-airport land as per master plan	Land Lease Rents payable to Govt. of Telangana									

S.no	Cost Centres	Allocation	
			As per the master plan, out of the total leased area of 5500 acres, 4000 acres has been identified for Airport purpose and balance 1500 acres has been allocated for non-airport activities.
		D.	Allocated in the Aero-Non Aero Opex Ratio All other common expenses (excluding the ones specified in A, B and C above)
4.	Non-Airport Cost Centres	Cost Centres providing only non-airport services: <ul style="list-style-type: none"> • CPD • Bidar 	

Operating Expenditure as submitted by HIAL

HIAL in its MYTP for the third control period has submitted the true up of the operating expenditure for the second control period.

HIAL, in its submission, highlighted that the Authority in Order No 34/2019-20 dated 27th March 2020 had proposed to true up all the operating expenses (except true-up of interest on working capital loan which is subject to a pre-defined cap) based on actual expenses in the 2nd control period.

Accordingly, the true up for operating expenses had been calculated by HIAL considering the actual operating cost for FY17-FY21.

Further, the true up of operating expenses. As per HIAL's submission, factored the following:

- Community development expenses as per actuals till FY21
- Incidental Income from NOB, SO and Township has been netted off from operating expenses
- Allowance of forex losses not recognised by the Authority in CP2 tariff order

Table 10: Summary of the forex loss not allowed by the Authority as per HIAL's submission

As per HIAL's submission							
S.no	Particulars (in Rs Crore)	2016-17	2017-18	2018-19	2019-20	2020-21	Total
1.	Forex loss	42.70	186.62	-	-	-	229.32
2.	Forex gain	0.36	0.56	-	-	-	0.92
3.	Net Loss to Be allowed (as per CP2 Order)	42.34	186.06	-	-	-	228.40
4.	Aero	35.28	155.23	-	-	-	190.51
5.	Non-Aero	7.06	30.83	-	-	-	37.89

- True Up for allowance of refinancing cost (Break cost of IRS, Upfront Fee on refinanced loan charged to P&L and Bond Issue Cost in FY2018)

HIAL, in its submission, highlighted that it has incurred the below one time cost towards refinancing of ECB and RTL in October 2018;

Table 11: Summary of the one-time cost towards refinancing of ECB and RTL as per HIAL's submission

As per HIAL's submission				
S.no	Particulars (in Rs Crore)	2016-17	April 1,2017 to October 31,2017	Total
1.	Upfront Fee on RTL charged to statement of Profit and Loss	8.33	10.69	19.02
2.	Unwinding Cost of Interest Rate Swap	-	55.32	55.32
3.	Break Cost of External Commercial Borrowing	-	2.18	2.18
4.	Bond issuance Cost	-	49.00	49.00
5.	Total	8.33	117.19	125.52

Other consideration and submission by HIAL

- HIAL considered IT department, Landscaping and Township as aeronautical cost centres
- HIAL considered Cargo, Ground Handling and Fuel farm as non-aeronautical cost centres
- HIAL considered operating expenditure related to Cargo Satellite Building outside the regulatory purview
- HIAL considered operating expenditure related to commercial property development as non-airport (outside regulatory purview)
- HIAL netted off the incidental income from the O&M expenses and did not consider these incidental income towards non-aeronautical revenues
- HIAL considered collection charges pertaining to IATA as pass through in the O&M building block while netting off the other collection charges (PSF & UDF collection charges) from the revenues
- HIAL considered lease rent paid to Government of Telangana for 1500 acres as non-airport in nature (outside the regulatory purview)
- HIAL considered both donations and CSR expenses as pass through expenses
- HIAL considered aviation academy as a non-aeronautical cost centre

5.2 Reconciliation of total costs with audited financials

The table below provides a reconciliation of the expense items as submitted by HIAL as per the audited financials.

Table 12 O&M Aggregate Cost (FY17 to FY21) for the 2nd Control Period Submitted by HIAL

S.no	Particulars	Total (in INR crores)
1.	Payroll Related Expenses	458.99
a)	Contribution to Provident fund and other funds	35.51
b)	Salaries and Wages	400.13
c)	Staff welfare expenses	23.35
2.	Administration & General Expenses	714.25
a)	Lease Rent to GoT	18.01
b)	Rates and Taxes	29.57
c)	Security Charges	86.90
d)	General Administrative Expenses	414.22
i.	<i>Rent-Others</i>	14.25
ii.	<i>Advertising and business promotion</i>	28.15
iii.	<i>Legal and professional fees</i>	82.01
iv.	<i>Management fees</i>	141.14
v.	<i>Travelling and conveyance</i>	82.64
vi.	<i>Training & Recruitment charges</i>	8.64
vii.	<i>Communication Expenses</i>	16.47
viii.	<i>Office maintenance</i>	11.46
ix.	<i>Directors' Sitting Fees</i>	1.06
x.	<i>Loss on sale / discarding of assets</i>	0.63
xi.	<i>Payment to auditor</i>	3.35
xii.	<i>Printing and Stationery</i>	2.29
xiv.	<i>Miscellaneous Expenses</i>	15.13
xv.	<i>Provision for Doubtful Advances</i>	1.09
xvi.	<i>Loss on sale of Investment in shares</i>	4.34
xvii.	<i>Loss on exchange fluctuation</i>	0.22
e)	Bad debts written off	4.40
f)	CSR & Donations	69.60
g)	Bank Charges	91.54
3.	Operating Expenditure	696.09
a)	Utilities	82.98
b)	Insurance	14.18
c)	Repairs and Maintenance	235.85
d)	Stores and Spares	34.12
e)	Housekeeping Charges	67.36
f)	Operating & Maintenance Expenses	27.81
i.	<i>Bus Hire Charges</i>	2.88
ii.	<i>Health and safety expenses</i>	2.07
iii.	<i>COVID 19 Expenses</i>	20.15
iv.	<i>Operating and maintenance expenses</i>	14.26
v.	<i>Operator fee</i>	3.18

vi.	Collection Charges	2.75
g)	Manpower Outsourcing	163.83
h)	Fuel Farm O&M Expenses	69.95
4.	Total (1+2+3)	1869.32
5.	Less: Incidental Income	33.27
6.	Total (adjusted for incidental income) (4-5)	1836.05
7.	One time refinancing cost	-89.12
8.	Total (adjusted for incidental income and one time refinancing cost) (6-7)	1925.14
9.	After apportionment of common into aero & non-aero	1925.14
10.	Balance Forex Losses	228.40
11.	Total (9+10)	2153.54
12.	Add : Incidental Income	33.27
13.	Total excluding incidental income (11+12)	2186.81

Notes:

- The training and recruitment charges have been considered under Employee cost for FY17-FY19 and under administrative expenses for FY20-FY21
- Collection charges for IATA have been included under other operating expenses while collection charges for UDF and PSF have been netted off from aeronautical charges.
- Community development expenses include statutory requirement towards CSR together with Donations by HIAL
- The numbers for FY21 were based on projections as submitted by HIAL but were revised based on actual expenditure incurred and auditor certificate submitted by HIAL.

5.3 Revised methodology for operating expenditure allocation as per CRIS analysis

HIAL in its submission has followed the operating expenditure allocation methodology as detailed in Annexure 9 (Concept Document) of the MYTP. The same has also been detailed in the preceding sections. The Consultant has outlined the revised principles for operating expenditure allocation in this section. Basis the principles, the revised allocation logic is summarised in the table below.

Table 13: Summary of classification of key departments

S.no	Description (Department)	HIAL's classification	Revised Classification
1.	Admin	Common	Common
2.	Aero related (FF, GH, Cargo)	Non Aero	Aero
3.	Airline marketing	Aero	Aero
4.	AIRSIDE OPS	Aero	Aero
5.	AOCC	Aero	Aero
6.	ARFF	Aero	Aero
7.	Aviation Academy	Non Aero	Non-Airport
8.	MD Office	Common	Common
9.	Commercial	Non Aero	Non Aero

S.no	Description (Department)	HIAL's classification	Revised Classification
10.	Contracts and Procurement	Common	Common
11.	Chief Commercial Officer's Office	Non Aero	Non Aero
12.	CEO'S office	Common	Common
13.	Customer Facilities and Logistics	Common	Common – Apportioned on the basis of terminal floor space ratio
14.	Chief Operating Officer's office	Aero	Aero
15.	Corp-communications	Common	Common
16.	Corporate Relations	Common	Common
17.	Commercial Property Development	Non Airport	Non Aero
18.	Finance & Accounts	Common	Common
19.	Business Support	Common	Common
20.	Chairman's Office	Common	Common
21.	HR	Common	Common
22.	Infra Planning & Development	Common	Common
23.	IT	Aero	Common
24.	Landscaping	Aero	Common
25.	Legal	Common	Common
26.	Non exe. Dir' office	Common	Common
27.	Project Management Team (PMT)	Common	Common
28.	Guest Relations	Aero	Common
29.	Retail	Non Aero	Non Aero
30.	Safety Environment & Compliances	Aero	Aero
31.	Security	Common	Common
32.	Strategy Planning Group	Common	Common
33.	Service Quality Dept. (SQD)	Aero	Aero
34.	Technical Services	Aero	Aero
35.	Terminal Ops	Aero	Aero
36.	Township	Aero	Common – Apportioned on the basis of critical/non-critical staff ratio
37.	Transportation	Common	Common

Post the reclassification of the departments, the Consultant segregated the costs directly attributable to aero and non-aero heads as well as the costs classified as common costs. The common costs were further allocated between

aero and non-aero heads on the basis of relevant ratios such as the gross fixed asset ratio, aero-non-aero expense ratio as well as the terminal area ratio.

Table 14: Summary of the basis of apportionment of common costs for various expense line items

S.no	Common costs (if any) related to the expense line item	HIAL's basis of apportionment	Revised basis of apportionment
1.	Payroll Related Expenses	As per sub heads	As per sub heads
a)	Contribution to Provident fund and other funds	Aero-Non Aero Expense Ratio	Gross Fixed Asset Ratio
b)	Recruitment charges	Aero-Non Aero Expense Ratio	Gross Fixed Asset Ratio
c)	Salaries and Wages	Aero-Non Aero Expense Ratio	Gross Fixed Asset Ratio
d)	Staff welfare expenses	Aero-Non Aero Expense Ratio	Gross Fixed Asset Ratio
e)	Training charges	Aero-Non Aero Expense Ratio	Gross Fixed Asset Ratio
2.	Administration & General Expenses	As per sub heads	As per sub heads
a)	Lease Rent to GoT	Aero-Non Aero Expense Ratio	Gross Fixed Asset Ratio
b)	Rates and Taxes	Gross Fixed Asset Ratio	Gross Fixed Asset Ratio
c)	Security Charges	Aero-Non Aero Expense Ratio	Gross Fixed Asset Ratio
d)	General Administrative Expenses	As per sub heads	As per sub heads
i.	<i>Rent</i>	Aero-Non Aero Expense Ratio	Aero-Non Aero Expense Ratio
ii.	<i>Legal and Professional Charges</i>	Aero-Non Aero Expense Ratio	Aero-Non Aero Expense Ratio
iii.	<i>Management Fees</i>	Aero-Non Aero Expense Ratio	Aero-Non Aero Expense Ratio
iv.	<i>Advertisement & Business Promotion</i>	Aero-Non Aero Expense Ratio	Aero-Non Aero Expense Ratio
v.	<i>Provision for Doubtful Advances</i>	Aero-Non Aero Expense Ratio	Inadmissible
vi.	<i>Communication Expenses</i>	Aero-Non Aero Expense Ratio	Gross Fixed Asset Ratio
vii.	<i>Directors' Sitting Fees</i>	Aero-Non Aero Expense Ratio	Aero-Non Aero Expense Ratio
viii.	<i>Loss on exchange fluctuation</i>	Aero-Non Aero Expense Ratio	Gross Fixed Asset Ratio
ix.	<i>Loss on sale / discarding of assets</i>	Aero-Non Aero Expense Ratio	Gross Fixed Asset Ratio
x.	<i>Miscellaneous Expenses</i>	Aero-Non Aero Expense Ratio	Gross Fixed Asset Ratio
xi.	<i>Office maintenance</i>	Aero-Non Aero Expense Ratio	Gross Fixed Asset Ratio
xii.	<i>Payment to auditor</i>	Aero-Non Aero Expense Ratio	Aero-Non Aero Expense Ratio
xiii.	<i>Printing and Stationery</i>	Aero-Non Aero Expense Ratio	Gross Fixed Asset Ratio
xiv.	<i>Travelling and conveyance</i>	Aero-Non Aero Expense Ratio	Aero – non aero ratio of 50:50
e)	Bad debts written off	Aero-Non Aero Expense Ratio	Aero-Non Aero Expense Ratio
f)	CSR & Donations	Aero-Non Aero Expense Ratio	Common - Expense ratio
g)	Bank Charges	Gross Fixed Asset Ratio	Gross Fixed Asset Ratio

S.no	Common costs (if any) related to the expense line item	HIAL's basis of apportionment	Revised basis of apportionment
3.	Operating Expenditure	As per sub heads	As per sub heads
a)	Utilities	Aero-Non Aero Expense Ratio	Gross Fixed Asset Ratio
b)	Insurance	Gross Fixed Asset Ratio	Gross Fixed Asset Ratio
c)	Repairs and Maintenance	Gross Fixed Asset Ratio	Gross Fixed Asset Ratio
d)	Stores and Spares	Gross Fixed Asset Ratio	Gross Fixed Asset Ratio
e)	Housekeeping Expenses	Aero-Non Aero Expense Ratio	Gross Fixed Asset Ratio
f)	Operating & Maintenance Expenses	As per sub heads	As per sub heads
i.	<i>Collection Charges</i>	Aero-Non Aero Expense Ratio	Aero-Non Aero Expense Ratio
ii.	<i>Bus Hire Charges</i>	Aero-Non Aero Expense Ratio	Aero-Non Aero Expense Ratio
iii.	<i>Health and safety expenses</i>	Aero-Non Aero Expense Ratio	Aero-Non Aero Expense Ratio
iv.	<i>Operating and maintenance expenses</i>	Aero-Non Aero Expense Ratio	Aero-Non Aero Expense Ratio
v.	<i>Operator fee</i>	Aero-Non Aero Expense Ratio	Aero-Non Aero Expense Ratio
g)	Manpower Outsourcing	Aero-Non Aero Expense Ratio	Gross Fixed Asset Ratio
h)	Fuel Farm O&M Expenses	Non-Aero	Aero
i)	Incidental Income	Aero-Non Aero Expense Ratio	Not Applicable – Incidental not be netted off from operating expenditure instead to be added back to revenues

Further, all the costs related to township were classified as common costs and were apportioned on the basis of the critical/non-critical ratio for the relevant year.

The below table summarises some of the above discussed revisions considered towards operating expense allocation.

Table 15: Summary of the key revisions for re-allocation of operating expenditure

S.no	Particular	Description
1.	Expenses related to Township	Apportioned on the basis of critical & non-critical staff ratio
2.	Expenses related to provisions on account of bad debt	Disallowed
3.	Expenses related to aviation academy	Disallowed
4.	Expenses related to donations	Disallowed
5.	Lease rent paid to GoT	Aero- 72.69%; Non-Aero 27.31% (1500 acres considered as non-aero)
6.	Expenses related to Landscaping, IT & guest relations departments	Common

7.	Expenses related to commercial property development	Non-Aero
8.	Expenses related to Cargo, Ground Handling & Fuel Farm	Aero
9.	Expenses related to Ground power unit & Cargo Satellite Building	Aero
10.	Collection charges (IATA, PSF & UDF)	Aero

5.4 Revised Ratio used for segregation of common cost heads

The revised ratio for Gross fixed asset has been calculated from the results of the study on allocation of assets between aeronautical and non-aeronautical assets as part of scope of work under RFP No. 01/2020-21 initiated by the Authority. The Aero-non-aero ratio has been computed based on revised segregation logic developed in this study. The table below gives the ratio used from FY17-FY21.

Table 16: Revised ratio used for segregation of common cost heads

Particulars	FY17	FY18	FY19	FY20	FY21
Gross fixed asset ratio (% aeronautical assets:% non-aeronautical assets)	90.4%:9.6%	90.3%:9.7%	91.5%:8.5%	92.5%:7.5%	91.8%:8.2%
Aero-Non-aero opex ratio (% aeronautical opex:% non-aeronautical opex)	86.9%:13.1%	86.0%:14.0%	84.4%:15.6%	82.3%:17.7%	86.4%:13.6%

Terminal Area Ratio

In the Order no. 34 2019/20, Authority had considered the terminal area ratio as Aero: 84.6% and Non – Aero: 15.4% respectively. HIAL in their submission has submitted the same terminal ratio for consideration for second control period as the airport is in expansion phase. Therefore, the same ratio is considered for segregating relevant common costs associated to terminal into aeronautical and non-aeronautical services. The common costs related to the customer facilities & logistics were apportioned on the basis of the terminal area ratio between aero & non-aero activities.

5.5 Opex cost head wise segregation for 2nd control period

The following section covers each cost head wise segregation logic used by HIAL and revision as per this study:

5.5.1 Employee Cost

Employee cost includes:

- Contribution to Provident fund and other funds
- Recruitment charges
- Salaries and Wages
- Staff welfare expenses

- Training charges

HIAL has classified the training and recruitment charges under Employee cost from FY17 to FY19 whereas from FY20 to FY21 the same has been considered under administrative costs. Further HIAL has submitted that the increase in payroll expenses is mainly attributable to increase in number of manpower on account of elevated level of operations and a nominal increase because of annual increments. The manpower has increased from 498 in FY16 to 870 in FY20. It is however, observed that the cost/employee has stayed within the same range indicating only an inflationary increase. The airport has seen >12% growth rate before the pandemic and due to commissioning of IIDT and IDAT, the increase in manpower is justified. Further the airport is undergoing major expansion and the manpower is bound to increase in a phased manner.

HIAL Segregation Logic:

As detailed in section 5.1 HIAL has segregated the departments as per aeronautical, non aeronautical common cost centers. Further the common cost has been segregated based on aero – non aero opex ratio and total aeronautical expense has been calculated.

Revision as per this study:

On examining submission of HIAL, it was observed that some of the departments were classified as 100% aeronautical (IT, Township, Landscaping) which have been re-classified into common and further segregated based on the logic given in Table no. 14. The cost related to CGF departments have been treated as non-aeronautical by HIAL and the same has been re-classified as aeronautical. On an overall basis, due to reallocation of few departments into aeronautical and upward revision in segregation ratio used to allocate the common expenses (difference of ~7-8% from HIAL's submission in aeronautical part) the aeronautical employee cost has increased post reallocation. The revised aeronautical employee cost as a result of the reallocation exercise is:

Table 17: Revision in segregation logic of employee costs as per this study

Particulars (in Rs Crore)	FY17	FY18	FY19	FY20	FY21	Total
Total Employee Cost – HIAL (A)	60.10	72.20	101.54	119.15	111.34	464.33
Aeronautical Ratio - HIAL (B)	80.76%	80.54%	77.35%	77.62%	82.04%	
Aeronautical Employee Cost as per HIAL (C= A*B)	48.54	58.15	78.54	92.48	91.34	369.05
Revision as per study						
Total Employee Cost considered as per study (D)	60.09	72.21	101.53	121.82*	111.97*	467.62
Revised Aeronautical Ratio - (E)	88.94%	89.18%	88.32%	88.81%	90.88%	
Aeronautical Employee Cost as per revised Study (F= D*E)	53.44	64.40	89.68	108.18	101.76	417.46
Impact of revision in Allocation Logic (G = F-C)	4.91	6.25	11.14	15.70	10.42	48.42

*Training and recruitment charges were considered by HIAL in Administrative cost in FY20-FY21 which have been adjusted in Employee cost leading to increase in total employee cost as per revised allocation.

(Rs. 2.65 crore in FY20 and Rs. 0.63 crore in FY21)

5.5.2 Administrative Expenses

The administrative expenses and their details together with segregation logic are given in the table below:

Table 18: Revision in segregation logic of Administrative costs as per this study

Sr. No.	Expense Particular	Segregation Logic
1.	Lease Rent to GoT	<p>HIAL Segregation Logic: Based on nature of individual expense and department the cost is apportioned to, it is classified as aeronautical, non-aeronautical and common. Common expense is classified into aeronautical and non –airport based on ratio of airport and non-airport land (5000 acres – 4000 acres airport + 1500 acres non airport). The airport related land expense is treated as 100% aeronautical</p> <p>Revised Segregation Logic: Based on revised department allocation and nature of individual expense and department cost is apportioned to, it is classified as aeronautical, non-aeronautical and common. Common expense is classified into aeronautical and non-aeronautical by treating non – airport land as non – aeronautical and revised ratio as Aero- 72.69%; Non-Aero 27.31%</p>
2.	Rates & Taxes	<p>HIAL Segregation Logic: Based on nature of individual expense and department cost is apportioned to, it is classified as aeronautical, non-aeronautical and common. Common expense under rates and taxes is classified into aeronautical and non –aeronautical based on ratio of gross block asset.</p> <p>Revised Segregation Logic: Since rates and taxes include property tax and other statutory taxes the amount submitted has been retained. Based on revised department allocation and nature of individual expense and department, cost is apportioned to it is classified as aeronautical, non-aeronautical and common. Common expenses have been classified based on ratio of gross fixed asset.</p> <p>Additionally the common rates and taxes classified under township are allocated in on the basis of critical & non-critical staff ratio.</p>
3.	Security Charges	<p>As per HIAL,</p> <ul style="list-style-type: none"> Security cost has increased due to increase in security manpower deployed at the airport on account of increase passenger flow at the airport and need for more deployment at landside. There was also a change in minimum wages effective from Jan 1, 2017 which lead to increase in security expenses for subsequent period. The security cost at HIAL is pertaining to the personnel deployed for baggage screening, AEP, SOCC and overall supervision of airport security. Airport frontage, forecourt management, administrative offices, access roads security and vehicular movement are taken care of by outsourced security agency.

		<p>HIAL Segregation Logic: Based on nature of individual expense and department it is apportioned to, cost is classified as aeronautical, non-aeronautical and common. Common security expense is classified into aeronautical and non –aeronautical based on ratio of aero-non aero opex ratio</p> <p>On examination of details pertaining to the security charges, the increase in security charges on account of increase in wages effective Jan 2017 coupled with inflationary increase on yearly basis falls well within the limits. Additionally, the security headcount has increased in order to debottleneck and to reduce congestion at the main terminal HIAL has constructed two new terminals by name Interim Intl Departure Terminal (IIDT) and Interim Domestic Arrival Terminal (IDAT) resulting into increased area demanding deployment of additional security personnel.</p> <p>Revised Segregation Logic: Based on Revised department allocation and nature of individual expense and department cost is apportioned to, it is classified as aeronautical, non-aeronautical and common. Security charges are function of assets, the common expense under security charges have been segregated into aeronautical and non-aeronautical based on gross fixed asset ratio</p>
4.	General Administrative Expenses	The general administrative expenses are segregated based on individual cost heads and their functions
a.	Rent - Others	<p>HIAL Segregation Logic: Based on nature of individual expense and department it is apportioned to it is classified as aeronautical, non-aeronautical and common. Common expense is classified into aeronautical and non – aeronautical based on ratio of aero-non-aero opex ratio</p> <p>Revised Segregation Logic: Based on Revised department allocation and nature of individual expense and department it is apportioned to it is classified as aeronautical, non-aeronautical and common. The segregation logic is retained and Common expense is classified into aeronautical and non –aeronautical based on ratio of aero-non-aero opex ratio.</p>
b.	Advertisement & Business Promotion	<p>As per HIAL, there has been an marginal increase due to decennial event which was not forecasted as part of projections for the 2nd control period</p> <p>HIAL Segregation Logic: Based on nature of individual expense and department it is apportioned to it is classified as aeronautical, non-aeronautical and common. Common expense is classified into aeronautical and non – aeronautical based on ratio of aero-non-aero opex ratio</p> <p>On examining the details submitted for advertisement and business promotion, it is observed that expenses related to event sponsorship, IPL tickets and decennial events are not mandatory expenses and cannot be passed on to the passengers. Hence these expenses have been deducted from common expense and adjusted as per revised segregation logic</p>

		<p>Revised Segregation Logic: Based on revised department allocation and nature of individual expense and department cost is apportioned to, it is classified as aeronautical, non-aeronautical and common. Advertisement and business promotions are function of business operations, common expenses have been classified based on ratio of aero-non-aero opex ratio</p>
c.	Legal and Professional Charges	<p>As per HIAL, the increase in Legal, Professional and Consultancy expenses for FY20 can be attributed to engagement of consultants for various airport related activities which are one time in nature. Additionally, engagement of consultants for improving O&M efficiency, business development, support for raising capital etc. led to increase in these expenses on an overall basis</p> <p>HIAL Segregation Logic: Based on nature of individual expense and department cost is apportioned to it is classified as aeronautical, non-aeronautical and common. Common expense is classified into aeronautical and non-aeronautical based on ratio of aero-non-aero opex ratio</p> <p>On examining the details submitted by HIAL, the increase in Legal and professional charges due to capital arising activity and major expansion plan is justified. Hence the submission is taken into consideration.</p> <p>Revised Segregation Logic: Based on Revised department allocation and nature of individual expense and department it is apportioned to, cost is classified as aeronautical, non-aeronautical and common. Since, common expense under legal and professional charges are function of business operations, same has been retained and common expenses have been classified based on ratio of aero-non-aero opex ratio.</p>
d.	Management Fees	<p>As per HIAL, Management Fee is an outcome of independent allocation study of Head quarter expenses. The study is prepared by Deloitte (Deloitte Study “Framework for Charging Corporate Cost” for GMR Infrastructure Ltd. May 2015 has been the basis of management fee) and these expenses are allocated to all group companies for efficient resource management and sharing of expertise. The cost may vary as it can be a function of department used and its cost driver.</p> <p>HIAL Segregation Logic: Based on nature of individual expense and department it is apportioned to, cost is classified as aeronautical, non-aeronautical and common. Common expense is classified into aeronautical and non-aeronautical based on ratio of aero-non-aero ratio</p> <p>On examining the details submitted by HIAL, since management fees is dependent on the cost driver of the department of parent company, it is clear that the cost year on year will not follow a specific trend and hence the submission of HIAL is taken into consideration.</p> <p>Revised Segregation Logic: Based on Revised department allocation and nature of individual expense and department it is apportioned to, it is classified as aeronautical, non-aeronautical and common. Since, common expense under management fees are function of business operations, same has been retained and common expenses have been classified based on ratio of aero-non-aero opex ratio.</p>

e.	Assets written off (only in FY20)	The nature of asset written off is aeronautical in nature and hence the same is considered under 100% aeronautical
f.	Communication Expenses, Loss on exchange fluctuation, Loss on sale / discarding of asset, Miscellaneous Expenses, Office Maintenance, Printing and Stationery	<p>HIAL Segregation Logic: Based on nature of individual expense and department it is apportioned to, it is classified as aeronautical, non-aeronautical and common. Common expense is classified into aeronautical and non – aeronautical based on ratio of aero-non-aero opex ratio</p> <p>Revised Segregation Logic: Based on Revised department allocation and nature of individual expense and department it is apportioned to, it is classified as aeronautical, non-aeronautical and common. Common expenses have been classified based on ratio of gross fixed asset ratio</p>
g.	Director's sitting fees, Payment to auditor.	<p>HIAL Segregation Logic: Based on nature of individual expense and department it is apportioned to, cost is classified as aeronautical, non-aeronautical and common. Common expense is classified into aeronautical and non – aeronautical based on ratio of aero-non-aero opex ratio</p> <p>Revised Segregation Logic: Based on Revised department allocation and nature of individual expense and department it is apportioned to, it is classified as aeronautical, non-aeronautical and common. Since, common expense under these cost heads are function of business operations, same has been retained and common expenses have been classified based on ratio of aero-non-aero opex ratio.</p>
h.	Provision for bad and doubtful debts	Disallowed
i.	Travelling and conveyance	<p>As per HIAL, Senior management need to undertake travel to/from Hyderabad for business requirements for which Company avails chartering services from aircraft charter service providers.</p> <p>Airtime sharing cost is incurred on account of:</p> <ul style="list-style-type: none"> • Travelling cost on account of various Meetings and Seminars of Aviation Industry. • Representing RGIA at various forums. • Meeting airlines senior management for new route developments • Meeting senior management of various international brands for retail development at RGIA. • Meeting institutional investors for GHIAL's financing requirements and investors relation. • Visiting various airports for bringing new innovative technologies and industry best practices to RGIA.

		<ul style="list-style-type: none"> Meeting the Leaders of various industries for business development. <p>HIAL Segregation Logic: Based on nature of individual expense and department it is apportioned to, it is classified as aeronautical, non-aeronautical and common. Common expense is classified into aeronautical and non – aeronautical based on ratio of aero-non-aero opex ratio</p> <p>Revised Segregation Logic: Based on Revised department allocation and nature of individual expense and department it is apportioned to, it is classified as aeronautical, non-aeronautical and common. Since the purpose of the common travel costs cannot be accurately segregated between aeronautical and non-aeronautical services, it is assumed that the common travel is used in 50:50 proportion for aeronautical and non-aeronautical services.</p>
5.	Bad debts written off (FY17, FY20)	On examination, bad debts written off for FY17 were wrongly classified under aeronautical whereas the expenses were non-aeronautical in nature. Hence this has been revised to non –aeronautical. There are no common expense under this head.
6.	CSR & Donations	Refer to section 5.5.5
7.	Bank Charges	<p>HIAL Segregation Logic: Based on nature of individual expense and department it is apportioned to, cost is classified as aeronautical, non-aeronautical and common. Common expense is classified into aeronautical and non –aeronautical based on ratio of gross fixed asset ratio</p> <p>Revised Segregation Logic: Since bank charges include finance related charges towards expansion and refinancing activities, TRA account operations, the amount submitted towards these expenses have been retained. However, the amount attributed to interest charges due to delayed payment have been deducted as these cannot be passed on to the passengers. Based on Revised department allocation and nature of individual expense and department it is apportioned to it is classified as aeronautical, non-aeronautical and common. common expenses have been classified based on ratio of gross fixed asset ratio</p>

Based on the above table, the aeronautical portion of administrative costs as estimated by HIAL and as per revised segregation logic is given in the table below:

Table 19: Revision in segregation logic of overall impact on aeronautical administrative costs as per this study

Particulars (in Rs Crore)	FY17	FY18	FY19	FY20	FY21	Total
Total Administrative Cost – HIAL (A)	83.60	244.11	152.62	194.10	123.58	798.01
Aeronautical Ratio - HIAL (B)	82.18%	81.84%	76.18%	78.89%	82.53%	
Aeronautical Administrative cost Cost as per HIAL (C= A*B)	68.70	199.77	116.26	153.12	101.99	639.85
Revision as per study						
Total Administrative Cost considered as per study (D)	80.34	236.96	148.31	186.24	119.52	771.38

Revised Aeronautical Ratio - (E)	78.65%	83.87%	62.92%	81.33%	78.52%	
Aeronautical Administrative Cost as per revised Study (F= D*E)	63.19	198.75	93.31	151.46	93.85	600.56
Impact of revision in Allocation Logic (G = F-C)	-5.51	-1.02	-22.95	-1.66	-8.14	-39.28

5.5.3 Operating Expenses

The operating expenses submitted by HIAL, consists of the following:

- Utilities
- Insurance
- Repairs and Maintenance
- Stores and Spares
- Housekeeping Charges
- Operating & Maintenance Expenses
- Manpower Outsourcing
- Fuel farm O&M Expenses

5.5.3.1 Utilities cost

As per HIAL, the utilities cost have gone down drastically due to cost saving measures adopted by HIAL. HIAL had commissioned Solar power plants of 5MW and 8 MW capacity in FY16 and FY17 respectively which led to significant cost savings. Utility cost includes water and power charges. Utility cost as per the financials are the net charges after adjusting the utility recoveries from third party concessionaires. Hence, utility cost had been considered as 100% aeronautical for allocation purpose. Further utility cost towards GPU services are considered as Non Aero as they have considered GPU as a non-aero service (akin to Ground handling services)

HIAL Segregation Logic:

HIAL has considered utilities cost as 100% aeronautical.

Revision as per this study:

Since there has been significant cost savings based on actual utilities cost submitted by HIAL and approved by the Authority in Order no. 34 2019/20, the same cost has been considered for opex. The utilities cost in the audited financial are net charges after adjusting the utility recoveries from third party concessionaires. Hence, utility cost is considered as 100% aeronautical for allocation purpose. Additionally the utilities cost considered towards GPU have been reallocated as aeronautical cost as CGF is considered under aeronautical services as per section 5.3

The aeronautical portion of utilities costs as estimated by HIAL and as per revised segregation logic is given in the table below:

Table 20: Revision in segregation logic of utilities costs as per this study

Particulars (in Rs Crore)	FY17	FY18	FY19	FY20	FY21	Total
Total Utility Cost- HIAL (A)	17.49	16.33	19.35	18.70	11.10	82.97
Aeronautical Ratio - HIAL (B)	94.91%	96.06%	98.14%	98.34%	98.82%	
Aeronautical Utility Cost as per HIAL (C= A*B)	16.60	15.69	18.99	18.39	10.97	80.64
Revision as per study						

Total Utility Cost considered as per study (D)	17.49	16.33	19.35	18.71	11.10	82.97
Revised Aeronautical Ratio - (E)	100%	100%	100%	100%	100%	
Aeronautical Utility Cost as per revised Study (F= D*E)	17.49	16.33	19.35	18.71	11.10	82.97
Impact of revision in Allocation Logic (G = F-C)	0.89	0.64	0.36	0.32	0.13	2.34

5.5.3.2 Repairs and Maintenance

As per HIAL, their in-house technical team over the period have developed the required skill sets for equipment health check-ups in order to decrease the downtime of plant and machinery and HIAL has shifted from AMC to CMC. Further, the CMC with key OEMs also helped them to contain R&M costs despite the elevated level of operations. The intermittent increase in cost in R&M is attributable to operationalization of IIDT and IDAT, asset aging and maintenance of security equipment which was earlier met through PSF funds now shifted to HIAL account.

HIAL Segregation Logic:

Based on nature of individual expense and department it is apportioned to, cost is classified as aeronautical, non-aeronautical and common. Common expense is classified into aeronautical and non –aeronautical based on ratio of gross fixed asset ratio

Revision as per this study:

There has been a marginal increase in R&M expense which is attributed to increased operations . Hence the same cost is taken into consideration. Based on revised department allocation and nature of individual expense and department it is apportioned to, R&M expense is classified as aeronautical, non-aeronautical and common. R&M expense is function of assets, hence, the common expense under R&M have been segregated into aeronautical and non-aeronautical based on gross fixed asset ratio

The aeronautical portion of R&M expenses as estimated by HIAL and as per revised segregation logic is given in the table below:

Table 21: Revision in segregation logic of repair and maintenance cost as per this study

Particulars (in Rs Crore)	FY17	FY18	FY19	FY20	FY21	Total
Total Repairs and Maintenance- HIAL (A)	36.94	42.74	46.87	56.27	53.02	235.85
Aeronautical Ratio - HIAL (B)	93.26%	93.68%	92.42%	92.49%	93.85%	
Aeronautical Repairs and Maintenance as per HIAL (C= A*B)	34.45	40.04	43.32	52.05	49.76	219.62
Revision as per study						
Total Repairs and Maintenance considered as per study (D)	36.94	42.74	46.88	56.27	53.02	235.85
Revised Aeronautical Ratio - (E)	93.02%	92.92%	92.48%	92.42%	93.93%	
Aeronautical Repairs and Maintenance as per revised Study (F= D*E)	34.36	39.72	43.35	52.01	49.81	219.24
Impact of revision in Allocation Logic (G = F-C)	-0.09	-0.33	0.03	-0.04	0.04	-0.38

5.5.3.3 Stores and spares

As per HIAL, stores and spares are primarily related to the value of inventory (maintenance equipment and related items for routine maintenance works at terminal, airside, ARFF equipment) purchased during the year.

HIAL Segregation Logic:

Based on nature of individual expense and department it is apportioned to, cost is classified as aeronautical, non-aeronautical and common. Common expense is further classified into aeronautical and non –aeronautical based on gross block asset ratio.

Revision as per this study:

There has been a significant reduction in the consumables in the second control period which is mainly due to the Annual Maintenance Contract (AMC) with key OEMs getting converted into Comprehensive Maintenance Contract (CMC) resulting into reduction of stores and spares. Hence the same cost is taken into consideration. Based on revised department allocation and nature of individual expense and department it is apportioned to, Store and spares cost is classified as aeronautical, non-aeronautical and common. Stores and spares cost is function of assets, hence, the common expense under Stores and spares have been segregated into aeronautical and non-aeronautical based on gross fixed asset ratio

The aeronautical portion of Stores and spares cost as estimated by HIAL and as per revised segregation logic is given in the table below:

Table 22: Revision in segregation logic of stores and spares costs as per this study

Particulars (in Rs Crore)	FY17	FY18	FY19	FY20	FY21	Total
Total Stores & Spares - HIAL (A)	11.47	5.87	5.78	7.16	3.84	34.11
Aeronautical Ratio - HIAL (B)	93.67%	90.43%	91.14%	93.62%	91.41%	
Aeronautical Stores & Spares as per HIAL (C= A*B)	10.74	5.31	5.27	6.70	3.51	31.53
Revision as per study						
Total Stores & Spares considered as per study (D)	11.47	5.87	5.78	7.16	3.84	34.12
Revised Aeronautical Ratio - (E)	96.04%	97.17%	94.84%	96.00%	93.74%	
Aeronautical Stores & Spares as per revised Study (F= D*E)	11.02	5.70	5.49	6.87	3.60	32.68
Impact of revision in Allocation Logic (G = F-C)	0.28	0.40	0.22	0.17	0.09	1.15

5.5.3.4 Housekeeping cost

As per HIAL, the housekeeping cost has increased due to increase in traffic, commissioning of IIDT and IDAT. However, the contract awarded to third parties are consolidated in nature and not specific to particular area of the airport.

HIAL Segregation Logic:

The housekeeping cost pertaining to terminal building has been apportioned into aeronautical and non-aeronautical based on terminal ratio (Aero – 84.6% and Non-aero – 15.4%). The remaining of the cost is segregated based on nature of individual expense and department it is apportioned to, into aeronautical, non-aeronautical and common. Common expense is further classified into aeronautical and non –aeronautical based on aero-non-aero opex ratio.

Revision as per study:

The housekeeping cost has increased in line with the passenger growth rate of 12.3% and hence the same cost is taken into consideration. The housekeeping expenses directly attributable to terminal building are apportioned into aeronautical and non-aeronautical expenses in the terminal ratio (Aero – 84.6% and Non-aero – 15.4%). Based on revised department allocation and nature of individual expense and department it is apportioned to, other housekeeping cost is classified as aeronautical, non-aeronautical and common. Housekeeping cost is function of assets, hence, the common expense under housekeeping have been segregated into aeronautical and non-aeronautical based on gross fixed asset ratio

The aeronautical portion of housekeeping cost as estimated by HIAL and as per revised segregation logic is given in the table below

Table 23: Revision in segregation logic of housekeeping costs as per this study

Particulars (in Rs Crore)	FY17	FY18	FY19	FY20	FY21	Total
Total Housekeeping Cost- HIAL (A)	11.37	12.46	14.01	17.49	12.04	67.37
Aeronautical Ratio - HIAL (B)	83.47%	80.57%	81.52%	82.93%	82.54%	
Aeronautical Housekeeping Cost as per HIAL (C= A*B)	9.49	10.04	11.42	14.50	9.94	55.40
Revision as per study						
Total Housekeeping Cost considered as per study (D)	11.37	12.45	14.01	17.49	12.04	67.36
Revised Aeronautical Ratio - (E)	85.48%	82.57%	84.01%	86.11%	85.87%	
Aeronautical Housekeeping Cost as per revised Study (F= D*E)	9.72	10.28	11.77	15.06	10.34	57.17
Impact of revision in Allocation Logic (G = F-C)	0.23	0.24	0.35	0.56	0.40	1.77

5.5.3.5 Manpower outsourcing cost

As per HIAL, the manpower outsourcing are primarily linked to cost of outsourced employees providing IT services, technical services, bird scaring, buggy services and others.

HIAL Segregation Logic:

Based on nature of individual expense and department it is apportioned to, it is classified as aeronautical, non-aeronautical and common. Common expense is further classified into aeronautical and non –aeronautical based on aero-non-aero opex ratio

Revision as per this study:

The manpower outsourcing has marginally increased due to increase in operations and hence the same cost is taken into consideration.

Based on revised department allocation and nature of individual expense and department it is apportioned to, manpower outsourcing cost is classified as aeronautical, non-aeronautical and common. Manpower outsourcing cost is function of assets, hence, the common expense under manpower outsourcing cost have been segregated into aeronautical and non-aeronautical based on gross fixed asset ratio

The aeronautical portion of manpower outsourcing cost as estimated by HIAL and as per revised segregation logic is given in the table below

Table 24: Revision in segregation logic of manpower outsourcing costs as per this study

Particulars (in Rs Crore)	FY17	FY18	FY19	FY20	FY21	Total
Total manpower outsourcing costs (Technical Service Expenses) - HIAL (A)	22.79	27.95	31.84	43.73	37.53	163.84
Aeronautical Ratio - HIAL (B)	93.19%	95.57%	92.10%	91.34%	96.64%	
Aeronautical manpower outsourcing costs (Technical Service Expenses) as per HIAL (C= A*B)	21.24	26.71	29.32	39.94	36.27	153.49
Revision as per study						
Total manpower outsourcing costs (Technical Service Expenses) considered as per study (D)	22.79	27.95	31.83	43.73	37.53	163.83
Revised Aeronautical Ratio - (E)	90.57%	91.47%	89.86%	90.79%	94.99%	
Aeronautical manpower outsourcing costs (Technical Service Expenses) as per revised Study (F= D*E)	20.64	25.57	28.60	39.70	35.65	150.16
Impact of revision in Allocation Logic (G = F- C)	-0.60	-1.14	-0.72	-0.24	-0.62	-3.33

5.5.3.6 Insurance

As per HIAL, insurance cost is towards operations insurance for IAR, fire, special contingency policy, airport operator liability, vehicles, terrorism, and cash insurance.

HIAL Segregation Logic:

Based on nature of individual expense and department it is apportioned to, cost is classified as aeronautical, non-aeronautical and common. Common expense is further classified into aeronautical and non –aeronautical based on gross fixed asset ratio

Revision as per this study:

On examination of details submitted by HIAL, the insurance related cost has increased marginally due to increase in operations and is justified. Hence the same cost is taken into consideration.

Based on revised department allocation and nature of individual expense and department it is apportioned to, insurance cost is classified as aeronautical, non-aeronautical and common. Insurance cost is function of assets, hence, the common expense under insurance cost have been segregated into aeronautical and non-aeronautical based on gross fixed asset ratio

The aeronautical portion of insurance cost as estimated by HIAL and as per revised segregation logic is given in the table below

Table 25: Revision in segregation logic of insurance costs as per this study

Particulars (in Rs Crore)	FY17	FY18	FY19	FY20	FY21	Total
Total Insurance Cost (A)	1.85	2.44	2.28	2.78	4.83	14.18
Aeronautical Ratio - HIAL (B)	83.32%	83.43%	85.56%	87.16%	88.56%	
Aeronautical Insurance Cost as per HIAL (C= A*B)	1.54	2.04	1.95	2.42	4.28	12.23
Revision as per study						

Total Insurance Cost considered as per study (D)	1.85	2.44	2.28	2.78	4.83	14.18
Revised Aeronautical Ratio - (E)	90.40%	90.33%	91.53%	92.50%	91.83%	
Aeronautical Insurance Cost as per revised Study (F= D*E)	1.67	2.20	2.09	2.57	4.44	12.97
Impact of revision in Allocation Logic (G = F-C)	0.13	0.17	0.14	0.15	0.16	0.74

5.5.3.7 Fuel Farm operating expense

HIAL Segregation Logic:

HIAL in their segregation methodology has treated CGF services as non-aeronautical. Hence the expense towards fuel farm operations have been treated as non-aeronautical expenses.

Revision as per this study:

Based on Authority's previous stand in order no. 34 2019/20 and on scrutinizing the concession agreement schedule 3 which clearly identified CGF as airport activities, the fuel farm operating expense has been treated as 100% aeronautical.

The aeronautical portion of fuel farm operating expense as estimated by HIAL and as per revised segregation logic is given in the table below

Table 26: Revision in segregation logic of fuel farm operating costs as per this study

Particulars (in Rs Crore)	FY17	FY18	FY19	FY20	FY21	Total
Total Fuel Farm Expenses (A)	11.36	12.67	15.01	18.29	12.62	69.95
Aeronautical Ratio - HIAL (B)	0.0%	0.0%	0.0%	0.0%	0.0%	
Aeronautical Fuel Farm Expenses as per HIAL (C= A*B)	0.00	0.00	0.00	0.00	0.00	0.00
Revision as per study						
Total Fuel Farm Expenses considered as per study (D)	11.36	12.67	15.01	18.29	12.62	69.96
Revised Aeronautical Ratio - (E)	100%	100%	100%	100%	100%	
Aeronautical Fuel Farm Expenses as per revised Study (F= D*E)	11.36	12.67	15.01	18.29	12.62	69.96
Impact of revision in Allocation Logic (G = F-C)	11.36	12.67	15.01	18.29	12.62	69.96

5.5.3.8 Other operating expenses

As per HIAL, Other operating expenses include:

- Bus hire charges - Bus hire charges for staff commutation to office
- Health & safety expenses- Miscellaneous expenses towards health and safety at the site. Includes cost towards noise level monitoring, waste water sampling, portable and rain water sampling, DG Emission checks, Air quality monitoring etc
- Other operating and maintenance expenses- O&M expenses of car park operator
- Operator fees (car park) - Operator fee paid to car park operator, Tenaga
- Collection charges (IATA) - Collection charges paid to IATA
- COVID -19 related expenses (FY21)

HIAL Segregation Logic:

HIAL has considered collection charges from IATA as 100% aeronautical. However, HIAL has netted off other collection charges such as PSF, USF (domestic and international) from aeronautical revenue instead of including it as part of aeronautical opex as per their accounting practice.

Other operating expenses excluding collection charges have been classified based on nature of individual expense and department it is apportioned to as aeronautical, non-aeronautical and common. Common expense is further classified into aeronautical and non –aeronautical based on aero-non-aero opex ratio

Revision as per this study:

Collection charges for IATA as well as UDF and PSF have been considered as part of opex and not netted off from the aeronautical revenue and treated as 100% aeronautical. Further other operating expenses have been segregated based on revised department allocation and nature of individual expense and department it is apportioned to as aeronautical, non-aeronautical and common. The common expense under other operating cost have been segregated into aeronautical and non-aeronautical based on aero-non aero opex ratio.

The aeronautical portion of other operating expenses as estimated by HIAL and as per revised segregation logic is given in the table below:

Table 27: Revision in segregation logic of other operating expenses costs as per this study

Particulars (in Rs Crore)	FY17	FY18	FY19	FY20	FY21	Total
Total Other Operating Expenses (A)	3.92	4.15	5.36	7.45	6.91	27.79
Aeronautical Ratio - HIAL (B)	33.58%	28.44%	27.43%	26.37%	55.42%	
Aeronautical Other Operating Expenses as per HIAL (C= A*B)	1.32	1.18	1.47	1.96	3.83	9.76
Revision as per study						
Total Other Operating Expenses considered as per study (D)	7.45	8.44	11.91	13.38	7.99	49.17*
Revised Aeronautical Ratio - (E)	65.09%	65.14%	67.68%	59.19%	62.06%	
Aeronautical Other Operating Expenses as per revised Study (F= D*E)	4.85	5.50	8.06	7.92	4.96	31.28
Impact of revision in Allocation Logic (G = F-C)	3.53	4.32	6.59	5.96	1.13	21.52

*Collection charges for IATA as well as UDF and PSF have been considered as part of opex and not netted off from the aeronautical revenue and treated as 100% aeronautical. (Net Impact of Rs. 20.29 crores)

5.5.4 Forex Losses

HIAL Segregation Logic:

As per HIAL, allowance of forex losses not recognised by the Authority in CP2 tariff order has been considered by HIAL as part of opex based on the following calculations:

Table 28: Summary of the forex loss not allowed by the Authority as per HIAL's submission

S.no	Particulars (in Rs Crore)	2016-17	2017-18	Total
1.	Forex loss	42.70	186.62	229.32
2.	Forex gain	0.36	0.56	0.92
3.	Net Loss to Be allowed (as per CP2 Order)	42.34	186.06	228.40
4.	Aero	35.28	155.23	190.51
5.	Non-Aero	7.06	30.83	37.89

Revision as per this study:

On examining the details submitted by HIAL, it is observed that HIAL has submitted forex loss based on actual calculation as part of the opex. However, as per the Order No. 34 2019/20, the Authority has not included the forex losses in the RAB calculation but allowed partially recovery by considering it as operating expenses (to the extent where the effective interest rate on external commercial borrowings = interest rate on rupee term loan). Hence the same treatment is considered for the purpose of this study as given in the table below. Further the overall forex losses have been treated as common and segregated into aeronautical and non-aeronautical based on gross fixed asset ratio.

Table 29: Summary of the forex losses to be allowed as part of O&M

S.no	Particular (in Rs Crore)	FY2017	FY2018
1.	Forex loss	42.70	186.62
2.	Forex gain	0.36	0.56
3.	Net ((1)-(2))	42.34	186.06
4.	Average RTL	10.41%	12.17%
5.	Cost of ECB	9.00%	9.36%
6.	Average ECB	314.87	148.36
7.	Diff in cost -Max allowable loss ((6)*((4)-(5)))	4.45	4.18
8.	To be part of O&M building block (Min (3,7))	4.45	4.18
9.	Aero	4.02	3.77
10.	Non-Aero	0.43	0.40

The aeronautical portion of other operating expenses as estimated by HIAL and as per revised segregation logic is given in the table below:

Table 30: Revision in segregation logic of Forex Losses costs as per this study

Particulars (in Rs Crore)	FY17	FY18	Total
Forex Cost (A)	42.34	186.06	228.40
Aeronautical Ratio - HIAL (B)	0.83	0.83	
Aeronautical Forex Cost as per HIAL (C= A*B)	35.28	155.23	190.51
Revision as per study			

Forex Cost considered as per study (D)	4.45	4.18	8.63
Revised Aeronautical Ratio - (E)	0.90	0.90	
Aeronautical Forex Cost as per revised Study (F= D*E)	4.02	3.77	7.79
Impact of revision in Allocation Logic (G = F-C)	-31.26	-151.45	-182.71

5.5.5 CSR Expenses

As per HIAL, CSR as stipulated by the central government is the mandatory expenses and such expenses have to be considered by the Authority while computing the revenue requirement of the regulated entity, else it may lead to reduction in equity return for the Company. HIAL has further emphasized to include CSR as part of opex in order to ensure that the return to the shareholders after making statutory deduction (in the form of tax or similar deduction like CSR) is protected under all circumstances.

HIAL's segregation Logic:

Out of the total CSR, aeronautical portion of CSR expenses as derived from aeronautical P&L is forming part of the eligible expenses.

Revision as per this study:

On the examining the details submitted by HIAL, it is observed that the CSR expense is categorized under Community development expenses which also include donations made by HIAL.

The Hon'ble TDSAT's judgment dated December 16, 2020 in the matter of Bangalore International Airport Limited v. Airports Economic Regulatory Authority of India was referred to ascertain the eligibility of CSR expense as a pass through in the O&M building block. As per the judgement, 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. Hon'ble 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.

Hence keeping in view the direction of this judgement, the CSR liability calculated based on aeronautical P&L can be allowed as pass through for the purpose of O&M expense. For the purpose of this study, the table below presents the CSR eligibility submitted by HIAL and the allowable CSR eligibility as per this study.

Table 31: Revision in segregation logic of CSR costs as per this study

Particulars (in Rs Crore)	FY17	FY18	FY19	FY20	FY21	Total
Total Community Development (A)	2.47	6.68	33.87	10.59	16.00	69.61
Aeronautical Ratio - HIAL (B)	82.37%	81.43%	78.02%	78.78%	82.63%	
Aeronautical Community Development as per HIAL (C= A*B)	2.03	5.44	26.43	8.34	13.22	55.46
Revision as per study						
Total Community Development considered as per study (D)	2.46	6.68	32.86	7.02	12.66	61.68
Revised Aeronautical Ratio - (E)	0.00%	0.00%	9.64%	100.00%	60.52%	
Aeronautical Community Development as per revised Study (F= D*E)	0.00	0.00	3.17	7.02	7.66	17.85

Impact of revision in Allocation Logic (G = F-C)	-2.03	-5.44	-23.26	-1.33	-5.55	-37.61
---	--------------	--------------	---------------	--------------	--------------	---------------

*CSR eligibility has been calculated on aero P&L with revised classification of CGF into aeronautical service and revised aeronautical opex based on this study. The depreciation and interest rates are as per HIAL submission as revised aeronautical P&L is not available as of now. The CSR eligibility is taken as per Companies Act, 2013.

5.5.6 Concession fees

HIAL signed the Concession Agreement with MoCA (Government of India) on 20th December 2004. As per clause 3.3 of the Concession Agreement, HIAL has to pay a Concession Fee equal to 4% of the gross annual revenue to the Government of India. The concession fee with respect to the first 10 financial years is deferred till the 11th year from COD and is payable in 20 equal half-yearly instalments starting from FY2019.

HIAL's segregation logic:

HIAL has apportioned the concession fee into aero, non-aero and non-aeronautical services in the ratio of the revenues from these services respectively.

The summary of the concession fee as per HIAL's submission is summarized below:

Table 32: Summary of concession fee as per HIAL submission

As per HIAL allocation						
Concession Fee						
<i>in Rs Crore</i>	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Concession Fee	46.20	52.95	61.53	64.95	22.54*	245.33
Aeronautical Concession Fee towards tariff determination	27.50	32.23	36.35	36.91	9.20	141.03
Non - Aeronautical Concession Fee	14.76	17.00	20.46	23.61	12.73	86.96
Non - Airport Concession Fee	3.94	3.71	4.71	4.44	0.60	17.34

*Concession fees taken on actuals in FY21 submitted by HIAL in the auditor's certificate

Revision as per this study:

On examining the details submitted by HIAL, it is noted that HIAL has submitted concession fees based on proportion of aeronautical and non-aeronautical revenue. However, HIAL has considered the CGF revenue under non-aeronautical revenue stream and CPD and CSB revenue has been considered as non-airport. Pursuant to order no 34/2019-20 for the Second Control Period, it is suggested that the amount of concession fee corresponding to the aeronautical revenues should only be allowed for the purpose of tariff determination. Hence, post reallocation of CGF into aeronautical revenue and revenue from non-airport into aeronautical and non-aeronautical (CPD as non-aeronautical and CSB as aeronautical), the concession fees towards aeronautical revenue at 4% is given in the table below:

Table 33: Summary of concession fee as per revised allocation

As per revised allocation						
Concession Fee						
<i>in Rs Crore</i>	2016-17	2017-18	2018-19	2019-20	2020-21*	Total
Aeronautical Revenue (Revenue from Regulated services + Revenue from CGF) (A)	842.15	950.06	1,103.87	1,122.02	258.44	4276.54
Non-aeronautical Revenue (Revenue from services other than regulated) (B)	353.73	381.45	445.97	486.18	283.53	1950.86
Concession Fee (C)	4%					
Aeronautical Concession Fee towards tariff determination (A*C)	33.69	38.00	44.15	44.88	10.34	171.06
Non - Aeronautical Concession Fee (B*C)	14.15	15.26	17.84	19.45	11.34	78.03
Non - Airport Concession Fee	-	-	-	-	-	-
Total	47.84	53.26	61.99	64.33	21.68	249.10

*FY21 concession fees is provisional as the actual revenue for FY21 has not been finalized by HIAL. (FY21 revenue considered based on actuals for 9MFY21 and projections for Jan – Mar 2021)

5.6 Total Opex as per revised submission

- Based on this study report, we have concluded that the Aeronautical Operation and Maintenance expense of Rs. 1905.24 crores as claimed by HIAL for the Second Control Period (FY17- 21) will be reduced by Rs. 50.93 crores. The table below summarizes the adjustments made

Table 34 Difference in aeronautical opex due to revision as per this study

Particulars (<i>in Rs Crore</i>)	FY17	FY18	FY19	FY20	FY21	Cost Head Wise Aggregate Sum
Employee Cost	4.91	6.25	11.14	15.70	10.42	48.42
Administrative Costs	-5.51	-1.02	-22.95	-1.66	-8.14	-39.28
General Admin Cost	-2.43	-4.59	-0.69	-5.53	-4.45	-17.69
Lease Rent to GoT	0.00	0.00	0.00	0.06	0.00	0.07
Rates & Taxes	0.40	0.40	0.35	0.35	0.16	1.67
Community Development	-2.03	-5.44	-23.26	-1.33	-5.55	-37.61
Security Cost	0.80	1.34	2.23	3.03	1.44	8.84
Bad Debts Written Off	-0.04	-0.33	0.00	0.00	0.00	-0.37
Bank Charges	-2.22	7.60	-1.59	1.75	0.27	5.81
Utility Cost	0.89	0.64	0.36	0.32	0.13	2.34
Total Repair & Maintenance Cost	-0.09	-0.33	0.03	-0.04	0.04	-0.38
Stores & Repairs Cost	0.28	0.40	0.22	0.17	0.09	1.15
Insurance cost	0.13	0.17	0.14	0.15	0.16	0.74
Technical Services Cost	-0.60	-1.14	-0.72	-0.24	-0.62	-3.33
Housekeeping Cost	0.23	0.24	0.35	0.56	0.40	1.77

Fuel Farm Expenses	11.36	12.67	15.01	18.29	12.62	69.96
Other Operating Cost*	3.53	4.32	6.59	5.96	1.13	21.52
Forex Losses	-31.26	-151.45	0.00	0.00	0.00	-182.71
Total excluding concession fees	-16.14	-129.26	10.16	39.19	16.24	-79.80
Concession Fees	6.19	5.77	7.80	7.97	1.14	28.87
Total Opex	-9.95	-123.48	17.97	47.16	17.37	-50.93

*The collection charges for UDF and PSF have been included in opex based on logic explained in section 5.5.3 whereas HIAL has netted off these expenses from aeronautical revenue based on its accounting principles. This differential treatment is creating a difference of Rs. 20.5 crores in revised segregation.

- The concession fees is calculated as per the revised segregation logic in section 5.5.6 in line with Authority's previous treatment in Order No. 34 2019/20 and revised concession fees towards aeronautical opex to be taken into consideration is given table 33.
- The aeronautical expense based on revised segregation logic to be considered for true-up of second control period is given in the table below:

Table 35 Revised aeronautical opex to be considered as part of true up for second control period

Particulars (in Rs Crore)	FY17	FY18	FY19	FY20	FY21	Cost Head Wise Aggregate Sum
Employee Cost	53.44	64.40	89.68	108.18	101.76	417.46
General Admin Cost	42.44	60.52	65.29	84.23	54.76	307.23
Lease Rent to GoT	2.38	2.48	2.61	2.73	2.88	13.09
Rates & Taxes	5.13	5.35	5.38	6.13	5.01	27.00
Community Development	0.00	0.00	3.17	7.02	7.66	17.85
Security Cost	9.68	14.17	16.15	21.12	15.86	76.98
Bad Debts Written Off	0.00	0.00	0.00	0.00	0.20	0.20
Bank Charges	3.55	116.23	0.72	30.23	7.48	158.21
Utility Cost	17.49	16.33	19.35	18.71	11.10	82.97
Total Repair & Maintenance Cost	34.36	39.72	43.35	52.01	49.81	219.24
Stores & Repairs Cost	11.02	5.70	5.49	6.87	3.60	32.68
Insurance cost	1.67	2.20	2.09	2.57	4.44	12.97
Technical Services Cost	20.64	25.57	28.60	39.70	35.65	150.16
Housekeeping Cost	9.72	10.28	11.77	15.06	10.34	57.17
Fuel Farm Expenses	11.36	12.67	15.01	18.29	12.62	69.96
Other Operating Cost	4.85	5.50	8.06	7.92	4.96	31.28
Forex Losses	4.02	3.77	0.00	0.00	0.00	7.79
Total excluding concession fees	231.75	384.90	316.70	420.77	328.13	1682.25
Concession fees	33.69	38.00	44.15	44.88	10.34	171.06
Total Opex	265.44	422.90	360.85	465.66	338.46	1853.32

- The reclassification of CGF expenses into aeronautical expense, increase in gross fixed asset ratio and aero-non-aero opex ratio, addition of collection charges for UDF and PSF to aeronautical expenses are some of the primary reason for increase in aeronautical opex ratio. However, on an overall basis the aeronautical opex has reduced by Rs. 50.93 crores.

Table 36 Revision in segregation logic of aeronautical opex costs including concession fees as per this study

Particulars (In Rs. Crores)	FY17	FY18	FY19	FY20	FY21	Total
Total Opex submitted by HIAL (A)	303.23	626.98	394.66	485.12	376.81	2186.81
Total Concession fees (B)	46.2	52.95	61.53	64.95	22.54	248.17
Total Opex including concession fees (C= A+B)	349.43	679.93	456.19	550.07	399.35	2434.98
Aeronautical Ratio - HIAL (D)	81.75%	82.00%	77.67%	78.66%	82.77%	
Aeronautical Opex as per HIAL (E= A*D)	247.89	514.16	306.54	381.58	311.89	1762.06
Aeronautical Ratio for concession fees - HIAL (F)	59.52%	60.87%	59.08%	56.83%	40.82%	
Aeronautical Concession fees as per HIAL (G = B*F)	27.5	32.23	36.35	36.91	9.2	142.19
Total Aeronautical opex including concession fees (H=E+G)	275.39	546.39	342.89	418.49	321.09	1904.25
Aeronautical ratio for opex including concession fees (I=H/C)	78.81%	80.36%	75.16%	76.08%	80.40%	78.20%
Revision as per this study						
Total Revised Opex Cost considered as per study (J)	265.59	442.25	396.89	485.87	374.47	1965.07
Total Concession fees (K)	47.84	53.26	61.99	64.33	21.68	249.10
Total Revised Opex including concession fees (L= J+K)	313.43	495.51	458.88	550.20	396.15	2214.17
Revised Aeronautical Ratio - (M)	87.26%	87.03%	79.80%	86.60%	87.62%	
Aeronautical Opex as per revised Study (N= J*M)	231.75	384.90	316.70	420.77	328.13	1682.25
Aeronautical Ratio for concession fees revised (O)	70.42%	71.35%	71.22%	69.77%	47.69%	
Aeronautical Concession fees as per revised (P=O*K)	33.69	38.00	44.15	44.88	10.34	171.06
Total Aeronautical opex including concession fees (Q=N+P)	265.44	422.90	360.85	465.66	338.46	1853.32
Aeronautical ratio for opex including concession fees (R= Q/L)	84.69%	85.35%	78.64%	84.63%	85.44%	83.70%
Impact (S=Q-H)	-9.95	-123.48	17.97	47.16	17.37	-50.93

- The total aeronautical ratio for second control period aeronautical opex including concession fees based on revision as per this study is 83.70%

5.7 Summary

- The concession fees is calculated as per the revised segregation logic in section 5.5.6 in line with Authority's previous treatment in Order No. 34 2019/20 and revised concession fees towards aeronautical opex to be taken into consideration is Rs. 171.06 crores.
- Based on this study report, we have concluded that the Aeronautical Operation and Maintenance expense of Rs. 1905.24 crores as claimed by HIAL for the Second Control Period (FY17-21) will be reduced by Rs. 50.93 crores.
- The reclassification of CGF expenses into aeronautical expense, increase in gross fixed asset ratio and aero-non-aero opex ratio, addition of collection charges for UDF and PSF to aeronautical expenses are some of the primary reason for increase in aeronautical opex ratio. However, on an overall basis the aeronautical opex has reduced by Rs. 50.93 crores.
- The total aeronautical ratio for second control period aeronautical opex including concession fees based on revision as per this study is 83.70%

6. Efficiency in O&M Expenses during second control period

6.1 Projected opex approved by AERA as per Order No. 34/2019-20 for the second control period vs actual Opex submitted by HIAL for 2nd control period

This section presents projected O&M expenses submitted to AERA in the 2nd tariff order as well as the actual expenses incurred by HIAL in the second control period.

The expenses have been grouped for the purpose of simplicity and to analyse the efficient costs for HIAL.

Table 37: Projected O&M expenses approved by AERA for Second Control Period in order 34 2019/20

Particulars (in Rs Crore)	FY17	FY18	FY19	FY20	FY21	CAGR
Payroll Cost	64.90	69.45	86.20	106.99	114.48	15.24%
Administrative Cost (general admin, Land Lease rent to GoT, Rates & taxes, CSR)	51.21	50.65	52.66	54.75	56.93	2.68%
Security Cost	8.71	9.05	9.40	9.77	10.15	3.90%
Finance related charges (bad debt written off, Bank charges, exchange fluctuations etc.)	7.95	10.24	10.12	11.77	13.96	15.11%
Utility Cost	20.83	17.83	18.87	29.70	38.28	16.43%
Repair and maintenance	33.30	36.09	38.97	45.33	64.82	18.12%
Stores and Spares	13.90	15.37	16.60	19.31	27.61	18.72%
Housekeeping	10.66	11.08	12.97	18.65	23.17	21.41%
Other operating cost (Insurance, Technical services)	39.07	41.19	46.68	53.36	57.32	10.06%
Concession fees	44.97	44.72	34.91	39.21	44.16	-0.45%
Total Opex	295.50	305.68	327.38	388.83	450.88	11.14%

Source: AERA Order no.34 2019-20

Table 38: Actual O&M expenses submitted by HIAL to AERA for true-up of second control period in the third control period tariff filing

Particulars (in Rs Crore)	FY17	FY18	FY19	FY20	FY21	CAGR	CAGR
						FY17- FY20	FY17- FY21
Payroll Cost	60.10	72.20	101.54	119.15	111.34	25.62%	16.67%
Administrative Cost (general admin, Land Lease rent to GoT, Rates & taxes, CSR)	65.65	96.52	131.04	137.76	97.90	28.02%	10.50%
Security Cost	10.99	16.98	18.36	23.25	17.32	28.37%	12.04%
Finance related charges (bad debt written off, Bank charges, exchange fluctuations etc.)	6.96	130.61	3.22	33.09	13.26	68.15%	17.49%
Utility Cost	17.49	16.33	19.35	18.70	11.10	2.26%	-10.74%
Repair and maintenance	36.94	42.74	46.87	56.27	53.02	15.07%	9.46%
Stores and Spares	11.47	5.87	5.78	7.16	3.84	-14.53%	-23.93%
Housekeeping	11.37	12.46	14.01	17.49	12.04	15.44%	1.44%
Other operating cost (Insurance, Technical services)	39.92	47.21	54.49	72.25	61.90	21.86%	11.59%
Concession fees	46.20	52.95	61.53	64.95	22.54	-16.42%	46.20
Total	307.09	493.87	456.19	550.07	399.35	6.79%	307.09
Forex Losses	42.34	186.06	0.00	0.00	0.00	42.34	
Grand Total*	349.43	679.93	456.19	550.07	399.35	3.39%	349.43

*Excluding adjustments against incidental income

Source: HIAL MYTP for third control period and revised submission

Table 39: Difference between projected expenses approved Authority and O&M actual expenses submitted by HIAL for true-up of second control period in the third control period tariff filing

Particulars (in Rs Crore)	FY17	FY18	FY19	FY20	FY21	Total
Payroll Cost	-4.80	2.75	15.34	12.16	-3.14	22.32
Administrative Cost (general admin, Land Lease rent to GoT, Rates & taxes, CSR)	14.44	45.88	78.38	83.01	40.97	262.67
Security Cost	2.28	7.93	8.96	13.48	7.17	39.84
Finance related charges (bad debt written off, Bank charges, exchange fluctuations etc.)	-0.99	120.36	-6.90	21.32	-0.70	133.09
Utility Cost	-3.34	-1.49	0.48	-11.00	-27.18	-42.53
Repair and maintenance	3.64	6.65	7.90	10.94	-11.80	17.32
Stores and Spares	-2.43	-9.50	-10.82	-12.15	-23.77	-58.68
Housekeeping	0.71	1.38	1.04	-1.16	-11.13	-9.16
Other operating cost (Insurance, Technical services)	0.86	6.01	7.80	18.89	4.58	38.14
Concession fees	1.23	8.23	26.62	25.74	-21.62	40.19
Total	11.58	188.19	128.81	161.24	-51.54	438.29

6.2 Cost measures adopted by HIAL

The key operational efficiency improvement initiatives that HIAL management has declared which has resulted in cost saving during Second Control Period has been tabulated below:

Table 40: Efficient cost measures adopted by HIAL

S/N	Project Description (in Rs Crore)	FY17	FY18	FY19	FY20	FY21	Total cost savings
1	Solar Power Plant	6.00	6.00	6.00	6.00	6.00	30.00
2	LED Conversion	2.31	2.54	4.21	4.24	4.27	17.56
3	Conversion of Split ACs to Inverter Split ACs	0.27	0.48	0.48	0.48	0.48	2.19
4	Replacement of Conventional ceiling fans with Energy Efficient Super fans	0.11	0.22	0.22	0.22	0.22	0.99

5	PTB AHU conventional fan replacement with Electrically Commutated (EC) fans		0.65	0.65	0.65	0.65	2.60
6	Chiller plant manager (New Control System)		0.33	0.33	0.33	0.33	1.32
7	AHU Condensate recovery and reuse			0.83	0.83	0.83	2.49
8	1 KVA UPS removal (56 Nos) and load consolidation with main UPS distribution			0.04	0.04	0.04	0.12
9	Upgrading the domestic water pump to energy efficient pumps -ALS				0.09	0.09	0.18
10	Use Natural Coagulant for enhancement of STP capacity and efficiency				1.30	1.30	2.60
11	Upgrading to energy Efficient Precision Air Conditioners (PAC) - 3 Numbers					0.25	0.25
12	Optimization of Water Conservation			0.05	0.30	0.30	0.66
13	Minimizing BMS DDC Controller Failures and Reduction of Maintenance Cost			0.13	0.13	0.13	0.39
14	Online Tube cleaning system for condenser of Chillers					0.16	0.16
15	R2 Reservoir for storm water storage and reuse					3.66	3.66
16	Miscellaneous Projects*	0.06	0.10	0.15	0.18	0.28	0.77
	Total	8.75	10.32	13.09	14.79	18.99	65.94

Source: HIAL

*The Miscellaneous projects include the following:

- Replacement of Energy Efficient Pumps
- Focus and rectification of Duct leakages to avoid AC Leakage at Check-in Hall
- Replacement of condenser water pipe line at ATC
- VFD for Air Blowers motor replacement in STP
- Replacement of Energy Efficient Pumps
- UPS-3 power Distribution Enhancement
- Enhancing performance of equipment by improving performance in Low Side of HVAC
- Energy efficient chiller installation

PTB HVAC system Cooling Tower upgradation

6.3 Summary

HIAL has adopted cost efficiency measures as detailed in section 6.2 which has resulted in cost savings of Rs. 65.94 crores over the second control period.

7. Trend analysis of Inflation Adjusted expenses

The expenses have inflation adjusted to derive the real amount of these expenses. This eliminates the fluctuations in the general price level as well as gives real increase or decrease in expenses over the period from the base year (FY17).

The wholesale price index is used as the price index against which the expenses are adjusted. The WPI index as given in by the Ministry of Commerce, & Industry is as follows:

Table 41: WPI Index

Particulars	FY17	FY18	FY19	FY20	FY21*
Index growth	-	2.96%	4.26%	1.67%	1.25%
Index for the year	100	102.96	107.35	109.14	110.51

*WPI index for FY21 taken as average of 12 months.

For the purpose of trend analysis the cost which is recurring in nature is only considered

7.1 Review of actual expenses incurred by HIAL for second control period

It is to be noted that the costs for each head is analysed only form FY17 to FY20 as FY21 was an exceptional year in terms of reduced traffic due to ongoing pandemic and analysis from FY17 to FY21 will not represent an accurate trend analysis for HIAL

7.1.1 Payroll Cost

HIAL's Manpower for FY17-FY20 is summarised below:

Table 42 Department Wise Head Counts and CAGR

Particulars	FY17	FY18	FY19	FY20	CAGR
Airport Operations	318	378	467	495	16%
F&A	44	51	56	70	17%
HR	10	12	18	20	26%
Infra Planning and Development	15	24	35	21	12%
Enterprise IT	-	8	35	36	112%*
Corporate Relations	22	28	34	46	28%

Commercial	25	26	24	34	11%
Business Support	6	10	29	30	71%
Others (SPG, Corporate Communication, Legal)	77	83	86	111	13%
Total	517	620	784	863	19%

*CAGR only for the period FY18-20

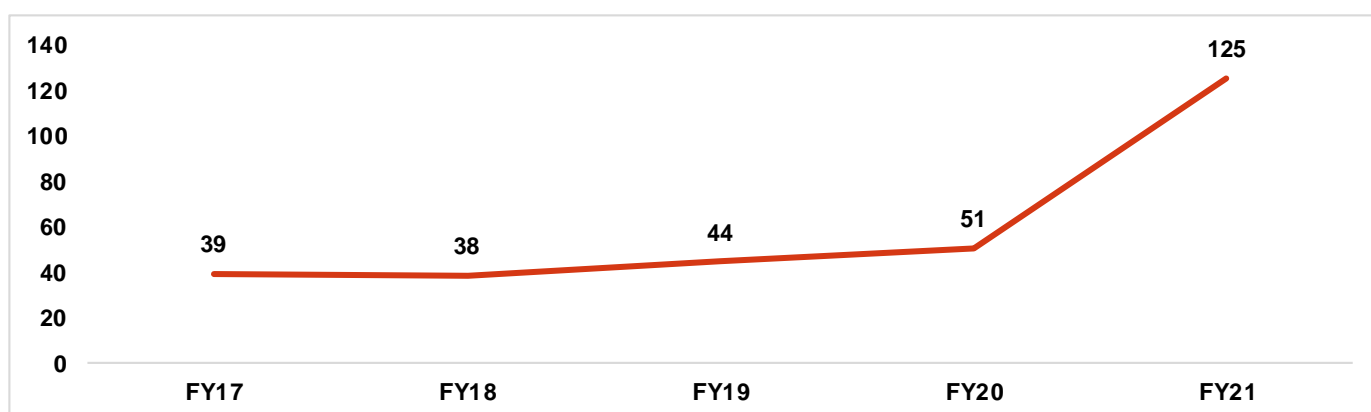
Payroll Cost for FY17-21 is summarised below:

Table 43 Payroll Cost Pattern for HIAL during Second Control Period

Particulars	FY17	FY18	FY19	FY20	FY21	CAGR(FY17-20)
Total Cost (Rs. Crores)	60.10	72.20	101.54	119.15	111.34	19.0%
Total Inflation Adjusted Cost (Rs. Crores)	60.10	70.12	94.59	109.17	100.75	22.01%
Inflation Adjusted cost per PAX (Rs.)	39.44	38.32	44.28	50.58	125.16	8.65%

It can be seen from the above table that the CAGR of manpower count during the period FY17-20 is % whereas inflation adjusted manpower cost shows a CAGR of **22.01%**. We infer that the increase in payroll expenses is mainly attributable to increase in number of manpower on account of elevated level of operations and a nominal increase because of annual increments. The manpower has increased from 498 in FY16 to 863 in FY21.

Figure 2 Inflation Adjusted per PAX Manpower Cost during second control Period (Rs.)



Manpower cost per PAX has a CAGR of 8.65% for the period FY17-20. We observe that the Increase in per PAX manpower is attributable to increase in scale of operations at HIAL during the second control period. Although, manpower cost per PAX was Rs. 125 for FY21 due to significant reduction in traffic due to ongoing pandemic and travel restrictions imposed by the Government.

As the airport is under expansion, the corroborated increase in manpower will be effected a year before the start of the terminal which HIAL has factored in its MYTP projections based on capacity release is considered in phases.

7.1.2 Administrative Cost (general admin, Land Lease rent to GoT, Rates & taxes, CSR)

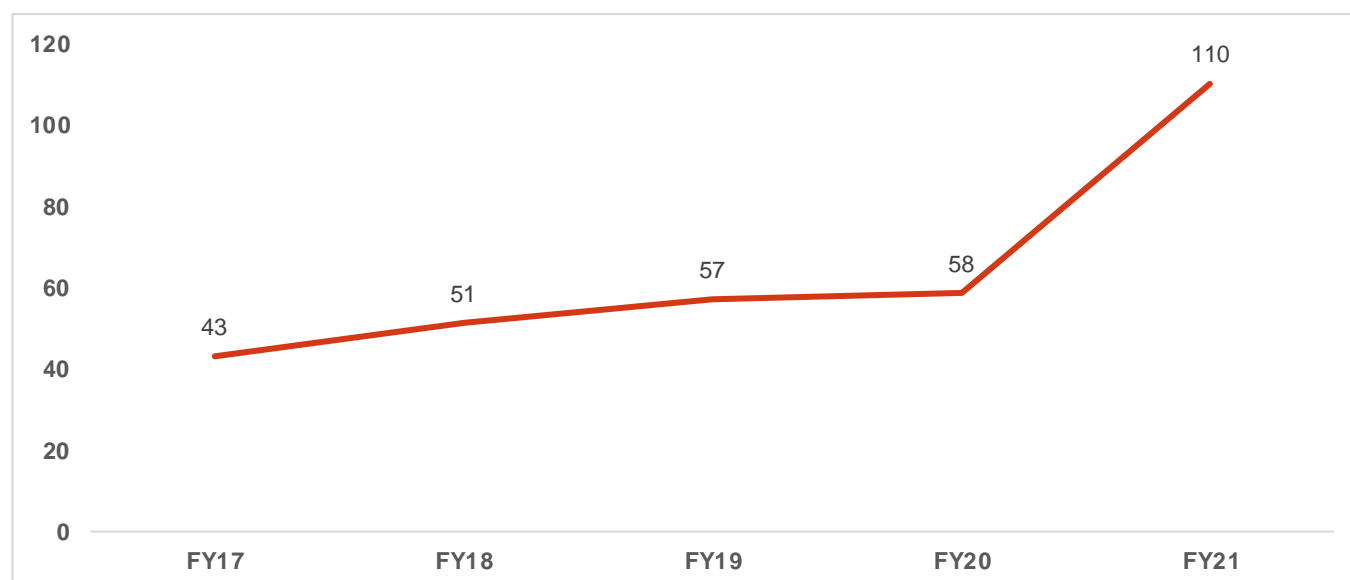
The Administrative cost includes Legal & professional fees, Management fees, travelling & conveyance fees and community development fees. Professional and consultancy expense include expenses towards various consultancy based on requirements arising during a particular year. Legal expenses include cost towards cases pending at various forums and arbitration related expenses.

HIAL's Administrative Cost for FY17-FY21 is summarised below:

Table 44 Administrative Cost Pattern for HIAL during Second Control Period

Particulars	FY17	FY18	FY19	FY20	FY21	CAGR(FY17-20)
Total Cost (Rs. Crores)	65.65	96.52	131.04	137.76	97.90	
Total Inflation Adjusted Cost (Rs. Crores)	65.65	93.75	122.07	126.22	88.59	24.35%
Inflation Adjusted cost per PAX (Rs.)	43.08	51.23	57.14	58.48	110.05	10.73%

Figure 3 Inflation Adjusted per PAX Administrative Cost during second control Period (Rs.)



We understand that these expenses may not follow a particular trend as these are contingent to requirement such as refinancing, stake sale, legal proceeding etc. Administrative cost per PAX has a CAGR of **10.73%** over the period FY17-20, which is lower than CAGR of total Inflation adjusted administrative cost of **24.35%**. We can infer that expansion in operations is the primary reason for an increase in total administrative cost.

Due to significant reduction in traffic due to ongoing pandemic and travel restrictions imposed by the Government administrative cost per PAX for FY21 has increased to Rs. 144 from 58 in FY20.

Management Fee is an outcome of independent allocation study of Head quarter expenses. The increase in travelling & conveyance is attributable to increase in operations, business and technological initiatives and enhanced marketing efforts to aid the growth.

7.1.3 Security Cost

HIAL's Security Cost for FY17-FY21 is summarised below:

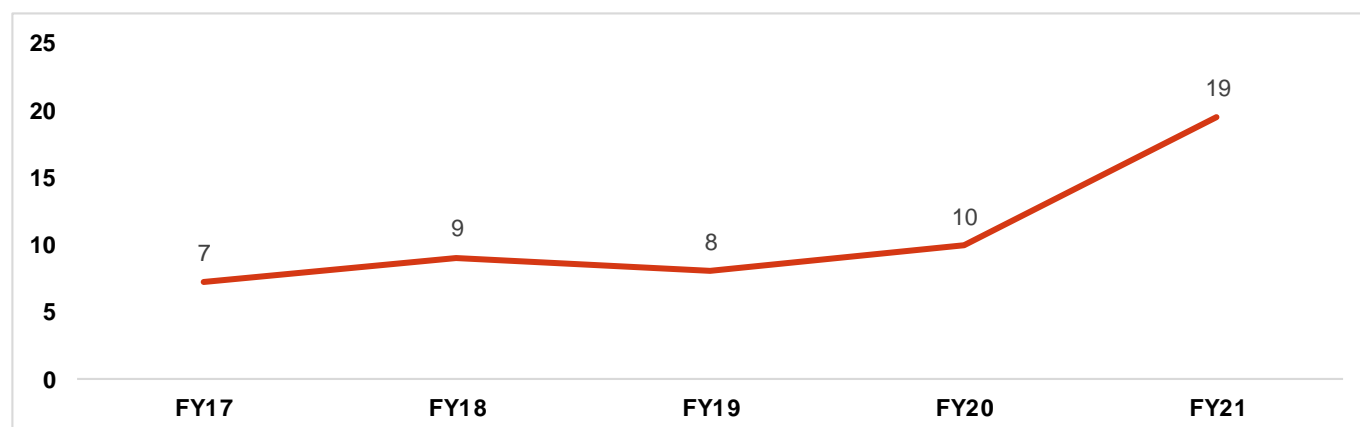
Table 45 Security Cost Pattern for HIAL during Second Control Period

Particulars	FY17	FY18	FY19	FY20	FY21	CAGR (FY17-20)
Total Cost (Rs. Crores)	10.99	16.98	18.36	23.25	17.32	
Total Inflation Adjusted Cost (Rs. Crores)	10.99	16.49	17.10	21.30	15.67	24.68%
Inflation Adjusted cost per PAX (Rs.)	7.21	9.01	8.01	9.87	19.47	11.03%

There is an increase in security cost in FY18, which is mainly due to revision in rates from Aug 2017 and increase in minimum wages. Further, in FY2018 the security measures were increased attributable to increased passenger flow at the airport. Further, in order to debottleneck and to reduce congestion at the main terminal HIAL has constructed two new terminals by name Interim Intl Departure Terminal (IIDT) and Interim Domestic Arrival Terminal (IDAT) resulting into increased area demanding deployment of additional security personnel.

As per discussion with HIAL and basis their clarifications, Broadly the security cost at HIAL is pertaining to the personnel deployed for baggage screening, AEP, SOCC and overall supervision of airport security. Terminal security in terms of passenger processing and airside perimeter are taken care by CISF. Airport frontage, forecourt management, administrative offices, access roads security and vehicular movement are taken care of by outsourced security agency.

Figure 4 Inflation Adjusted per PAX Security Cost during second control Period (Rs.)



We can observe efficiencies of scale as CAGR for the period FY17-20 of inflation adjusted cost per pax **11.03%**, which is lower than CAGR of total inflation adjusted security cost of **24.68%**. The increase in FY21 to Rs.19 is due to reduced traffic as a result of ongoing pandemic and travel restrictions imposed by the Government.

7.1.4 Finance related charges (bad debt written off, Bank charges, exchange fluctuations etc.)

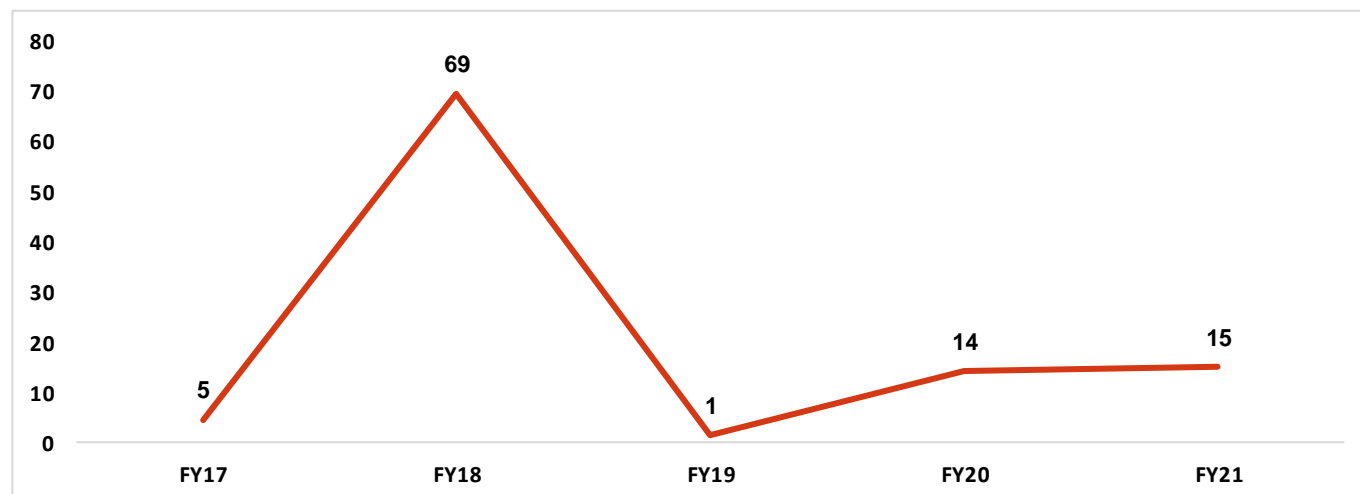
HIAL's Finance related charges for FY17-FY21 are summarised below:

Table 46 Finance Related Cost Pattern for HIAL during Second Control Period

Particulars	FY17	FY18	FY19	FY20	FY21	CAGR(FY17-20)
Total Cost (Rs. Crores)	6.96	130.61	3.22	33.09	13.26	
Total Inflation Adjusted Cost (Rs. Crores)	6.96	126.85	3.00	30.32	12.00	63.62%
Inflation Adjusted cost per PAX (Rs.)	4.57	69.32	1.40	14.05	14.91	45.43%

We observe that an Increase in finance charges FY18 is due to refinancing of term loans through USD Bond. HIAL submitted a request to consider this one time expense for raising of bond as allowable expense along with auditors certificate to the authority. The authority vide its order dated March 27, 2020 (please refer clause 6.63 of the order) agreed to consider such one time cost as there has been a significant reduction in borrowing cost from the then 10.7% per annum for RTL and 16.17% for ECB to 8.9% per annum on account of issuance of USD Bond.

Figure 5 Inflation Adjusted per PAX Finance Cost during second control Period (Rs.)



The finance related charges are not directly related to passenger growth rate and hence the cost per pax shows an abrupt trend with increase in (FY18) due to refinancing costs.

7.1.5 Utility Cost

HIAL's Utility Cost for FY17-FY21 is summarised below:

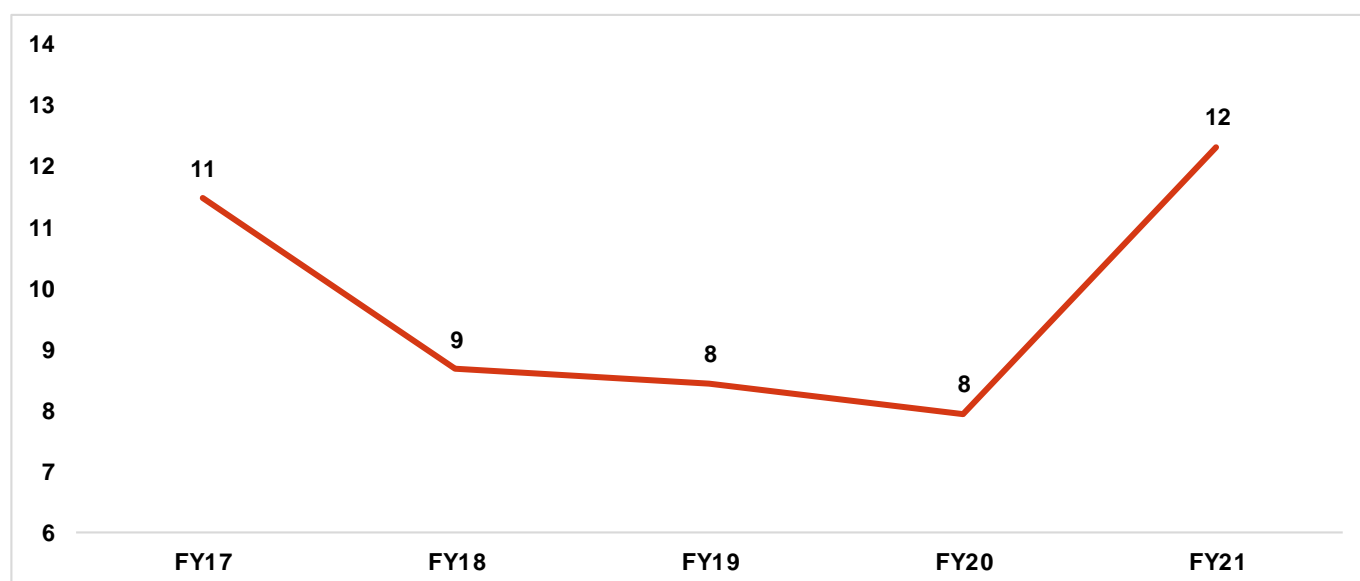
Table 47: Utility Cost Pattern for HIAL during Second Control Period

Particulars	FY17	FY18	FY19	FY20	FY21	CAGR(FY17-20)
-------------	------	------	------	------	------	---------------

Total Cost (Rs. Crores)	17.49	16.33	19.35	18.70	11.10	
Total Inflation Adjusted Cost (Rs. Crores)	17.49	15.86	18.03	17.13	10.04	(0.68)%
Inflation Adjusted Utility Cost per PAX (Rs.)	11.47	8.67	8.44	7.94	12.48	(11.56)%

We observe that over the period HIAL has adopted several cost optimization initiatives, the details of which are given in section 6.2 above. The initiatives of introducing solar power, migration to LED lamps, adoption of water conservation measures and using technology based control systems for operations of various equipments led to savings in utility costs.

Figure 6 Inflation Adjusted per PAX Utility Cost during second control Period (Rs.)



We conclude that as utility costs are capacity based costs that are more sensitive to capacity related parameters than to passenger movements and therefore inflation adjusted utility cost per PAX decreased at a CAGR of 11.56% due to increase in traffic movement.

7.1.6 Repair and Maintenance Cost

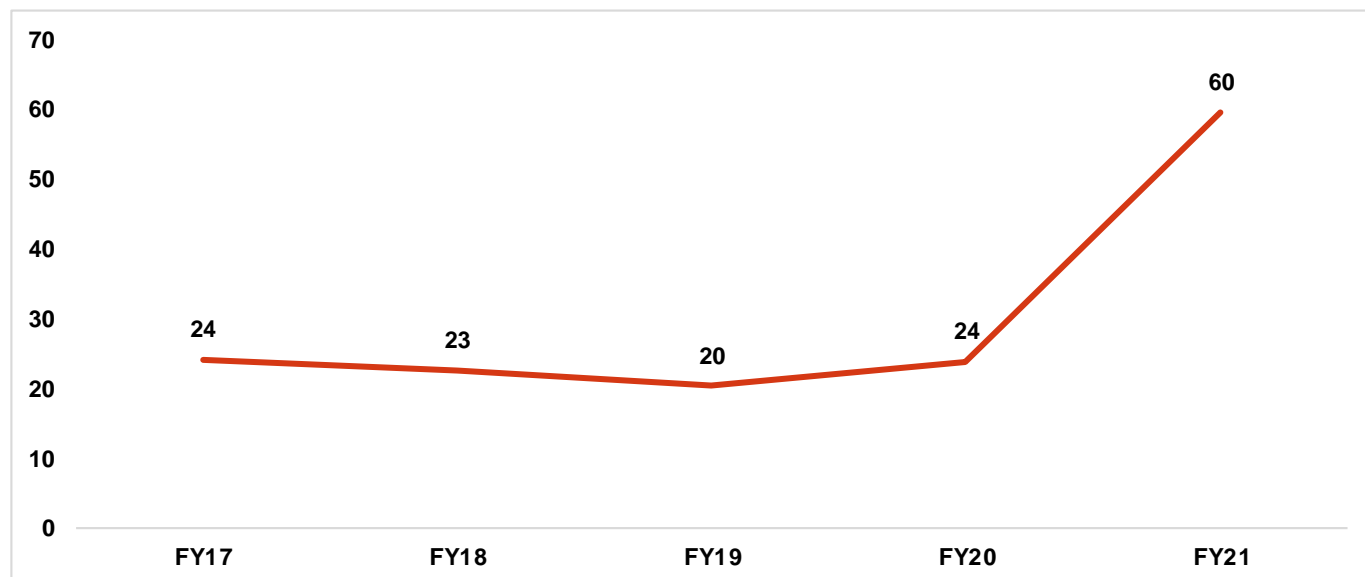
HIAL's Repair and Maintenance Cost for FY17-FY21 is summarised below:

Table 48 Repair and Maintenance Cost Pattern for HIAL during Second Control Period

Particulars	FY17	FY18	FY19	FY20	FY21	CAGR(FY17-20)
Total Cost (Rs. Crores)	36.94	42.74	46.87	56.27	53.02	
Total Inflation Adjusted Cost (Rs. Crores)	36.94	41.51	43.67	51.56	47.98	11.76%
Inflation Adjusted cost per PAX (Rs.)	24.24	22.69	20.44	23.89	59.60	(0.48)%

We understand that HIAL's in-house technical team over the period have developed the required skill sets for equipment health check-ups in order to decrease the downtime of plant and machinery. Further, the CMC with key OEMs also helped them to contain R&M costs despite the elevated level of operations.

Figure 7 Inflation Adjusted per PAX Repair and Maintenance Cost during second control Period (Rs.)



We observe that the increase in cost in R&M is also attributable to operationalization of IIDT and IDAT, asset aging and maintenance of security equipment which was earlier met through PSF funds now shifted to HIAL account.

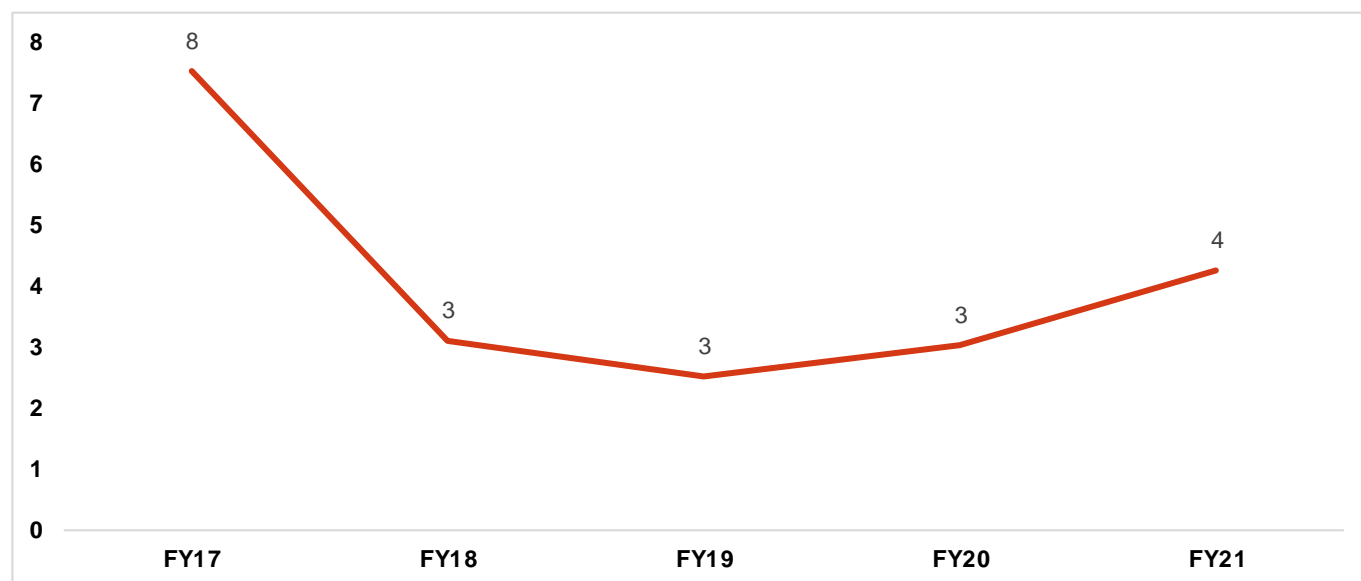
7.1.7 Stores and Spares Cost

HIAL's Stores and Spares Cost for FY17-FY21 is summarised below:

Table 49 Stores and Spares Cost Pattern for HIAL during Second Control Period

Particulars	FY17	FY18	FY19	FY20	FY21	CAGR(FY17-20)
Total Cost (Rs. Crores)	11.47	5.87	5.78	7.16	3.84	
Total Inflation Adjusted Cost (Rs. Crores)	11.47	5.70	5.38	6.56	3.43	(16.99)%
Inflation Adjusted cost per PAX (Rs.)	7.52	3.11	2.52	3.04	4.26	(26.08)%

Figure 8 Inflation Adjusted per PAX Stores and Spares Cost during second control Period (Rs.)



We observe that the Annual Maintenance Contract (AMC) with key OEMs now stands converted into Comprehensive Maintenance Contract (CMC) resulting into reduction of stores and spares.

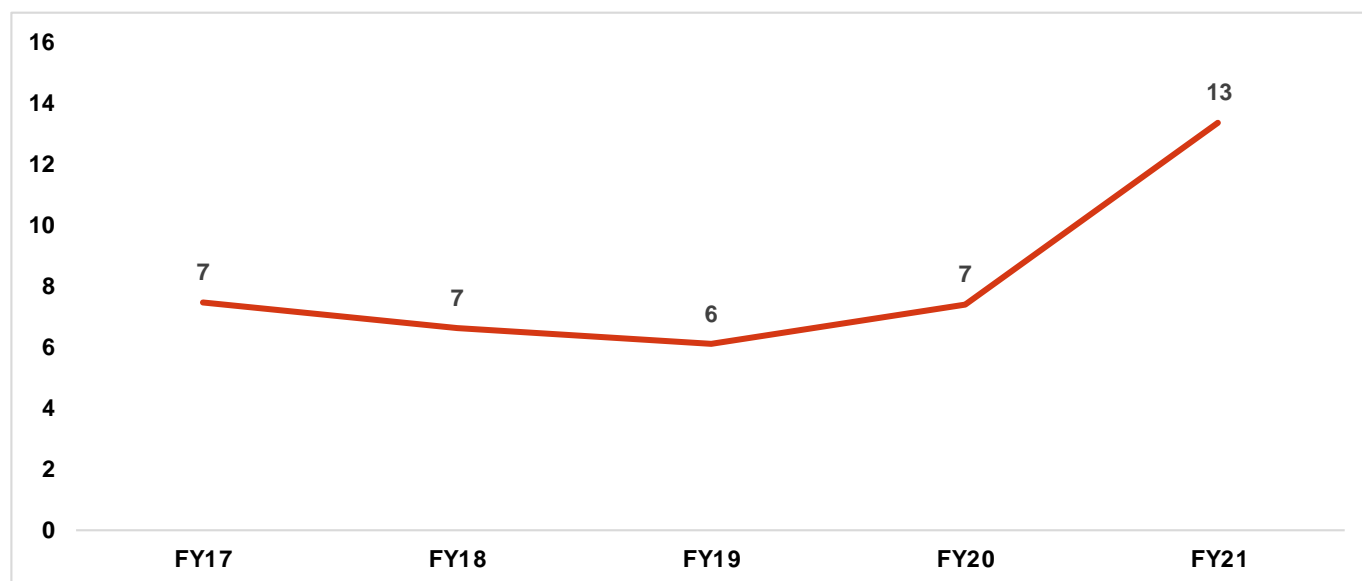
7.1.8 Housekeeping Cost

HIAL's Housekeeping Cost for FY17-FY21 is summarised below:

Table 50 Housekeeping Cost Pattern for HIAL during Second Control Period

Particulars	FY17	FY18	FY19	FY20	FY21	CAGR(FY17-20)
Total Cost (Rs. Crores)	11.37	12.46	14.01	17.49	12.04	
Total Inflation Adjusted Cost (Rs. Crores)	11.37	12.10	13.05	16.03	10.75	12.12%
Inflation Adjusted cost per PAX (Rs.)	7.46	6.61	6.11	7.42	13.35	(0.16)%

Figure 9 Inflation Adjusted per PAX Housekeeping Cost during second control Period (Rs.)



We observe that the housekeeping cost has seen increase due to increase in traffic, commissioning of IIDT and IDAT. However, the increase in housekeeping charges has been in line with the growth in the passenger traffic. The real housekeeping charges have grown by CAGR of 12.12% which is in line with CAGR of pax growth of 12.30% during the period FY17-20.

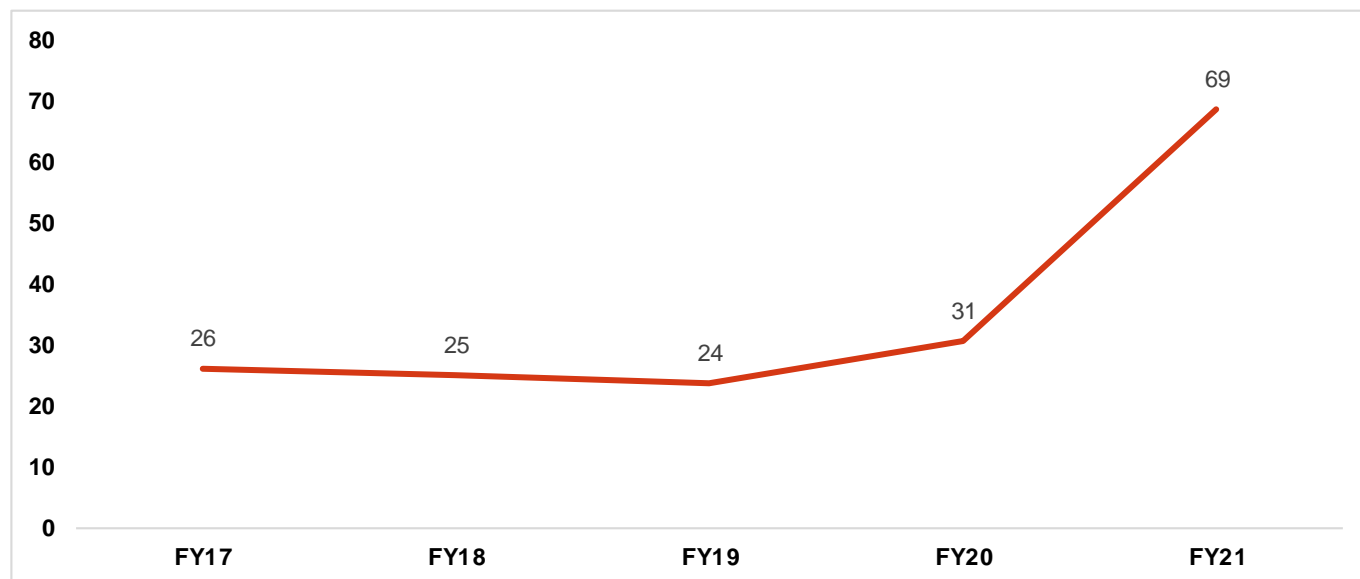
7.1.9 Other Operating Cost (Insurance, Technical Services)

HIAL's Other Operating Cost for FY17-FY21 is summarised below:

Table 51 Other Operating Cost Pattern for HIAL during Second Control Period

Particulars	FY17	FY18	FY19	FY20	FY21	CAGR(FY17-20)
Total Cost (Rs. Crores)	39.92	47.21	54.49	72.25	61.90	
Total Inflation Adjusted Cost (Rs. Crores)	39.92	45.85	50.76	66.20	55.26	18.36%
Inflation Adjusted cost per PAX (Rs.)	26.20	25.06	23.76	30.67	68.65	5.40%

Figure 10 Inflation Adjusted per PAX Other Operating Cost during second control Period (Rs.)



We infer that the increase in other operating expenses is due to the increase in the level of business activity plus an inflationary growth in the expenses. Other operating cost per PAX is high in FY21 due to lower traffic attributable to ongoing pandemic and travel restrictions imposed by the Government.

7.2 Summary

The analysis of the key components of O&M costs shows that while the absolute cost has increased over the duration of the Second Control Period due to increased passenger traffic and ramping up of IIAT and IIDT operations, HIAL has been able to improve the efficiency of its operations, as evidenced by a lower growth or even decrease in costs on a per passenger basis on most of its key cost heads.

- The overall payroll cost has increased, but payroll cost per pax has grown at a rate lower than passenger growth rate.
- The admin cost per pax has increased at a rate lower than passenger growth rate
- The security cost per pax has increased at a rate lower than passenger growth rate.
- The finance related charges due to bad debt is extremely high in the year FY18 due to one time bond issuance to reduce the cost of borrowing
- The utility cost per pax has gone down which suggests adoption of efficient measures.
- The R&M cost per pax has gone down which suggests adoption of efficient measures or delay in expenses.
- The Stores & Spares cost per pax has gone down which suggests adoption of efficient measures or delay in R&M expenses.
- The housekeeping cost per pax has gone down which suggests adoption of efficient measures.
- The other operating income cost per pax has increased at a rate lower than passenger growth rate due to increase in operations

8. Benchmarking of international and domestic airports

8.1 Internal Benchmarking

In this section, the comparison of various operational and cost parameters is presented. Period under consideration is 2012 to 2021. This will enable us to perform an internal benchmarking analysis.

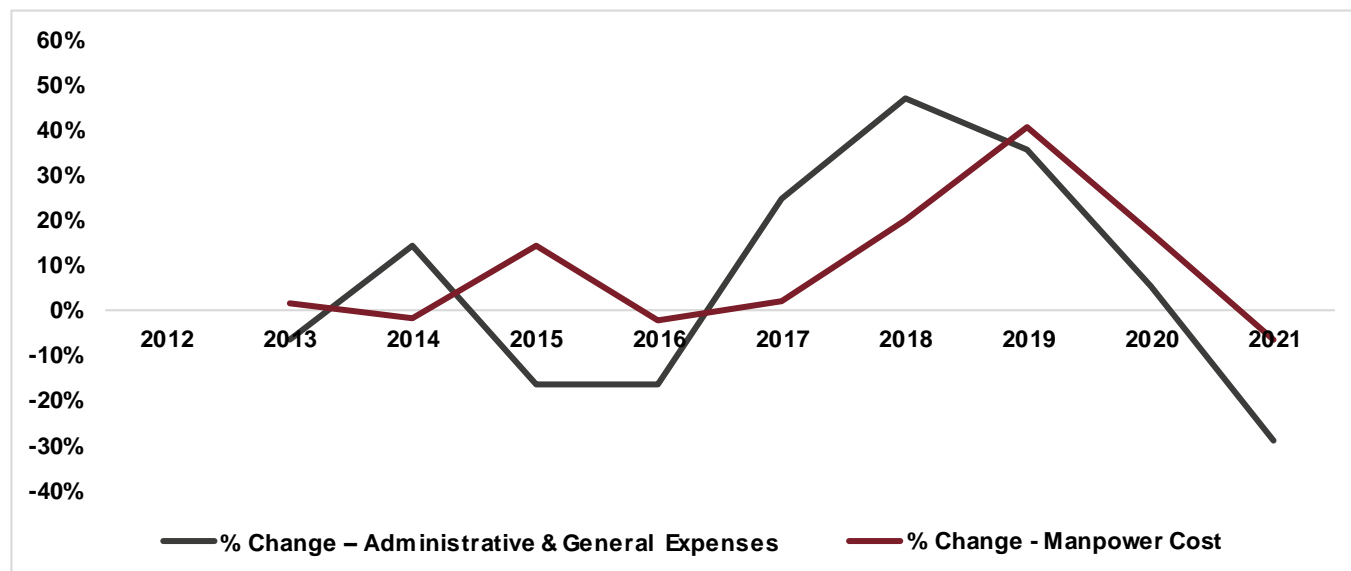
Administrative & General expenses and manpower cost for a period 2012-2021 are summarised below:

Table 52: Cost Movement of Administrative & General and Manpower Expenses at HIAL

Particulars (Rs. Crores)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Administrative & General Expenses	70.38	65.69	75.13	62.82	52.53	65.65	96.52	131.04	137.76	97.90
Manpower Cost	52.91	53.79	52.76	60.25	58.87	60.10	72.20	101.54	119.15	111.34
% Change – Administrative & General Expenses		-7%	14%	-16%	-16%	25%	47%	36%	5%	-29%
% Change - Manpower Cost		2%	-2%	14%	-2%	2%	20%	41%	17%	-7%

Below graph depicts change in Administrative and General and Manpower Expenses for the period 2012-2021:

Figure 11 % change movement in Administrative and General and Manpower Expenses for a period 2012-2021



Passenger traffic and Air traffic movement

Passenger Traffic and Air Traffic Movement for a period 2012-2021 are summarised below:

Table 53 Movement of Passenger and Air Traffic at HIAL

Particulars	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Passenger Traffic (in millions)	8.60	8.38	8.73	10.51	12.49	15.24	18.30	21.36	21.58	8.05
Air Traffic Movement (in thousands)	99.8	90.8	88.2	94.5	106.3	131.3	150.1	180.1	183.5	86.0
CAGR of passenger traffic	1 st Control period – 9.8%					2 nd control period – FY17 – FY20 – 12.4% FY17 – FY21 – (14.8%)				
CAGR of ATM	1 st Control period – 1.6%					2 nd control period – FY17 – FY20 – 11.8% FY17 – FY21 – (10.0%)				

Below graphs depicts Passenger traffic and ATM for the period 2012-2021:

Figure 12 Passenger Traffic for the period 2012-2021 (in million pax)

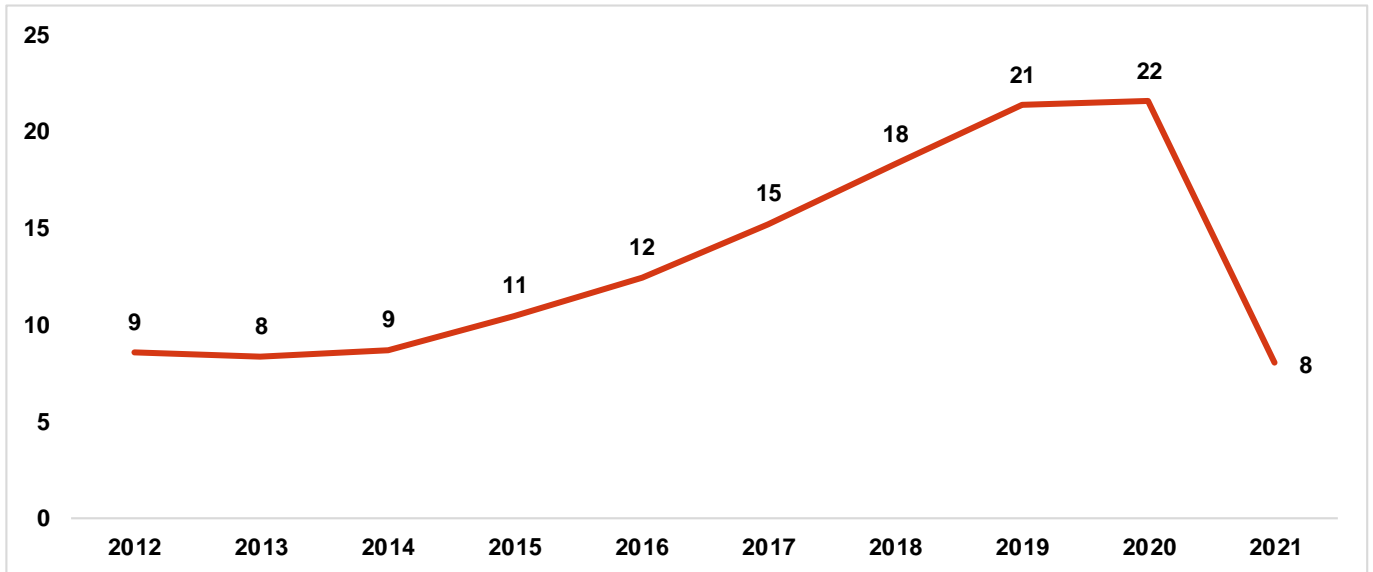
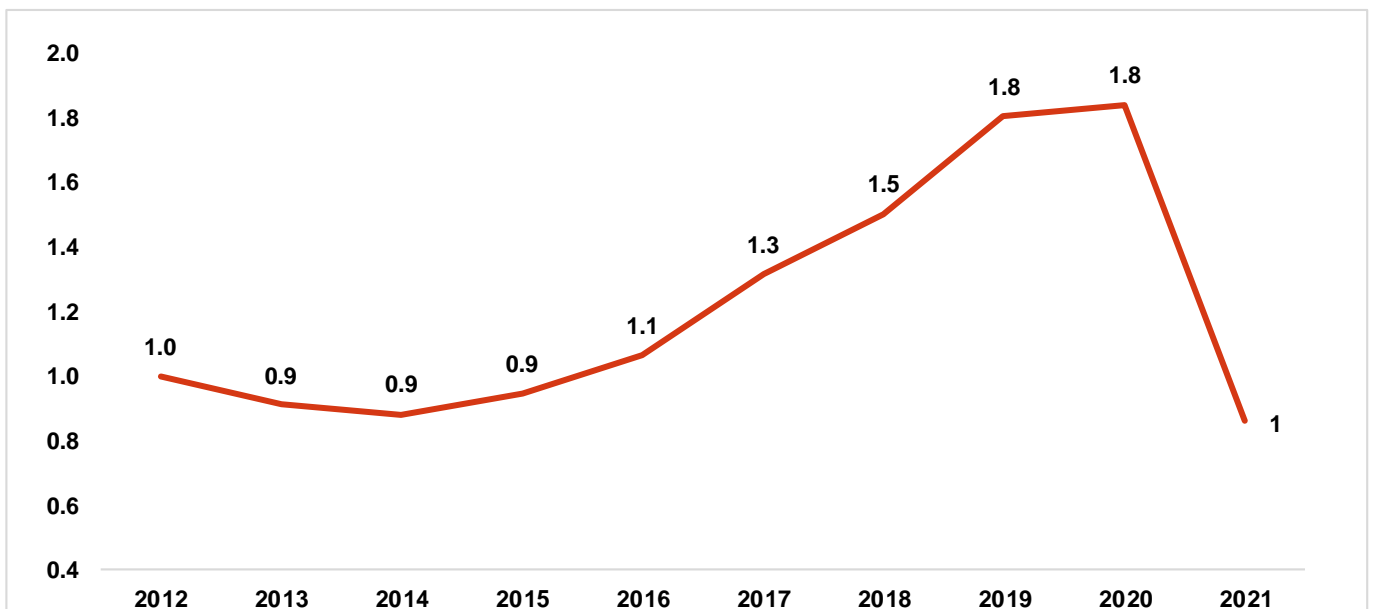


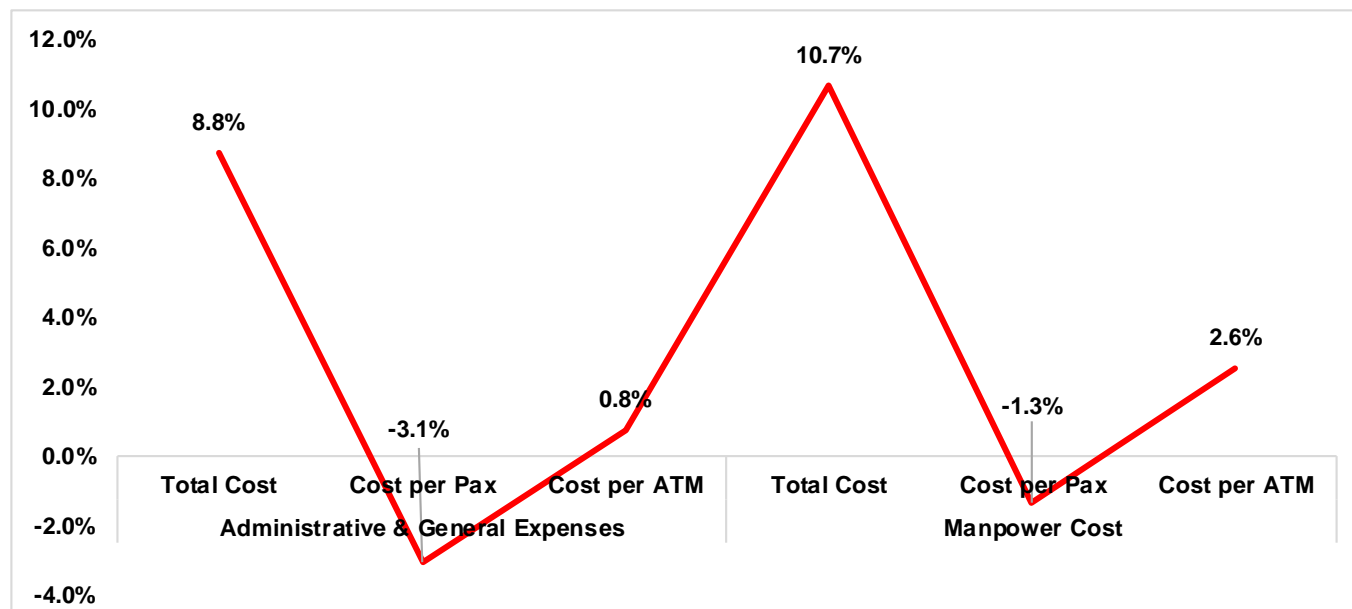
Figure 13 Air Traffic Movement for the period 2012-2021 (in thousand movement)



Passenger Traffic and Air Traffic movement have dipped significantly in FY21 due to Covid19.

The graph below depicts Cost CAGR for a 10 year period (2012-2020):

Figure 14 CAGR of Total Cost to CAGR of Costs per PAX/per ATM

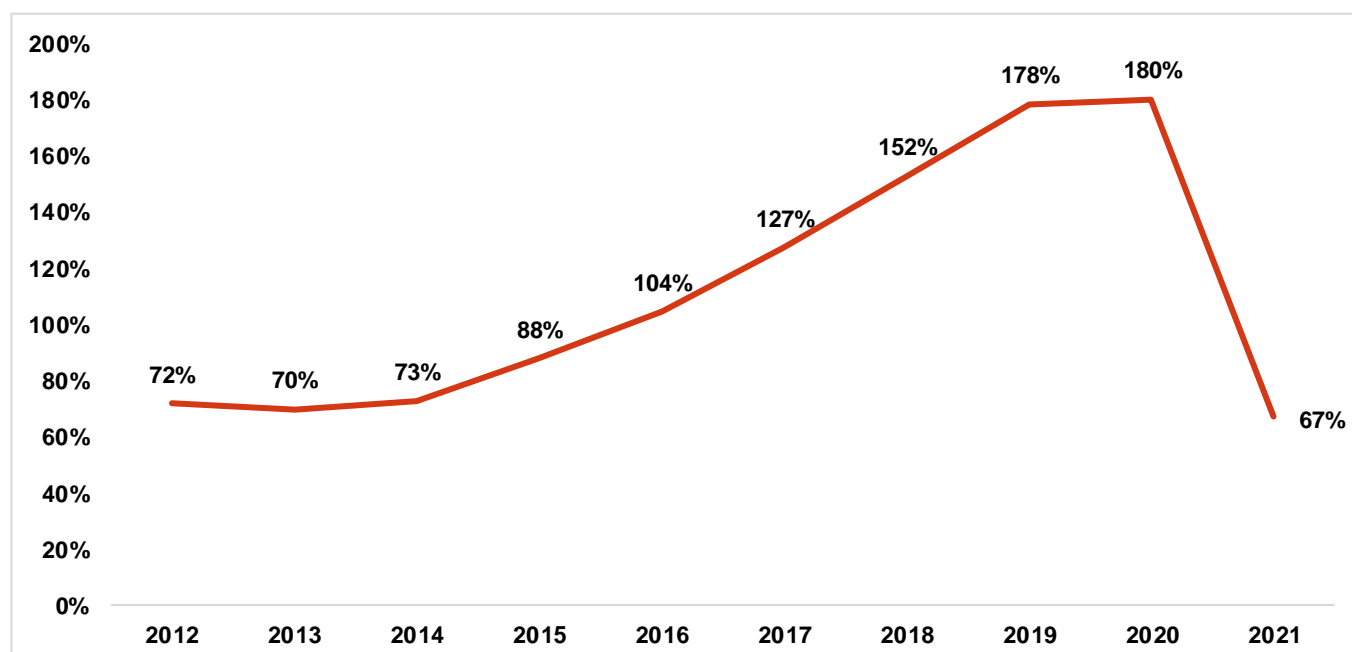


We understand that the growth rates of cost per PAX and ATM were lower when compared with the growth rate of the total costs justifying the impact of expanding operations. We have ignored the data for FY21 to avoid uncharacteristic CAGR numbers as a result of ongoing pandemic and travel restrictions imposed by the Government.

Terminal capacity utilisation

The graph below depicts Passenger Terminal Capacity Utilisation for a 10 year period (2012-2021).

Figure 15 Passenger Terminal Capacity Utilisation (%)



We can observe an exponential increase in capacity utilisation for HIAL in the past decade owing to increased passenger growth rate. Therefore, the augmentation of capacity is needed to maintain/improve service delivery to the passengers at the airport.

Proportion of domestic and international passenger traffic

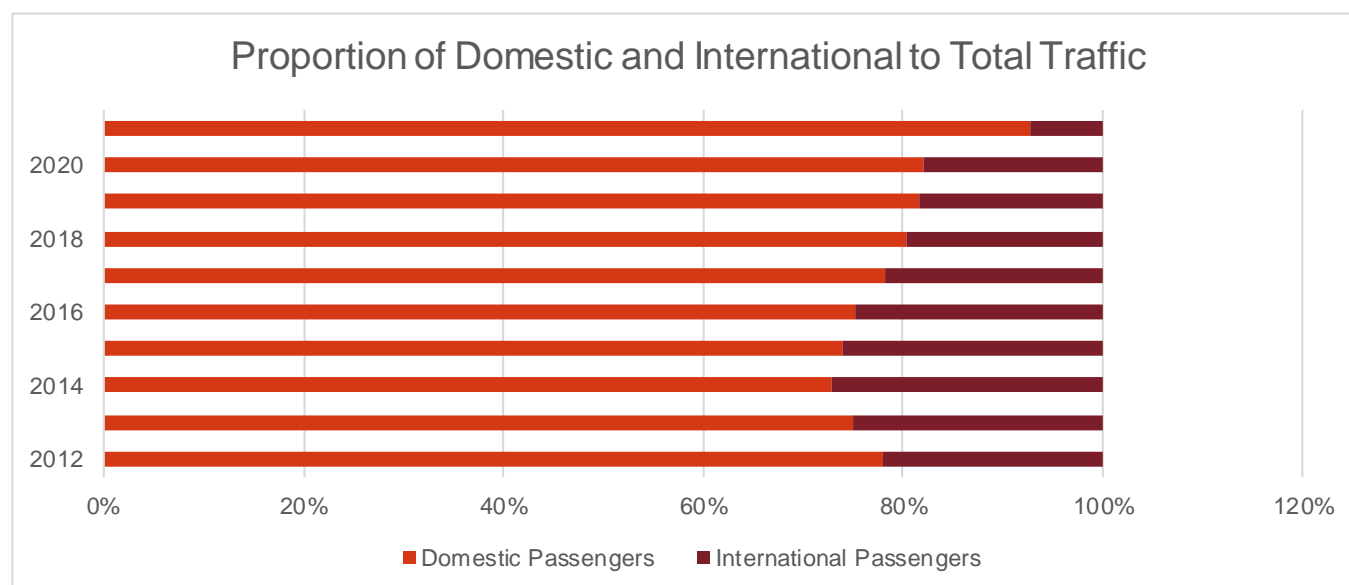
Passenger Mix for HIAL is summarised below:

Table 54 Break up for Passenger Mix for HIAL during 2012-2021

Particulars	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Domestic Passengers	78%	75%	73%	74%	75%	78%	80%	82%	82%	93%
International Passengers	22%	25%	27%	26%	25%	22%	20%	18%	18%	7%

The graph below depicts Passenger Mix for a 10 year period (2012-2021):

Figure 16 Graphical Representation of Passenger Mix for HIAL 2012-2021



We understand that domestic passengers' movement can be managed at a lower cost and higher gate utilisation, whereas international passengers' movement involves high cost of operations. HIAL has managed to keep its operating cost in check due to an increasing share of domestic passengers in the past decade.

8.2 External Benchmarking

To perform an external benchmarking analysis, airports have to be shortlisted. This selection is based on similarity of dynamic variables pertaining to the operations of an airport. Some of the influencing factors include:

- Passenger volume
- Capacity constraints
- Mix of International and domestic traffic
- Type of aircraft handled
- Degree of outsourcing
- Length and breadth of the runways
- Size of the Terminal
- Regulatory factors

We understand that these airports have comparable business models and operate in alike business environments. The airports selected are:

Table 55 Details of Domestic Airports for External Benchmarking

S.No	Airport	Date of Commencement	Type of Airport
1	Bengaluru International Airport Limited (BIAL)	May 2008	Green-Field
2	Cochin International Airport Limited (CIAL)	June 1999	Green-Field
3	Delhi International Airport Limited (DIAL)	April 2006	Brown-Field
4	Mumbai International Airport Limited (MIAL)	April 2006	Brown-Field

We also understand that beyond the core airside operational functions, different airports have little in common and largely vary from each other in many ways. The costs of operation, maintenance and administration are variable to the type of tilt (single, dual, hybrid and whether the airport is required to keep departing and arriving international passengers sterile from each other. Therefore, we conclude that airports are diverse and there is no typical or perfectly comparable airport.

The data for the purpose of benchmarking the above costs for these airports were taken from the AERA Consultation Paper No. 35 / 2020-21 issued for MIAL.

Passenger traffic and Air traffic movement of the airports in comparison for FY18 are summarized below:

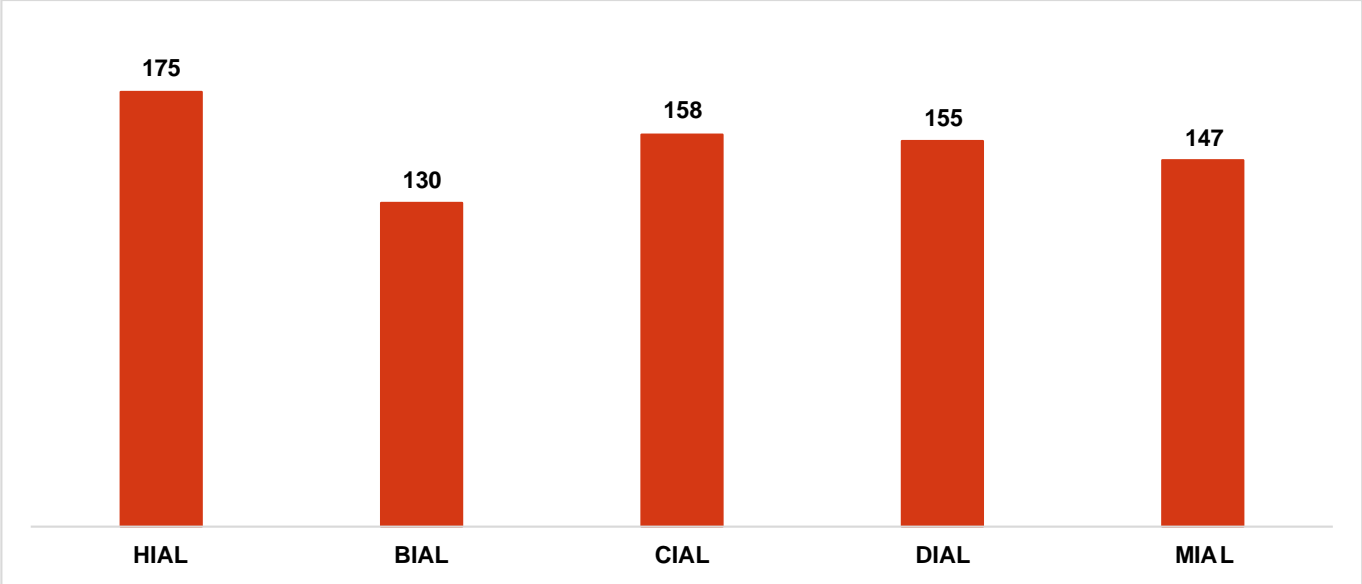
Table 56 Passenger Traffic for Comparable Airports in India in FY18

Particulars	HIAL	BIAL	CIAL	DIAL	MIAL
Passenger traffic (<i>in millions</i>)	18.2	16.9	10.1	65.7	48.5
Air traffic movement (<i>in nos.</i>)	1,49,600	1,96,600	68,800	4,59,243	3,20,689

Operation and Maintenance Costs Comparison

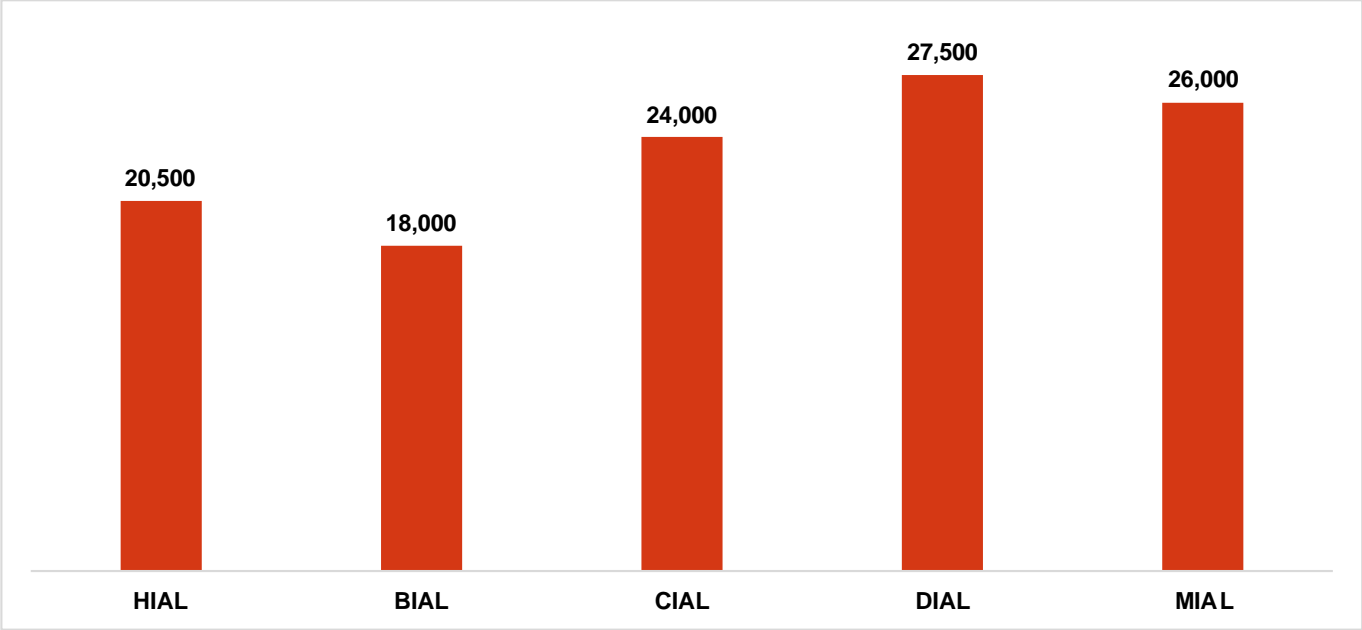
The graph below depicts O&M Cost per PAX in FY18 for comparable airports:

Figure 17 O&M Cost per PAX in FY18 for comparable airports



The graph below depicts O&M Cost per ATM in FY18 for comparable airports:

Figure 18 O&M Cost per ATM in FY18 for comparable airports

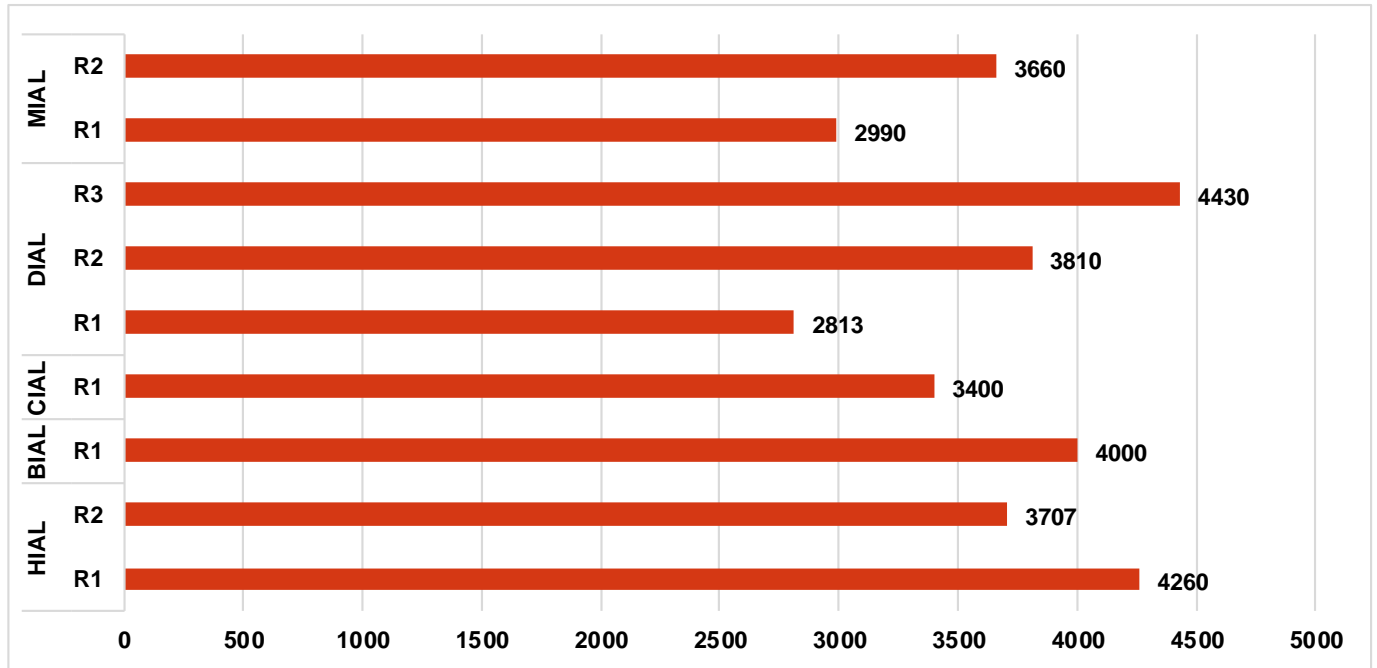


The O&M cost per pax is higher for HIAL while O&M cost per ATM is lower for HIAL when compared to other airports

Number of Runways and Size of the Runways:

The graph below depicts runway length of comparable airports:

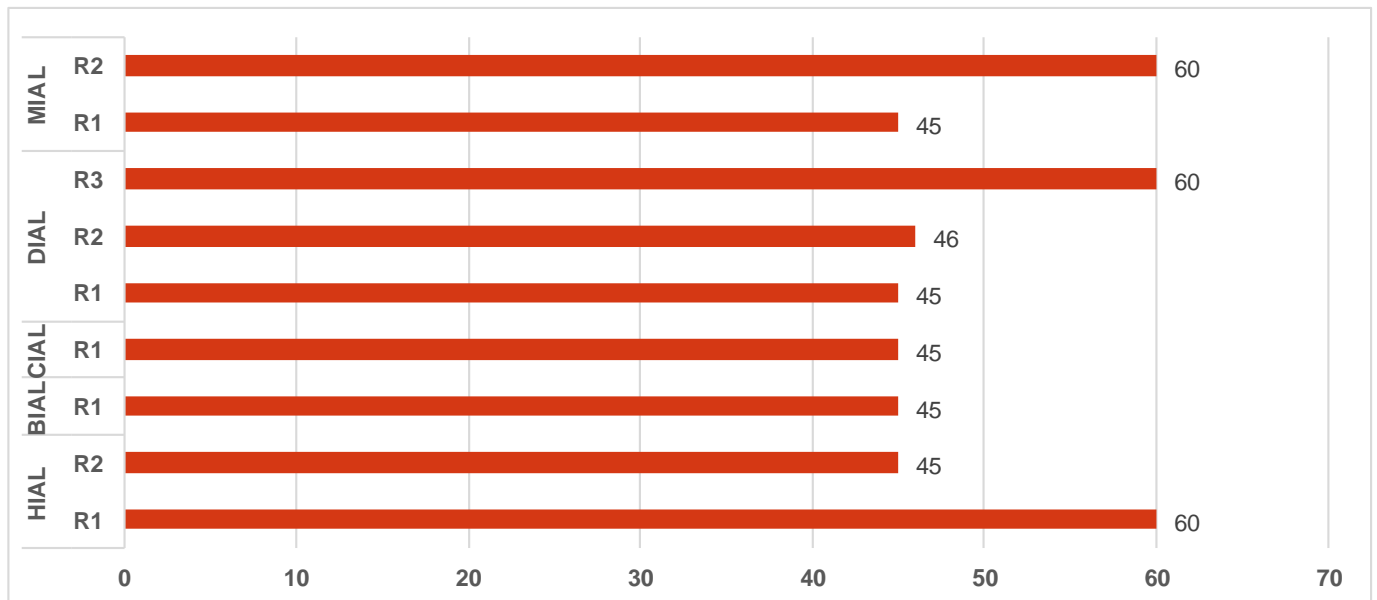
Figure 19 Runway Length of Comparable airports (Sqm)



We observe that Delhi, Mumbai and Hyderabad airports operate with more than one runway and are comparatively lengthier and code F compliant (The width of the runway can support A380 aircraft with wingspan of more than 80 metres).

The graph below depicts runway breadth of comparable airports:

Figure 20 Runway Breadth of Comparable airports (Sqm)

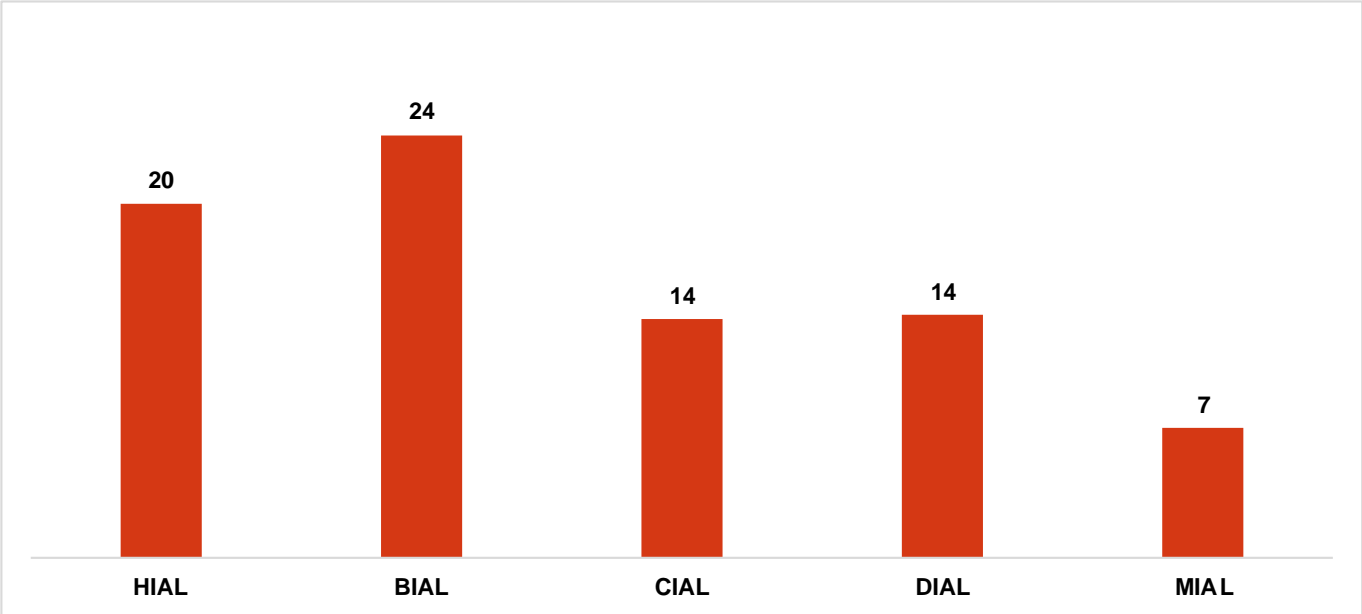


Airport management costs like Airside lighting, cleaning and maintenance costs, ground transportation costs, firefighting, and safety costs are variable to length and breadth of the runway. Therefore, we can infer that costs will be comparatively higher at **HIAL**, **MIAL** and **DIAL**.

Passenger Traffic Growth

The graph below depicts traffic growth in FY18 for comparable airports:

Figure 21 Traffic growth in FY18 (%)

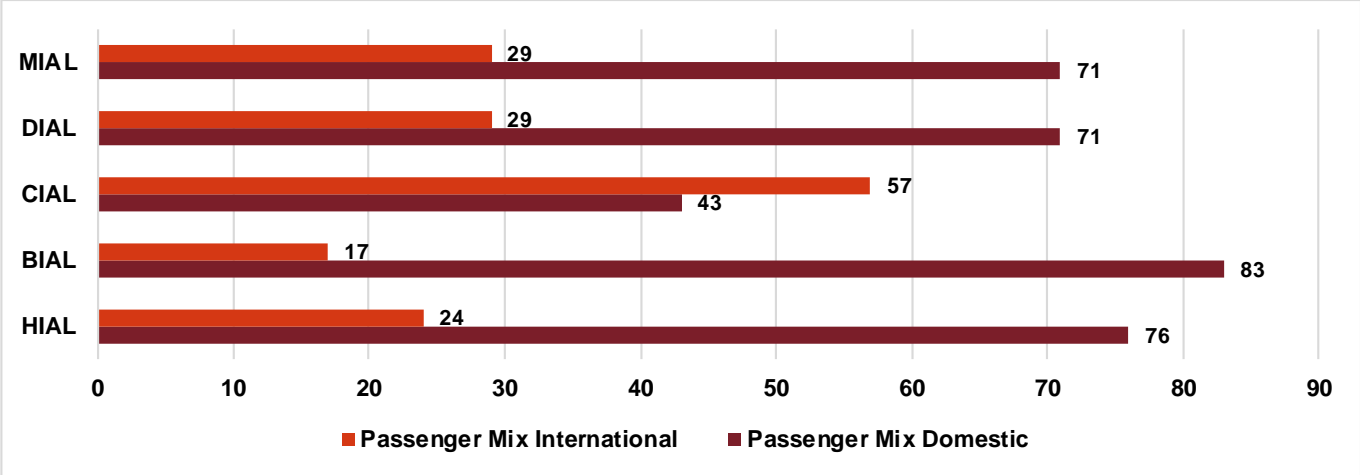


We understand that growing air traffic and passenger traffic movement impact passenger experience and preference for a particular airport. Hence, it is imperative for the airport to maintain both the terminal and airside infrastructure which causes increase in costs.

Passenger Mix

The graph below depicts passenger mix of comparable airports:

Figure 22 Passenger Mix of Comparable airports (%)



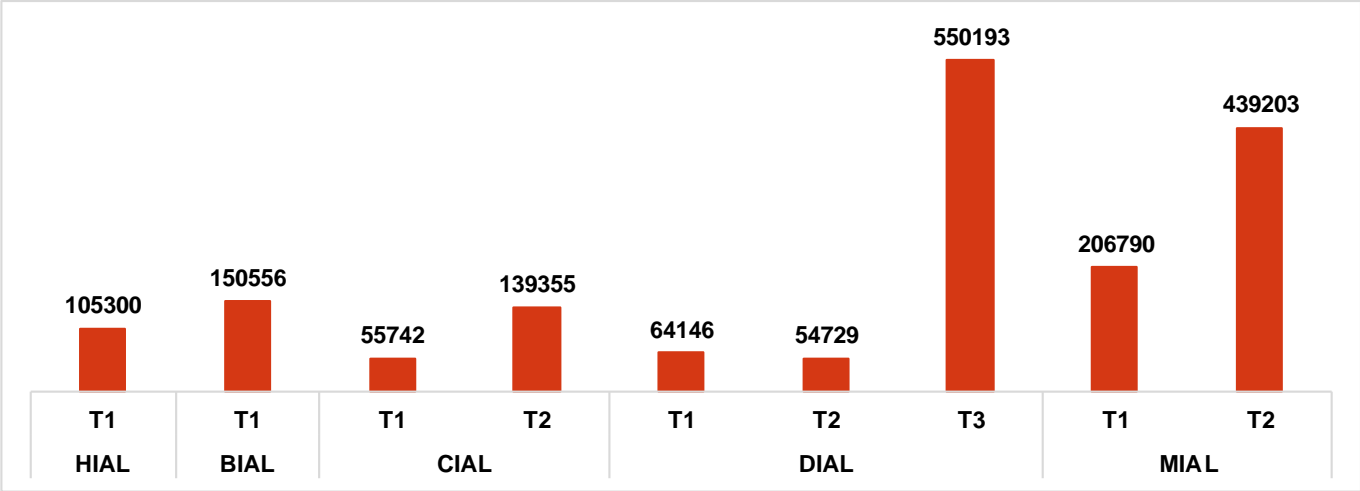
We observe that a rising share of domestic passenger for airports in India has led to cost efficiencies. We infer that HIAL has had similar favourable revenue mix wherein the burden of higher costs due to additional services like customs, immigration having costs of security, personnel, health care etc.

Terminal Size and Capacity Utilisation for FY18

The terminal size and utilization impact the level of service and airport operator needs to ensure that the terminal movement and experience for passenger is seamless and with minimum bottlenecks.

The graph below depicts terminal size of comparable airports:

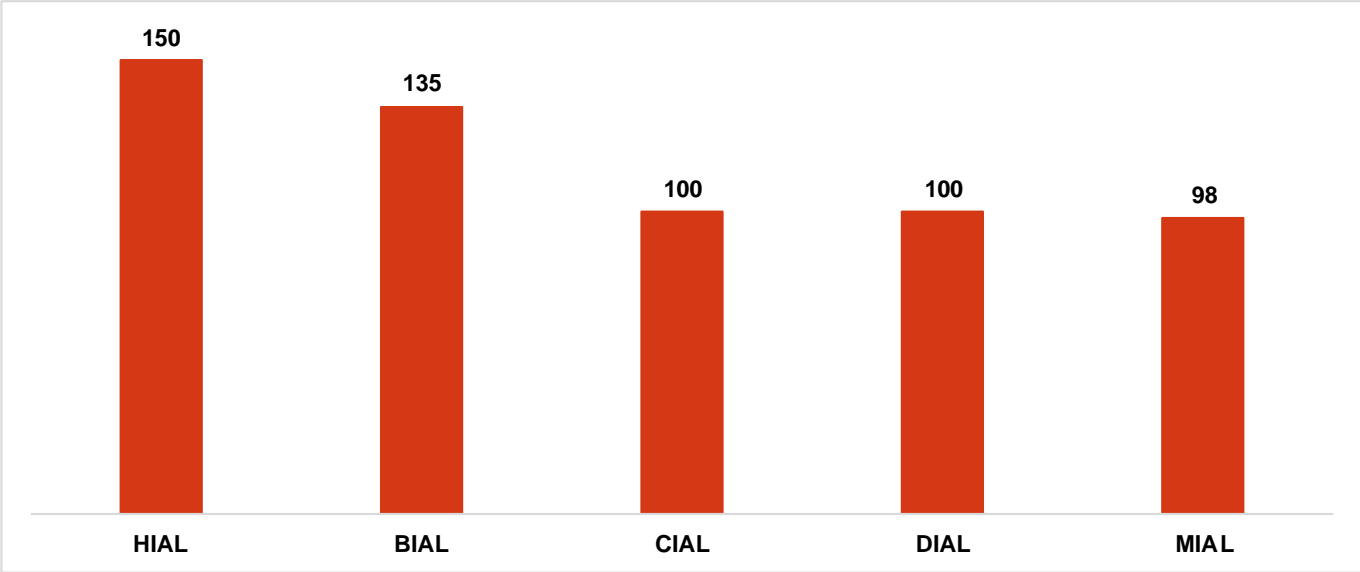
Figure 23 Terminal Size of Comparable airports (Sqm)



Term

The graph below depicts terminal capacity utilisation of comparable airports:

Figure 24 Terminal Capacity of Comparable airports in FY18 (%)

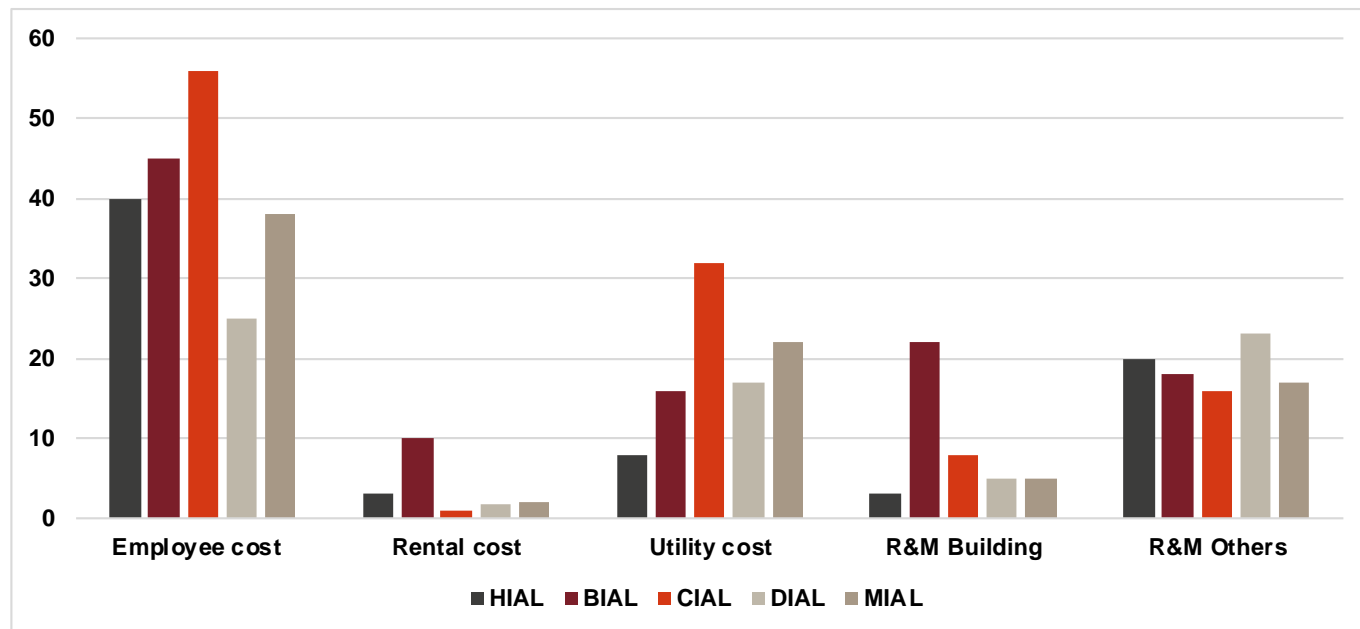


We understand that increase in capacity utilisation can impact cost per PAX in two ways i.e. reduction in cost per PAX due to higher traffic or increase in cost per PAX due to associated cost of congestion at airports and aircraft delays. **HIAL** has the highest capacity utilisation in FY18 of all the airports under consideration.

Cost per PAX and ATM

The graph below depicts various costs per PAX of comparable airports:

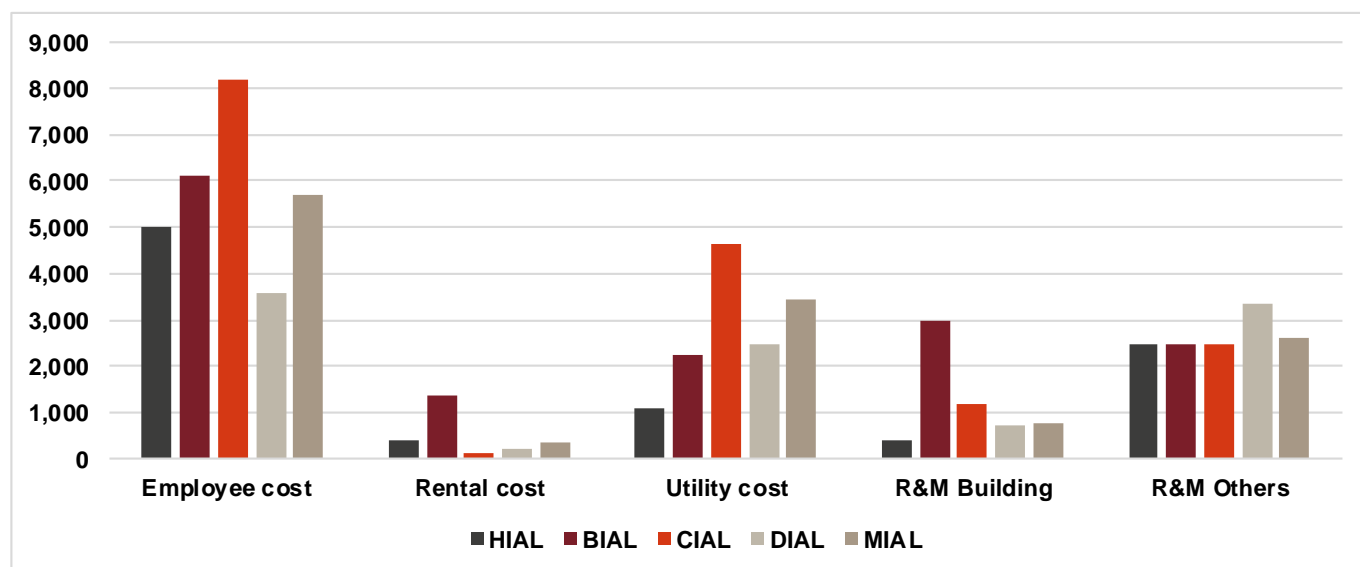
Figure 25 Various Costs per PAX for Comparable airports in FY18



We infer that HIAL has managed to outperform its peers under consideration for per PAX costs like utility, R&M building, employee cost. This has been a result of operational efficiencies measures undertaken at HIAL.

The graph below depicts various costs per ATM of comparable airports:

Figure 26 Various Costs per ATM for Comparable airports in FY18



8.3 Summary

- The internal benchmark of HIAL's O&M costs was performed by studying the growth trend of various cost components over a period from 2012-2020, to the extent of available data.
- The findings of the study suggests that the increase in total costs has been higher than the growth in passenger traffic and Air Traffic Movements, however, the per pax cost and per ATM cost for most cost heads has been lower than the passenger growth rate over the same period.
- Based on the analysis carried out in this report, it is concluded that O&M submitted by HIAL are reasonable and HIAL has adopted measures to achieved further efficiency in operating cost.
- Additionally, the benchmarking of HIAL with other PPP airports suggests that HIAL ranks lower in most of the cost parameters which suggests that HIAL has managed its cost efficiently and adopted measures to keep the same within limits.

9. Overall Summary of the Study

- RGI Airport commenced operations on 23rd March, 2008 post signing of the concession agreement on 20th December 2004 between HIAL and MoCA. The terminal capacity is 12 million passengers and the airport crossed 20 million mark in FY19.
- RGIA airport has grown at a growth rate of 12.8% for passenger traffic, 12.0% for ATM movements and 5.1% for cargo traffic between FY17 and FY20
- HIAL has submitted the true up of total operating expenditure for the second control period as Rs. 2434.98 crore, out of which aeronautical operating expenditure are Rs. 1904.25 crore, non –aero operating expenditure are Rs. 496.70 crore and non-airport operating expenditure are Rs. 34.04 crore.
- The operating expenditure allocation methodology adopted by HIAL is based on its understanding of the project agreements and has been summarised in section 5.1 of this report
- The Authority had approved Rs. 1768.27 crore over the second control period out of which aeronautical expenses was Rs. 1428.04 crore and non-aeronautical was Rs. 132.25 crores
- General segregation principles were developed for classification of each expense and logic has been established for apportionment of common expense into Aeronautical and Non-aeronautical categories as detailed in section 5.3
- The revised ratio for Gross fixed asset has been calculated from the results of the study on allocation of assets between aeronautical and non-aeronautical assets as part of scope of work under RFP No. 01/2020-21 initiated by the Authority. The Aero-non-aero ratio has been computed based on revised segregation logic developed in this study. The ratio from FY17-FY21 is given in Table 18.
- The terminal ratio of Aero: 84.6% and Non – Aero: 15.4% has been used to segregate common cost for customer facilities & logistics and housekeeping expense related to terminal building
- By application of the revised segregation logic using the description of the expense, classification of common costs into Aeronautical and Non-aeronautical has been carried out.
- The concession fees is calculated as per the revised segregation logic in section 5.5.6 in line with Authority's previous treatment in Order No. 34 2019/20 and revised concession fees towards aeronautical opex to be taken into consideration
 - Adjusted total aeronautical operating expenditure as per revised allocation: Rs. 1853.32 crores
 - Adjusted non – aeronautical operating expenditure as per revised allocation : Rs. 312.85 crores
 - Total Non-airport related operating expenditure as per revised allocation : Rs. 48.92 crores
 - Total adjustment to the aeronautical operating expenditure as per revised allocation : Rs. (50.93) crores
- **Efficiency in O&M for the second control period –**
 - The analysis of the key components of O&M costs shows that while the absolute cost has increased over the duration of the Second Control Period due to increased passenger traffic and ramping up of IIAT and IIDT operations, HIAL has been able to improve the efficiency of its operations, as evidenced by a lower growth or even decrease in costs on a per passenger basis on most of its key cost heads.

- The overall payroll cost has increased, but payroll cost per pax has grown at a rate lower than passenger growth rate.
- The admin cost per pax has increased at a rate lower than passenger growth rate.
- The security cost per pax has increased at a rate lower than passenger growth rate.
- The finance related charges due to bad debt is extremely high in the year FY18 due to onetime bond issuance to reduce the cost of borrowing
- The utility cost per pax has gone down which suggests adoption of efficient measures.
- The R&M cost per pax has gone down which suggests adoption of efficient measures or delay in expenses.
- The Stores & Spares cost per pax has gone down which suggests adoption of efficient measures or delay in R&M expenses.
- The housekeeping cost per pax has gone down which suggests adoption of efficient measures.
- The other operating income cost per pax has increased at a rate lower than passenger growth rate due to increase in operations
- HIAL has adopted cost efficiency measures as detailed in section 5.2 which has resulted in cost savings of Rs. 65.94 crores over the second control period.
- **Internal and External Benchmarking**
 - The internal benchmark of HIAL's O&M costs was performed by studying the growth trend of various cost components over a period from 2012-2020, to the extent of available data.
 - The findings of the study suggests that the increase in total costs has been higher than the growth in passenger traffic and Air Traffic Movements, however, the per pax cost and per ATM cost for most cost heads has been lower than the passenger growth rate over the same period.
 - Additionally, the benchmarking of HIAL with other PPP airports suggests that HIAL ranks lower in most of the cost parameters which suggests that HIAL has managed its cost efficiently and adopted measures to keep the same within limits.

9.1 Conclusion

- The airport operator, i.e. HIAL has submitted the true up of total operating expenditure for the second control period as Rs. 2434.98 crore, out of which aeronautical operating expenditure are Rs. 1904.25 crore, non –aero operating expenditure are Rs. 496.70 crore and non-airport operating expenditure are Rs. 34.04 crore.
- Based on the study, the total operational expenditure is Rs. 2214.71 crores (based on audited financial statements and revised allocation), and proposed aeronautical expenditure is Rs. 1853.32 crores resulting in total reduction of Rs. 50.93 crores for the second control period. The opex allocation ratio submitted by HIAL was 78.20% and revised opex allocation ratio is 83.70%.

10. Annexure

10.1 Operating expenditure as per HIAL allocation

HIAL has submitted the operating expense for each of the year along with its classification between aero, non-aero and non-airport categories.

The year wise details for operating expenses are summarized below:

Summary of the operating expenditure (excluding concession fee) as per HIAL's submission

Table 57: Operating expenditure for FY2017 as per HIAL's submission

S.no	Particulars (in Rs Crore)	Aero	Non-Aero	Common	Non-Airport	Total
As per HIAL's submission (FY2017)						
1.	Payroll Related Expenses	18.48	4.04	36.55	1.01	60.09
a)	Contribution to Provident fund and other funds	1.68	0.45	2.57	0.09	4.80
b)	Recruitment charges	0.00	0.00	0.08	0.00	0.08
c)	Salaries and Wages	16.66	3.58	28.85	0.92	50.01
d)	Staff welfare expenses	0.10	0.01	3.69	0.00	3.80
e)	Training charges	0.04	0.00	1.37	0.00	1.41
2.	Administration & General Expenses	10.16	1.35	79.36	1.04	91.91
a)	Lease Rent to GoT	2.38	0.00	0.00	0.89	3.28
b)	Rates and Taxes	0.00	0.00	5.68	0.00	5.68
c)	Security Charges	0.25	0.24	10.50	0.00	10.99
d)	General Administrative Expenses	7.47	1.11	45.50	0.15	54.22
i.	Rent	0.00	0.00	1.14	0.02	1.15
ii.	Legal and Professional Charges	0.98	0.23	7.18	0.00	8.40
iii.	Management Fees	0.00	0.00	22.58	0.00	22.58
iv.	Advertisement & Business Promotion	1.15	0.57	1.74	0.08	3.53
v.	Provision for Doubtful Advances	0.00	0.00	0.17	0.00	0.17
vi.	Communication Expenses	3.01	0.02	0.18	0.00	3.21
vii.	Directors' Sitting Fees	0.00	0.00	0.18	0.00	0.18
viii.	Loss on exchange fluctuation	0.00	0.00	0.00	0.00	0.00

S.no	Particulars (in Rs Crore)	Aero	Non-Aero	Common	Non-Airport	Total
ix.	Loss on sale / discarding of assets	0.00	0.00	0.28	0.00	0.28
x.	Miscellaneous Expenses	0.53	0.03	1.13	0.01	1.70
xi.	Office maintenance	0.47	0.00	2.32	0.00	2.79
xii.	Payment to auditor	0.00	0.00	1.02	0.00	1.02
xiii.	Printing and Stationery	0.11	0.00	0.18	0.00	0.29
xiv.	Travelling and conveyance	1.23	0.27	7.39	0.04	8.92
e)	Bad debts written off	0.04	0.00	0.00	0.00	0.04
f)	CSR & Donations	0.02	0.00	2.44	0.00	2.46
g)	Bank Charges	0.00	0.00	15.25	0.00	15.25
3.	Operating Expenditure	88.26	19.88	8.59	0.47	117.20
a)	Utilities	16.60	0.89	0.00	0.00	17.49
b)	Insurance	0.00	0.00	1.85	0.00	1.85
c)	Repairs and Maintenance	30.89	1.62	4.28	0.16	36.94
d)	Stores and Spares	10.51	0.62	0.29	0.06	11.47
e)	Housekeeping Expenses	9.45	1.61	0.05	0.26	11.37
f)	Operating & Maintenance Expenses	0.92	2.52	0.48	0.00	3.93
i.	Collection Charges	0.68	0.00	0.00	0.00	0.68
ii.	Bus Hire Charges	0.00	0.00	0.48	0.00	0.48
iii.	Health and safety expenses	0.24	0.00	0.01	0.00	0.25
iv.	Operating and maintenance expenses	0.00	1.86	0.00	0.00	1.86
v.	Operator fee	0.00	0.66	0.00	0.00	0.66
g)	Manpower Outsourcing	19.89	1.26	1.64	0.00	22.79
h)	Fuel Farm O&M Expenses	0.00	11.36	0.00	0.00	11.36
4.	Total (1+2+3)	116.90	25.27	124.50	2.52	269.19
5.	Less: Incidental Income	0.34	-	3.67	-	4.01
6.	Total (adjusted for incidental income) (4-5)	116.56	25.27	120.83	2.52	265.18
7.	One time refinancing cost	-	-	8.33	-	8.33
8.	Total (adjusted for incidental income and one time refinancing cost) (6-7)	116.56	25.27	112.50	2.52	256.85

S.no	Particulars (in Rs Crore)	Aero	Non-Aero	Common	Non-Airport	Total
9.	After apportionment of common into aero & non-aero	209.26	45.10	-	2.52	256.88
10.	Balance Forex Losses	35.28	7.06	-		42.34
11.	Total (9+10)	244.54	52.16	-	2.52	299.22
12.	Add : Incidental Income	3.36	0.65			4.01
13.	Total excluding incidental income (11+12)	247.90	52.81	-	2.52	303.23

Table 58: Operating expenditure for FY2018 as per HIAL's submission

S.no	Particulars (in Rs Crore)	Aero	Non-Aero	Common	Non-Airport	Total
As per HIAL's submission (FY2018)						
1.	Payroll Related Expenses	21.25	4.48	45.46	1.02	72.21
a)	Contribution to Provident fund and other funds	1.80	0.44	3.26	0.08	5.59
b)	Recruitment charges	0.00	0.00	0.18	0.00	0.18
c)	Salaries and Wages	19.39	4.05	36.28	0.94	60.67
d)	Staff welfare expenses	0.05	-0.01	4.05	0.00	4.09
e)	Training charges	0.01	0.00	1.69	0.00	1.69
2.	Administration & General Expenses	14.18	3.72	113.69	1.36	132.96
a)	Lease Rent to GOT	2.48	0.00	0.00	0.93	3.42
b)	Rates and Taxes	0.00	0.00	5.93	0.00	5.93
c)	Security Charges	0.37	1.25	15.36	0.00	16.98
d)	General Administrative Expenses	11.23	2.47	66.38	0.43	80.50
i.	Advertisement & Business Promotion	1.72	0.98	5.89	0.28	8.87
ii.	Rent	0.00	0.00	2.10	0.00	2.10
iii.	Legal and Professional Charges	3.80	0.94	11.24	0.00	15.98
iv.	Management Fees	0.00	0.00	31.52	0.00	31.52
v.	Communication Expenses	2.84	0.01	0.28	0.00	3.14

S.no	Particulars (in Rs Crore)	Aero	Non-Aero	Common	Non-Airport	Total
vi.	Directors' Sitting Fees	0.00	0.00	0.19	0.00	0.19
vii.	Miscellaneous Expenses	0.90	0.21	1.99	0.10	3.20
viii.	Office maintenance	0.44	0.00	2.87	0.00	3.32
ix.	Payment to auditor	0.00	0.00	0.70	0.00	0.70
x.	Printing and Stationery	0.11	0.01	0.18	0.01	0.31
xi.	Travelling and conveyance	1.43	0.30	9.40	0.04	11.17
e)	Provision for bad and doubtful debts	0.00	0.00	0.40	0.00	0.40
f)	CSR & Donations	0.09	0.00	6.59	0.00	6.68
g)	Bank Charges	0.00	0.00	19.04	0.00	19.04
3.	Operating Expenditure	93.40	21.59	9.12	0.49	124.61
a)	Utilities	15.68	0.64	-	-	16.33
b)	Insurance	-	-	2.44	-	2.44
c)	Repairs and Maintenance	35.33	1.58	5.65	0.18	42.74
d)	Stores and Spares	5.09	0.50	0.26	0.02	5.87
e)	Housekeeping	9.99	2.12	0.06	0.29	12.45
f)	Operating & Maintenance Expenses	0.77	2.87	0.51	-	4.15
i.	Bus Hire Charges	0.00	0.00	0.50	0.00	0.50
ii.	Health and safety expenses	0.11	0.00	0.01	0.00	0.12
iii.	Operating and maintenance expenses	0.00	2.15	0.00	0.00	2.15
iv.	Collection Charges	0.66	0.00	0.00	0.00	0.66
v.	Operator fee	0.00	0.72	0.00	0.00	0.72
g)	Manpower Outsourcing	26.55	1.20	0.20	-	27.95
h)	Fuel Farm O&M Expenses	-	12.67	-	-	12.67
4.	Total (1+2+3)	128.83	29.79	168.28	2.87	329.78
5.	Less: Incidental Income	0.54	0.00	5.67	0.00	6.21

S.no	Particulars (in Rs Crore)	Aero	Non-Aero	Common	Non-Airport	Total
6.	Total (adjusted for incidental income) (4-5)	128.29	29.79	162.61	2.87	323.57
7.	One time refinancing cost	-	-	111.17	-	111.17
8.	Total (adjusted for incidental income and one time refinancing cost) (6+7)	128.29	29.79	273.78	2.87	434.74
9.	After apportionment of common into aero & non-aero	353.78	78.06	-	2.87	434.71
10.	Balance Forex Losses	155.23	30.83	-	-	186.06
11.	Total (9+10)	509.01	108.89	-	2.87	620.77
12.	Add : Incidental Income	5.14	1.07			6.21
13.	Total excluding incidental income (11+12)	514.15	109.96	-	2.87	626.98

Table 59: Operating expenditure for FY2019 as per HIAL's submission

S.no	Particulars (in Rs Crore)	Aero	Non-Aero	Common	Non-Airport	Total
As per HIAL's submission (FY2019)						
1.	Payroll Related Expenses	25.61	6.21	67.88	1.83	101.53
a)	Contribution to Provident fund and other funds	2.17	0.53	4.54	0.15	7.39
b)	Training & Recruitment charges	0.01	-0.01	2.01	-	2.00
c)	Salaries and Wages	23.34	5.70	56.69	1.68	87.41
d)	Staff welfare expenses	0.09	-0.00	4.65	-0.00	4.73
2.	Administration & General Expenses	12.19	6.64	136.97	1.14	156.94
a)	Lease Rent to GoT	2.61	-	-	0.98	3.59
b)	Rates and Taxes	-	-	5.87	0.00	5.87
c)	Security Charges	0.48	0.65	17.22	-	18.36
d)	General Administrative Expenses	9.00	5.46	73.12	0.16	87.74
i.	Advertisement & Business Promotion	1.45	0.33	3.22	-0.00	5.00
ii.	Rent - Others	-0.00	-	3.11	-	3.11
iii.	Legal and Professional Charges	1.40	0.65	9.32	0.01	11.37

S.no	Particulars (in Rs Crore)	Aero	Non-Aero	Common	Non-Airport	Total
iv.	Management Fees	-	-	29.96	-	29.96
v.	Bad debts written off	-	3.75	-	-	3.75
vi.	Communication Expenses	2.29	0.01	0.43	0.00	2.74
vii.	Directors' Sitting Fees	-	-	0.25	-	0.25
viii.	Loss on exchange fluctuation	0.23	0.00	-0.01	0.00	0.22
ix.	Miscellaneous Expenses	1.24	0.19	2.13	0.00	3.56
x.	Office Maintenance	0.57	0.00	3.73	0.00	4.30
xi.	Payment to auditor	-	-	0.47	-	0.47
xii.	Printing and Stationery	0.11	0.01	0.77	0.00	0.89
xiii.	Travelling and conveyance	1.70	0.51	15.40	0.15	17.75
xiv.	Loss on sale of Investment in shares	-	-	4.34	-	4.34
e)	Provision for bad and doubtful debts	0.00	0.52	0.00	0.00	0.52
f)	CSR & Donations	0.10	0.00	33.77	0.00	33.87
g)	Bank Charges	0.00	0.00	6.99	0.00	6.99
3.	Operating Expenditure	99.33	25.85	14.84	0.48	140.50
a)	Utilities	18.99	0.36	-	-	19.35
b)	Insurance	-	-	2.28	-	2.28
c)	Repairs and Maintenance	35.91	2.12	8.66	0.18	46.88
d)	Stores and Spares	5.14	0.48	0.16	0.01	5.78
e)	Housekeeping cost	11.07	2.20	0.45	0.29	14.01
f)	Operating & Maintenance Expenses	0.91	3.73	0.72	-	5.37
i.	Bus Hire Charges	-	-	0.71	-	0.71
ii.	Health and safety expenses	0.21	0.00	0.01	-	0.22
iii.	Operating and maintenance expenses	-	3.01	-	-	3.01
iv.	Operator fee	-	0.72	-	-	0.72
v.	Collection Charges	0.70	-	-	-	0.70
g)	Manpower Outsourcing	27.32	1.95	2.57	-	31.83
h)	Fuel Farm O&M Expenses	-	15.01	-	-	15.01
4.	Total (1+2+3)	137.13	38.70	219.69	3.46	398.98
5.	Less: Incidental Income	0.29	-	7.94	-	8.23

S.no	Particulars (in Rs Crore)	Aero	Non-Aero	Common	Non-Airport	Total
6.	Total (adjusted for incidental income) (4-5)	136.84	38.70	211.75	3.46	390.75
7.	One time refinancing cost	-	-	4.29	-	4.29
8.	Total (adjusted for incidental income and one time refinancing cost) (6-7)	136.84	38.70	207.46	3.46	386.46
9.	After apportionment of common into aero & non-aero	300.06	82.92	-	3.46	386.43
10.	Balance Forex Losses	-	-	-	-	-
11.	Total (9+10)	300.06	82.92	-	3.46	386.43
12.	Add : Incidental Income	6.48	1.75			8.23
13.	Total excluding incidental income (11+12)	306.54	84.67	-	3.46	394.66

Table 60: Operating expenditure for FY2020 as per HIAL's submission

S.no	Particulars (in Rs Crore)	Aero	Non-Aero	Common	Non-Airport	Total
As per HIAL's submission (FY2020)						
1.	Payroll Related Expenses	24.54	4.15	86.43	4.04	119.17
a)	Contribution to Provident fund and other funds	2.14	0.44	7.34	0.27	10.18
b)	Salaries and Wages	22.43	3.66	73.79	3.77	103.65
c)	Staff welfare expenses	-0.03	0.05	5.31	0.00	5.33
2.	Administration & General Expenses	16.07	6.70	174.58	1.28	198.62
a)	Lease Rent to GoT	2.73	0.00	0.00	1.03	3.76
b)	Rates and Taxes	0.00	0.00	6.63	0.00	6.63
c)	Security Charges	0.58	0.40	22.27	0.00	23.25
d)	General Administrative Expenses	12.68	5.89	97.96	0.25	116.78
i.	Rent - Others	-0.06	0.00	3.92	0.00	3.87
ii.	Advertisement & Business Promotion	1.75	0.82	4.92	0.00	7.49
iii.	Legal and Professional Charges	3.00	4.54	25.16	0.00	32.69
iv.	Management Fees	0.00	0.00	32.05	0.00	32.05
v.	Assets written off	0.81	0.00	0.00	0.00	0.81

S.no	Particulars (in Rs Crore)	Aero	Non-Aero	Common	Non-Airport	Total
vi.	Communication Expenses	3.81	0.02	0.62	0.00	4.45
vii.	Directors' Sitting Fees	0.00	0.00	0.23	0.00	0.23
viii.	Loss on exchange fluctuation	0.31	0.00	0.01	0.00	0.33
ix.	Loss on sale / discarding of assets	0.00	0.00	0.00	0.00	0.00
x.	Miscellaneous Expenses	0.89	0.08	2.51	0.00	3.49
xi.	Office Maintenance	0.04	0.00	0.47	0.02	0.53
xii.	Payment to auditor	0.00	0.00	0.60	0.00	0.60
xiii.	Printing and Stationery	0.15	0.01	0.42	0.00	0.58
xiv.	Provision for bad and doubtful debts	0.00	0.15	0.00	0.00	0.15
xv.	Training charges & Recruitment charges	0.13	0.02	2.50	0.00	2.65
xvi.	Travelling and conveyance	1.86	0.25	24.47	0.22	26.80
xvii.	Provision for Diminution of value in investment	0.00	0.00	0.05	0.00	0.05
e)	Bad debts written off	0.00	0.41	0.00	0.00	0.41
f)	CSR & Donations	0.08	0.00	10.52	0.00	10.59
g)	Bank Charges	0.00	0.00	37.20	0.00	37.20
3.	Operating Expenditure	114.06	31.15	25.96	0.71	171.88
a)	Utilities	18.40	0.31	0.00	0.00	18.71
b)	Insurance	0.00	0.00	2.78	0.00	2.78
c)	Repairs and Maintenance	39.46	2.09	14.44	0.28	56.27
d)	Stores and Spares	6.25	0.37	0.51	0.02	7.16
e)	Housekeeping Charges	13.53	2.31	1.24	0.41	17.49
f)	Operating & Maintenance Expenses	1.21	5.28	0.96	0.00	7.45
i.	Bus Hire Charges	0.00	0.00	0.89	0.00	0.89
ii.	Health and safety expenses	0.50	0.01	0.06	0.00	0.57
iii.	Operating and maintenance expenses	0.00	4.55	0.01	0.00	4.56
iv.	Operator fee	0.00	0.72	0.00	0.00	0.72
v.	Collection Charges	0.71	0.00	0.00	0.00	0.71
g)	Manpower Outsourcing	35.21	2.50	6.02	0.00	43.73
h)	Fuel Farm O&M Expenses	0.00	18.29	0.00	0.00	18.29

S.no	Particulars (in Rs Crore)	Aero	Non-Aero	Common	Non-Airport	Total
4.	Total (1+2+3)	154.67	41.99	286.97	6.03	489.67
5.	Less: Incidental Income	0.22	0.00	8.66	0.00	8.88
6.	Total (adjusted for incidental income) (4-5)	154.45	41.99	278.31	6.03	480.79
7.	One time refinancing cost	-	-	4.52	-	4.52
8.	Total (adjusted for incidental income and one time refinancing cost) (6-7)	154.45	41.99	273.79	6.03	476.27
9.	After apportionment of common into aero & non-aero	374.55	95.66	-	6.03	476.25
10.	Balance Forex Losses	-	-	-	-	-
11.	Total (9+10)	374.55	95.66	-	6.03	476.25
12.	Add : Incidental Income	7.03	1.85			8.88
13.	Total excluding incidental income (11+12)	381.58	97.51	-	6.03	485.13

Table 61: Operating expenditure for FY2021 as per HIAL's submission

S.no	Particulars	Aero	Non-Aero	Common	Non-Airport	Total
As per HIAL's submission (FY2021)						
1.	Payroll Related Expenses	23.66	5.74	81.94	0.00	111.34
a)	Contribution to Provident fund and other funds	1.96	0.43	5.16	0.00	7.55
b)	Salaries and Wages	21.69	5.32	71.37	0.00	98.39
c)	Staff welfare expenses	0.01	-0.01	5.40	0.00	5.40
2.	Administration & General Expenses	10.25	2.13	115.00	1.10	128.49
a)	Lease Rent to GoT	2.88	0.00	0.00	1.08	3.96
b)	Rates and Taxes	0.15	0.00	5.31	0.00	5.46
c)	Security Charges	0.81	0.03	16.48	0.00	17.32
d)	General Administrative Expenses	6.19	2.09	64.18	0.02	72.48
i.	<i>Rent-Others</i>	0.09	0.00	3.93	0.00	4.02
ii.	<i>Advertising and business promotion</i>	1.07	0.75	1.44	0.00	3.26
iii.	<i>Legal and professional fees</i>	1.08	1.20	11.28	0.00	13.57
iv.	<i>Management fees</i>	0.00	0.00	25.03	0.00	25.03
v.	<i>Travelling and conveyance</i>	0.96	0.02	17.01	0.01	18.00

S.no	Particulars	Aero	Non-Aero	Common	Non-Airport	Total
As per HIAL's submission (FY2021)						
vi.	<i>Training & Recruitment charges</i>	0.01	0.00	0.62	0.00	0.63
vii.	<i>Communication Expenses</i>	1.67	0.02	1.24	0.01	2.93
viii.	<i>Office maintenance</i>	0.03	0.00	0.49	0.00	0.52
ix.	<i>Directors' Sitting Fees</i>	0.00	0.00	0.21	0.00	0.21
x.	<i>Loss on sale / discarding of assets</i>	0.35	0.00	0.00	0.00	0.35
xi.	<i>Payment to auditor</i>	0.00	0.00	0.56	0.00	0.56
xii.	<i>Printing and Stationery</i>	0.13	0.00	0.09	0.00	0.22
xiii.	<i>Miscellaneous Expenses</i>	0.80	0.10	2.29	0.00	3.18
e)	Bad debts written off	0.20	0.00	0.00	0.00	0.20
f)	CSR & Donations	0.02	0.00	15.97	0.00	16.00
g)	Bank Charges	0.00	0.00	13.06	0.00	13.06
3.	Operating Expenditure	95.88	19.34	26.10	0.58	141.90
a)	Utilities	10.97	0.13	0.00	0.00	11.10
b)	Insurance	0.00	0.00	4.83	0.00	4.83
c)	Repairs and Maintenance	37.87	1.55	13.42	0.18	53.02
d)	Stores and Spares	2.96	0.25	0.62	0.01	3.84
e)	Housekeeping Charges	9.64	1.64	0.36	0.40	12.04
f)	Operating & Maintenance Expenses					0.00
i.	<i>Bus Hire Charges</i>	0.00	0.00	0.30	0.00	0.30
ii.	<i>Health and safety expenses</i>	0.85	0.04	0.01	0.00	0.91
iii.	<i>COVID 19 Expenses</i>	1.33	0.11	1.22	0.00	2.66
iv.	<i>Operating and maintenance expenses</i>	0.38	2.30	0.00	0.00	2.68
v.	<i>Operator fee</i>	0.00	0.36	0.00	0.00	0.36
vi.	<i>Collection Charges</i>	0.00	0.00	0.00	0.00	0.00
g)	Manpower Outsourcing	31.88	0.34	5.32	0.00	37.53
h)	Fuel Farm O&M Expenses	0.00	12.62	0.00	0.00	12.62
4.	Total (1+2+3)	129.79	27.21	223.04	1.69	381.72
5.	Less: Incidental Income	0.64		5.30		5.94
6.	Total (adjusted for incidental income) (4-5)	129.15	27.21	217.74	1.69	375.78
7.	One time refinancing cost	0.00	0.00	4.91	0.00	4.91
8.	Total (adjusted for incidental income and one time refinancing cost) (6-7)	129.15	27.21	212.83	1.69	370.87
9.	After apportionment of common into aero & non-aero	306.87	62.31	0.00	1.69	370.87

S.no	Particulars	Aero	Non-Aero	Common	Non-Airport	Total
As per HIAL's submission (FY2021)						
10.	Balance Forex Losses	0.00	0.00	0.00	0.00	0.00
11.	Total (9+10)	306.87	62.31	0.00	1.69	370.87
12.	Add : Incidental Income	5.02	0.92			5.94
13.	Total excluding incidental income (11+12)	311.89	63.24	0.00	1.69	376.81

10.2 Auditor Certificate (Attached in next page)

Report in connection with Agreed-upon procedures related to Statement of allocation of Employee Benefit Expenses, Operational and Administrative Expenses into Aeronautical, Non-Aeronautical, Common and Non-Airport

We, M/s K.S. Rao & Co., joint statutory auditors of M/s. GMR Hyderabad International Airport Limited (the Company) having its registered office at GMR Aero towers, Rajiv Gandhi International Airport, Shamshabad, Hyderabad - 500108 (the Company) have performed the agreed upon procedures vide Engagement Letter dated June 16, 2020 with respect to Statement of allocation of Employee Benefit Expenses, Operational and Administrative Expenses into Aeronautical; Non-Aeronautical; Common and Non Airport Expenses for the period from April 01, 2016 to March 31, 2020. Our engagement was undertaken in accordance with the Standard on Related Service (SRS) 4400 on "Engagements to Perform Agreed-upon Procedures regarding Financial Information", issued by the Institute of Chartered Accountants of India. The procedures were performed solely to assist you in evaluating the accuracy of Statement of the allocation of Employee Benefit Expenses, Operational and Administrative Expenses into Aeronautical; Non-Aeronautical; Common and Non-Airport.

The agreed upon procedures to be performed on the accuracy of the Statement of allocation of Employee Benefit Expenses, Operational and Administrative Expenses into Aeronautical; Non-Aeronautical; Common and Non Airport Expenses for the years ended March 31, 2017; March 31, 2018; March 31, 2019 and March 31, 2020 are as follows:

- a. Obtain the Cost Centre data generated from the company's ERP and verify whether the data is in agreement to the expenditure breakup provided in the Special Purpose Standalone Financial Statements for the years ended March 31, 2017; March 31, 2018; March 31, 2019 and March 31, 2020 which are prepared in accordance with accounting principles generally accepted in India, including the Companies (Accounting Standards) Rules, 2006 as emended and specified under Section 133 of the Companies Act, 2013 read with Companies (Accounting Standard) Rules 2014 (referred as "IGAAP Financial Statements").
- b. Verify the classification of Cost Centres into Aeronautical; Non-Aeronautical; Common and Non-Airport on the basis of guidelines as per concept document enumerated in Annexure - I.
- c. Verify the summary of expenditure allocated into Aeronautical; Non-Aeronautical; Common and Non Airport Expenses for the period from April 01, 2016 to March 31, 2020 in Annexure II, III, IV, V with IGAAP Financial Statements for the years ended on March 31, 2017; March 31, 2018; March 31, 2019 and March 31 2020 respectively.
- d. Verify the summary of expenditure disclosed separately in the Annexure II, III, IV and IV for Cargo, Fuel Farm, Ground Handling including Ground Power Unit and Cargo satellite Building with the cost centre data obtained from ERP and IGAAP Financial Statements.

We report our finding below:

- i. With respect to item (a), we found that the cost-centre data generated from ERP for classification of expenditure is in agreement to the IGAAP Financial Statements;
- ii. With respect to item (b), we found that the classification of the Cost Centre is in accordance with the concept document enumerated in Annexure – I, upon verification of the nature of transactions in the cost-centre on a test check basis and using the concept of Materiality for the allocation;
- iii. With respect to item (c), we found that the Annexures II, III, IV and V is in agreement with the allocation in accordance with the item (b) and in agreement to the data obtained in item (a) and IGAAP Financial Statements.
- iv. With respect to item (d), we found that the expenditure separately disclosed in Annexure II, III, IV and V is in agreement with item (a) and IGAAP Financial statements.

Since the procedures performed do not constitute either an audit or a review made in accordance with the generally accepted auditing standards in India, we do not express any assurance on the allocation of the Statement of Employee Benefit Expenses, Operational and Administrative Expenses into Aeronautical; Non-Aeronautical; Common and Non Airport for the years ended March 31, 2017; March 31, 2018; March 31, 2019 and March 31, 2020.

Our report is solely issued on the request of the Company for its submission to the Airports Economic Regulatory Authority of India (AERA) and is not to be used for any other purpose or to be distributed to any other parties.

For K.S. Rao & Co.,
Chartered Accountants
ICAI Firm Registration no. 003109S

Hitesh Kumar P
Partner
Membership No. 233734
UDIN No.:20233734AAAAEI1656

Place: Bengaluru
Date: July 22, 2020

Concept document on Basis of Allocation

The methodology adopted for allocation of the Employee Benefit Expenses, Operational and Administrative Expenses were in line with the previous submissions by GHAL, to the Airport Economic Regulatory Authority of India (AERA) for determination of Tariff. The expenditure is allocated based on the cost centres of the expenditure.

Below is the brief of the procedures applied for allocation of the expenses:

Aeronautical expenditure

The expenditure in cost centres which are necessary or required for the performance of Aeronautical Services at the Airport and all other expenditure that the company may incur in accordance with the written direction of GOI for or in relation to provision of any of the reserved activities is considered as Aeronautical expenditure. Below are cost centre departments which are considered as Aero:

Airside operations, AOCC, ARFF, COO Office	Service Quality
Terminal Operations	Technical Services
Information Technology	Township
Landscaping	Without Cost Centre
Airline marketing and Business Development	
Protocol	
Safety Environment & Compliances	

Non Aeronautical expenditure

The expenditure in cost centres necessary for the performance of Non Aeronautical Services at the Airport are required to be considered as Non-Aeronautical expenditure. Below are cost centre departments which are considered as Non-Aero:

Cargo
Aero related (Fuel Farm and Ground Handling)
Commercial
Travel Services
Retail
Chief Commercial Office

Common expenditure

The cost centres which are necessary for both the Aeronautical Services and Non-Aeronautical Services are considered are common expenditure. Below are cost centre departments which are considered as common:

Admin, Facility Management	Project Management
CFL (Customer Facilities & Logistics)	Knowledge Management
HR	Corporate Communication
Finance	CEO's office, MD's Office,
Strategic Planning	Non Executive Director office
Legal	Contracts and Procurement
Security	Corporate relations
Transportation	CSR

Non-Airport expenditure

Expenditure related to Commercial Property development, Cargo Satellite Building and Other non airport departments are treated as Non Airport expenditure.

Other points:

- Collection charges other than IATA charges are netted off from Aeronautical Revenue.
- Rent is allocated in the ratio of airport and non- airport land as per master plan. Out of total land leased area of 5500 acres, 4000 acres has been identified for Airport purpose and balance 1500 acres has been allocated for non -airport activities.
- Incidental income is the income recovered as rent from the available space at the New Office Building, Site Office Building and Employee Township pending its utilization for common airport activities is netted off from the expenditure.
- Company has not maintained separate cost center for expenses relating to Ground Power Unit and Cargo Satellite Building (CSB) for the period from April 1, 2016 to March 31, 2020 and therefore these expenses are separately confirmed by the management for allocation purpose.

GMR Hyderabad International Airport Limited
FY 2016-17

Annexure -II

Statement of Allocation of Expenses

(₹ in crores)

Particulars	Aero	Non Aero	Common	Non Airport	Total
Payroll Related Expenses	18.49	4.04	36.56	1.01	60.10
Administration & General Expenses					
Advertisement & Business Promotion	1.15	0.57	1.73	0.08	3.53
Rent	2.38	-	1.14	0.91	4.43
Rates and Taxes	-	-	5.68	-	5.68
Security Charges	0.25	0.24	10.50	-	10.99
Legal and Professional Charges	0.99	0.23	7.18	-	8.40
Management Fees	-	-	22.58	-	22.58
General Administrative Expenses	5.34	0.31	12.87	0.05	18.57
CSR & Donations	0.02	-	2.44	-	2.46
Bad Debts Written Off	0.04	-	-	-	0.04
Bank Charges	-	-	15.25	-	15.25
Operating Expenditure					
Electricity & Water charges	16.60	0.89	-	-	17.49
Insurance	-	-	1.85	-	1.85
Repairs and Maintenance	30.88	1.62	4.28	0.16	36.94
Stores and Spares	10.50	0.62	0.29	0.06	11.47
Housekeeping Expenses	9.45	1.61	0.05	0.26	11.37
Operating & Maintenance Expenses	0.24	2.52	0.48	-	3.24
Manpower Outsourcing	19.89	1.26	1.64	-	22.79
Fuel Farm operator fee, O&M Expenses	-	11.36	-	-	11.36
Collection Charges (IATA)	0.68	-	-	-	0.68
Total	116.90	25.27	124.52	2.53	269.22
Less: Incidental Income from NOB, SO and Township	0.34	-	3.67	-	4.01
Grand Total	116.56	25.27	120.85	2.53	265.21

Total Allocated expenses	269.22
Other expenditure not considered above	
Concession fee	46.20
Depreciation & amortization	203.81
Finance costs	181.72
Collection charges except IATA charges	3.52
Total expense as per Financials	704.47

* 0.00 Represents less than 50,000

#CSB represents Cargo Satellite Building, GH represents Ground Handling and Ground Power Unit

CGF Expenses

(₹ in crores)

Cargo	GH#	Fuel Farm	CSB#	Total
1.85	0.17	-	-	2.02
0.04	0.00	-	-	0.04
-	-	-	-	-
0.00	-	-	-	0.00
-	-	-	-	-
0.15	-	0.02	-	0.17
-	-	-	-	-
0.17	0.01	0.00	-	0.18
-	-	-	-	-
-	-	-	-	-
0.00	-	-	-	0.00
-	0.89	-	-	0.89
-	-	-	-	-
0.01	0.33	0.28	0.16	0.78
-	0.26	-	0.06	0.31
-	-	-	0.26	0.26
-	-	-	-	-
-	-	11.36	-	11.36
-	-	-	-	-
2.22	1.65	11.67	0.47	16.01
-	-	-	-	-
2.22	1.65	11.67	0.47	16.01

GMR Hyderabad International Airport Limited
FY 2017-18

Annexure -III

Statement of Allocation of Expenses

(₹ in crores)

Particulars	Aero	Non Aero	Common	Non Airport	Total
Payroll Related Expenses	21.25	4.48	45.46	1.02	72.21
Administration & General Expenses					
Advertisement & Business Promotion	1.72	0.98	5.89	0.28	8.87
Rent	2.48	-	2.10	0.93	5.51
Rates and Taxes	-	-	5.93	-	5.93
Security Charges	0.37	1.25	15.36	-	16.98
Legal and Professional Charges	3.80	0.94	11.24	-	15.98
Management Fee	-	-	31.52	-	31.52
General Administrative Expenses	5.71	0.54	15.63	0.15	22.03
CSR & Donations	0.09	-	6.59	-	6.68
Bank Charges	-	-	19.04	-	19.04
Provision for bad and doubtful debts	-	-	0.40	-	0.40
Operating Expenditure					
Electricity & Water charges	15.69	0.64	-	-	16.33
Insurance	-	-	2.44	-	2.44
Repairs and Maintenance	35.33	1.58	5.65	0.18	42.74
Stores and Spares	5.09	0.50	0.26	0.02	5.87
Housekeeping	9.99	2.12	0.06	0.29	12.46
Operating & Maintenance Expense	0.11	2.87	0.51	-	3.49
Manpower Outsourcing	26.55	1.20	0.20	-	27.95
Fuel Farm operator fee, O&M Expenses	-	12.67	-	-	12.67
Collection Charges (IATA)	0.66	-	-	-	0.66
Total	128.84	29.77	168.28	2.87	329.76
Less: Incidental Income from NOB, SO and Township	0.54	-	5.67	-	6.21
Grand Total	128.30	29.77	162.61	2.87	323.55

Total Allocated expenses	329.76
Other expenditure not considered above	
Concession fee	52.95
Depreciation & amortization	190.12
Finance costs	168.00
Collection charges except IATA charges	4.29
Total expense as per Financials	745.12

* 0.00 Represents less than 50,000

#CSB represents Cargo Satellite Building, GH represents Ground Handling and Ground Power Unit

CGF Expenses

(₹ in crores)

Cargo	GH#	Fuel Farm	CSB#	Total
2.19	0.16	-	-	2.35
0.01	0.01	-	-	0.01
-	-	-	-	-
0.05	-	-	-	0.05
-	-	-	-	-
0.00	-	0.04	-	0.05
-	-	-	-	-
0.22	0.02	-	-	0.24
-	-	-	-	-
-	-	-	-	-
-	0.64	-	-	0.64
-	-	-	-	-
0.01	0.00	0.15	0.18	0.34
-	0.41	-	0.02	0.43
-	-	-	0.29	0.29
-	-	-	-	-
-	0.36	-	-	0.36
-	-	12.67	-	12.67
-	-	-	-	-
2.47	1.60	12.86	0.49	17.42
-	-	-	-	-
2.47	1.60	12.86	0.49	17.42

GMR Hyderabad International Airport Limited
FY 2018-19

Annexure -IV

Statement of Allocation of Expenses

(₹ in crores)

Particulars	Aero	Non Aero	Common	Non Airport	Total
Payroll Related Expenses	25.62	6.21	67.88	1.83	101.54
Administration & General Expenses					
Advertisement & Business Promotion	1.45	0.33	3.22	-	5.00
Rent	2.61	-	3.11	0.98	6.70
Rates and Taxes	-	-	5.87	-	5.87
Security Charges	0.48	0.65	17.23	-	18.36
Legal and Professional Charges	1.40	0.65	9.31	0.01	11.37
Management Fee	-	-	29.96	-	29.96
General Administrative Expenses	6.15	4.48	27.49	0.16	38.28
CSR & Donations	0.10	-	33.77	-	33.87
Bank Charges	-	-	6.99	-	6.99
Provision for bad and doubtful debts	-	0.52	-	-	0.52
Operating Expenditure					
Electricity & Water charges	18.99	0.36	-	-	19.35
Insurance	-	-	2.28	-	2.28
Repairs and Maintenance	35.91	2.12	8.66	0.18	46.87
Stores and Spares	5.13	0.48	0.16	0.01	5.78
Housekeeping Expenses	11.07	2.20	0.45	0.29	14.01
Operating & Maintenance Expenses	0.21	3.73	0.72	-	4.66
Manpower Outsourcing	27.32	1.95	2.57	-	31.84
Fuel Farm operator fee, O&M Expenses	-	15.01	-	-	15.01
Collection Charges (IATA)	0.70	-	-	-	0.70
Total	137.14	38.69	219.67	3.46	398.96
Less: Incidental Income from NOB, SO and Township	0.29	-	7.94	-	8.23
Grand Total	136.85	38.69	211.73	3.46	390.73

Total Allocated expenses	398.96
Other expenditure not considered above	
Concession fee	61.53
Depreciation & amortization	136.56
Finance costs	161.17
Collection charges except IATA charges	6.54
Total expense as per Financials	764.76

* 0.00 Represents less than 50,000

#CSB represents Cargo Satellite Building, GH represents Ground Handling and Ground Power Unit

CGF Expenses

(₹ in crores)

Cargo	GH#	Fuel Farm	CSB#	Total
2.32	0.02	0.14	-	2.48
0.00	0.00	-	-	0.00
-	-	-	-	-
0.00	-	-	-	0.00
-	-	-	-	-
0.20	0.12	0.00	-	0.32
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	0.36	-	-	0.36
-	-	-	-	-
0.10	0.39	0.02	0.18	0.69
-	0.21	-	0.01	0.22
-	-	-	0.29	0.29
-	-	-	-	-
-	-	15.01	-	15.01
-	-	-	-	-
-	-	-	-	-
2.61	1.10	15.17	0.48	19.36
-	-	-	-	-
2.61	1.10	15.17	0.48	19.36

GMR Hyderabad International Airport Limited
FY 2019-20

Annexure -V

Statement of Allocation of Expenses

(₹ in crores)

Particulars	Aero	Non Aero	Common	Non Airport	Total
Payroll Related Expenses	24.54	4.15	86.42	4.04	119.15
Administration & General Expenses					
Advertisement & Business Promotion	1.75	0.82	4.92	-	7.49
Rent	2.67	-	3.93	1.03	7.63
Rates and Taxes	-	-	6.63	-	6.63
Security Charges	0.58	0.40	22.27	-	23.25
Legal and Professional Charges	3.00	4.54	25.15	-	32.69
Management Fees	-	-	32.05	-	32.05
General Administrative Expenses	8.00	0.53	31.90	0.25	40.68
CSR & Donations	0.08	-	10.51	-	10.59
Bank Charges	-	-	37.20	-	37.20
Bad debts written off	-	0.41	-	-	0.41
Operating Expenditure					
Electricity & Water charges	18.39	0.31	-	-	18.70
Insurance	-	-	2.78	-	2.78
Repairs and Maintenance	39.46	2.09	14.44	0.28	56.27
Stores and Spares	6.25	0.37	0.52	0.02	7.16
Housekeeping Expenses	13.53	2.31	1.24	0.41	17.49
Operating & Maintenance Expenses	0.50	5.28	0.96	-	6.74
Manpower Outsourcing	35.21	2.50	6.02	-	43.73
Fuel Farm operator fee, O&M Expenses	-	18.29	-	-	18.29
Collection Charges (IATA)	0.71	-	-	-	0.71
Total	154.67	42.00	286.94	6.03	489.64
Less: Incidental Income from NOB, SO and Township	0.22	-	8.66	-	8.88
Grand Total**	154.45	42.00	278.28	6.03	480.76

CGF Expenses

(₹ in crores)

Cargo	GH#	Fuel Farm	CSB#	Total
1.26	0.16	0.08	-	1.50
-	-	-	-	-
-	-	-	-	-
0.00	-	-	-	0.00
-	-	0.04	-	0.04
2.36	-	0.15	-	2.51
-	-	-	-	-
0.07	0.08	0.01	-	0.16
-	-	-	-	-
-	-	-	-	-
-	0.31	-	-	0.31
-	-	-	-	-
-	-	0.00	0.26	0.26
0.00	0.16	-	0.02	0.18
-	-	-	0.41	0.41
-	-	-	-	-
-	0.40	0.00	-	0.40
-	-	18.29	-	18.29
-	-	-	-	-
3.69	1.11	18.57	0.69	24.07
-	-	-	-	-
3.69	1.11	18.57	0.69	24.07

Total Allocated expenses

489.64

Other expenditure not considered above

Concession fee	64.95
Depreciation & amortization	165.36
Finance costs	183.51
Collection charges except IATA charges	5.94
GHIAL PSF advance written off	15.08
Total expense as per Financials	924.48

* 0.00 Represents less than 50,000

** The above expenditure doesn't include GHIAL-PSF advances written off amounting to Rs. 15.08 Crores.

#CSB represents Cargo Satellite Building, GH represents Ground Handling and Ground Power Unit



Report in connection with Agreed-upon procedures related to Statement of allocation of Employee Benefit Expenses, Operational and Administrative Expenses into Aeronautical, Non-Aeronautical, Common and Non-Airport

We, M/s K.S. Rao & Co., joint statutory auditors of M/s. GMR Hyderabad International Airport Limited (the Company) having its registered office at GMR Aero towers, Rajiv Gandhi International Airport, Shamshabad, Hyderabad - 500108 (the Company) have performed the agreed upon procedures vide Engagement Letter dated May 12, 2021 with respect to Statement of allocation of Employee Benefit Expenses, Operational and Administrative Expenses into Aeronautical; Non-Aeronautical; Common and Non Airport expenses for the period from April 01, 2020 to March 31, 2021. Our engagement was undertaken in accordance with the Standard on Related Service (SRS) 4400 on "Engagements to Perform Agreed-upon Procedures regarding Financial Information", issued by the Institute of Chartered Accountants of India. The procedures were performed solely to assist the Company in evaluating the accuracy of Statement of the allocation of Employee Benefit Expenses, Operational and Administrative Expenses into Aeronautical; Non-Aeronautical; Common and Non-Airport.

The agreed upon procedures to be performed on the accuracy of the Statement of allocation of Employee Benefit Expenses, Operational and Administrative Expenses into Aeronautical; Non-Aeronautical; Common and Non Airport expenses for the period April 01, 2020 to March 31, 2021 are as follows:

- a. Obtain the Cost Centre data generated from the company's ERP and verify whether the data is in agreement to the expenditure breakup provided in the Special Purpose Standalone Financial Statements for the year ended March 31, 2021 which are prepared in accordance with accounting principles generally accepted in India, including the Companies (Accounting Standards) Rules, 2006 as amended and specified under Section 133 of the Companies Act, 2013 read with Companies (Accounting Standard) Rules 2014 (referred as "IGAAP Financial Statements").
- b. Verify the classification of Cost Centres into Aeronautical; Non-Aeronautical; Common and Non-Airport on the basis of guidelines as per concept document enumerated in Annexure - I.
- c. Verify the summary of expenditure allocated into Aeronautical; Non-Aeronautical; Common and Non Airport expenses for the period April 01, 2020 to March 31, 2021 in Annexure II with IGAAP Financial Statements.
- d. Verify the summary of expenditure disclosed separately in the Annexure II for Cargo, Fuel Farm, Ground Handling including Ground Power Unit and Cargo satellite Building with the cost centre data obtained from ERP and IGAAP Financial Statements.



We report our finding below:

- i. With respect to item (a), we found that the cost-centre data generated from ERP for classification of expenditure is in agreement to the IGAAP Financial Statements.
- ii. With respect to item (b), we found that the classification of the Cost Centre is in accordance with the concept document enumerated in Annexure – I upon verification of the nature of transactions in the cost-centre on a test check basis and using the concept of Materiality for the allocation.
- iii. With respect to item (c), we found that the Annexures II is in agreement with the allocation in accordance with the item (b) and in agreement to the data obtained in item (a) and IGAAP Financial Statements.
- iv. With respect to item (d), we found that the expenditure separately disclosed in Annexure II, is in agreement with item (a) and IGAAP Financial statements.

Since the procedures performed do not constitute either an audit or a review made in accordance with the generally accepted auditing standards in India, we do not express any assurance on the allocation of the Statement of Employee Benefit Expenses, Operational and Administrative Expenses into Aeronautical; Non-Aeronautical; Common and Non Airport for the period from April 01, 2020 to March 31, 2021.

Our report is solely issued on the request of the Company for its submission to the Airports Economic Regulatory Authority of India (AERA) and is not to be used for any other purpose or to be distributed to any other parties.

For K.S. Rao & Co.,
Chartered Accountants
ICAI Firm Registration no. 003109S

Hitesh Kumar P

Hitesh Kumar P
Partner
Membership No. 233734
UDIN No.: 21233734AAAAIL4260

Place: Bengaluru
Date: May 18, 2021



GMR Hyderabad International Airport Limited

Annexure I

Concept document on Basis of Allocation

The methodology adopted for allocation of the Employee Benefit Expenses, Operational and Administrative Expenses were in line with the previous submissions by GHIAL, to the Airport Economic Regulatory Authority of India (AERA) for determination of Tariff. The expenditure is allocated based on the cost centres of the expenditure.

Below is the brief of the procedures applied for allocation of the expenses:

Aeronautical expenditure

The expenditure in cost centres which are necessary or required for the performance of Aeronautical Services at the Airport and all other expenditure that the company may incur in accordance with the written direction of GOI for or in relation to provision of any of the reserved activities is considered as Aeronautical expenditure. Below are cost centre departments which are considered as Aero:

Airside operations, AOCC, ARFF, COO Office	Service Quality
Terminal Operations	Technical Services
Information Technology (Including ICT related expenditure for CUTE, CUSS and BRS)	Township
Landscaping	Without Cost Centre
Airline marketing and Business Development	
Protocol	
Safety Environment & Compliances	

Non Aeronautical expenditure

The expenditure in cost centres necessary for the performance of Non Aeronautical Services at the Airport are required to be considered as Non-Aeronautical expenditure. Below are cost centre departments which are considered as Non-Aero:

Cargo
Aero related (Fuel Farm and Ground Handling)
Commercial
Travel Services
Retail
Chief Commercial Office

Common expenditure

The cost centres which are necessary for both the Aeronautical Services and Non-Aeronautical Services are considered are common expenditure. Below are cost centre departments which are considered as common:

Admin, Facility Management	Project Management
CFL (Customer Facilities & Logistics)	Knowledge Management
HR	Corporate Communication
Finance	CEO's office, MD's Office,
Strategic Planning	Non Executive Director office
Legal	Contracts and Procurement
Security	Corporate relations
Transportation	CSR

Non-Airport expenditure

Expenditure related to Commercial Property development, Cargo Satellite Building and Other non airport departments are treated as Non Airport expenditure.

Other points:

- Collection charges other than IATA charges are netted off from Aeronautical Revenue.
- Rent is allocated in the ratio of airport and non- airport land as per master plan. Out of total land leased area of 5500 acres, 4000 acres has been identified for Airport purpose and balance 1500 acres has been allocated for non -airport activities.
- Incidental income is the income recovered as rent from the available space at the New Office Building, Site Office Building and Employee Township pending its utilization for common airport activities is netted off from the expenditure.
- Company has not maintained separate cost center for expenses relating to Ground Power Unit and Cargo Satellite Building (CSB) and therefore these expenses are separately confirmed by the management for allocation purpose.



GMR Hyderabad International Airport Limited

Annexure II

Statement of Allocation of Expenses for the period April 01, 2020 to March 31, 2021

(` in crores)

Particulars	Aero	Non Aero	Common	Non Airport	Total
Payroll Related Expenses	23.66	5.74	81.94	-	111.34
Administration & General Expenses					
Advertisement & Business Promotion	1.07	0.75	1.44	-	3.26
Rent	2.97	-	3.93	1.08	7.98
Rates and Taxes	0.15	-	5.31	-	5.46
Security Charges	0.81	0.03	16.48	-	17.32
Legal and Professional Charges	1.08	1.20	11.29	-	13.57
Management Fees	-	-	25.03	-	25.03
General Administrative Expenses	3.95	0.15	22.50	-	26.60
Bad debts	0.20	-	-	-	0.20
Donations	-	-	5.00	-	5.00
Community Development	0.02	-	10.98	-	11.00
Bank Charges*	-	-	13.06	-	13.06
Operating Expenditure					
Electricity & Water charges	10.97	0.13	-	-	11.10
Insurance	-	-	4.83	-	4.83
Repairs and Maintenance	37.85	1.55	13.42	0.20	53.02
Stores and Spares	2.96	0.25	0.62	0.01	3.84
Housekeeping Expenses	9.64	1.64	0.37	0.40	12.05
Operating & Maintenance Expenses	2.57	2.81	1.54	-	6.92
Manpower Outsourcing	31.88	0.34	5.32	0.00	37.53
Fuel Farm operator fee, O&M Expenses	-	12.62	-	-	12.62
Total	129.78	27.21	223.06	1.69	381.73
Less: Incidental Income from NOB, SO, Township	0.64	-	5.30	-	5.94
Grand Total	129.14	27.21	217.76	1.69	375.79

CGF Expenses

(` in Crores)

Cargo	GH#	Fuel	CSB#	Total
1.90	0.17	0.31	-	2.38
0.02	-	0.03	-	0.05
-	-	-	-	-
-	-	0.03	-	0.03
-	-	-	-	-
-	-	-	-	-
0.01	-	0.04	-	0.05
-	-	-	-	-
-	-	-	-	-
-	0.13	-	-	0.13
-	-	-	-	-
-	0.42	0.01	0.20	0.63
-	0.08	-	0.01	0.09
-	-	-	0.40	0.40
-	-	-	-	-
-	-	-	-	-
-	-	12.62	-	12.62
1.93	0.80	13.04	0.61	16.38

Total Allocated expenses 381.73

Other expenditure not considered above

Concession fee	22.54
Depreciation & amortization	184.45
Finance costs	199.11
Collection charges except IATA charges	1.08
Total expense as per Financials	788.91

#CSB represents Cargo Satellite Building, GH represents Ground Handling and Ground Power Unit.

*Bank Charges include other borrowing cost and interest on working capital loan.



About CRISIL Limited

CRISIL is a leading, agile and innovative global analytics company driven by its mission of making markets function better.

It is India's foremost provider of ratings, data, research, analytics and solutions, with a strong track record of growth, culture of innovation and global footprint.

It has delivered independent opinions, actionable insights, and efficient solutions to over 100,000 customers.

It is majority owned by S&P Global Inc, a leading provider of transparent and independent ratings, benchmarks, analytics and data to the capital and commodity markets worldwide.

About Infrastructure Advisory

CRISIL Infrastructure Advisory is a leading advisor to regulators and governments, multilateral agencies, investors, and large public and private sector firms. We help shape public policy and enable infrastructure development. Our services span a wide array of infrastructure development activities. Our work in the areas of policy formulation, regulation, design and implementation of public-private partnership (PPP) frameworks and infrastructure financing mechanisms helps create a vibrant ecosystem for infrastructure development. Our services at the project level include bid process management, valuations and due diligence to enable investment decisions. We are known for our core values of independence and analytical rigour combined with deep domain expertise. Our teams have expertise across the complete range of infrastructure sectors - urban development, energy, transport and logistics, natural resources, education, and healthcare. We have a rich understanding of PPP and financing related issues. We operate in India and 22 other emerging economies in Asia, Africa, and the Middle East. CRISIL Infrastructure Advisory is a division of CRISIL Risk and Infrastructure Solutions Limited, a wholly owned subsidiary of CRISIL Limited.

CRISIL Privacy

CRISIL respects your privacy. We may use your contact information, such as your name, address, and email id to fulfil your request and service your account and to provide you with additional information from CRISIL. For further information on CRISIL's privacy policy please visit www.crisil.com/privacy.

