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Airports Economic Regulatory Authority of India

Determination of Aeronautical Tariffs in respect of Rajiv Gandhi International Airport, Shamshabad, Hyderabad for the 2nd Control Period (01.04.2016 – 31.03.2021)

New Delhi: 19th December, 2017

AERA Building Administrative Complex Safdarjung Airport New Delhi - 110003

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In the matter of Determination of Tariffs for Aeronautical Services in respect of Rajiv Gandhi International Airport, Shamshabad, Hyderabad for the 2nd

Control Period (01.04.2016 – 31.03.2021)

1. Brief facts

Backdrop of the 1st Control Period and legal Proceedings

- 1.1. The GMR MAHB (GMR Infrastructure Limited (GIL) and Malaysia Airports Holdings Berhad (MAHB) consortium was selected by the Government of Andhra Pradesh (GoAP) in December 2000 as the private partner for development of the proposed greenfield international airport at Shamshabad, Hyderabad.
- **1.2.** GMR Hyderabad International Airport Limited (HIAL) was incorporated to design, finance, build, operate and maintain a world class Greenfield airport at Shamshabad, Hyderabad. HIAL is a joint venture company with following shareholding pattern:

Table 1: Shareholding Pattern of HIAL as on 31.03.2016

	Percentage
Holding Company	Shareholding
GMR Airports Limited	63%
Gol through AAI	13%
Government of Telangana	13%
Malaysia Airports Holdings Berhad (Mauritius) Pvt. Ltd.	11%

- **1.3.** The airport, named as Rajiv Gandhi International Airport (RGI Airport / RGIA), Hyderabad, is among the few airports to be operationalized under the PPP model in India. The airport was inaugurated on 14.03.2008 and started the commercial operations from 23.03.2008. RGIA has an integrated passenger terminal with a capacity of 12 million passengers per year. It presently has a Code-F runway and a parallel standby runway.
- **1.4.** The Authority determined the tariff in respect of RGIA for the 1st Control Period vide Order no. 38/2013-14 dated 24th February 2014; by adopting Single Till mechanism. HIAL stated that "Due to the aforementioned AERA order, there was no UDF revenue in FY 2015 and 3 quarters of FY 2016."

1.5. HIAL was aggrieved by the aforementioned tariff Order, and filed a writ petition on 06.03. 2014. A summary of the proceedings is given below,

"

1. First Writ - W.P. No. 6487/ 2014:

GHIAL vs. Ministry of Civil Aviation & 2 Others

Details:

AERA Order No.38/2013-14 dated 24.02.2014 has been challenged before High Court at Hyderabad.

Status:

- a) The HC at Hyderabad disposed-off the writ on 10th June 2014.
- b) Directed the Central Government to take a decision within eight (08) weeks considering all aspects placed before it by GHIAL in its representation dated 24.04.2013.
- c) GHIAL is permitted to challenge the AERA order on merits before the Appellate Tribunal within four (04) weeks.
- d) The Central Government issued an order U/s 42 directing AERA to adopt "Shared Till" with 30% cross subsidization on 10.06.2015.
- e) GHIAL filed an Appeal before the then AERAAT on the other issues."
- **1.6.** Further, HIAL filed an Appeal on 7th June 2014 before AERAAT on the other issues. As AERAAT then was not sufficiently constituted and declined to take the Appeal for hearing, HIAL filed another writ petition in the High Court at Hyderabad on 06.08. 2014. A summary of the proceedings is given below,

"

2. Second Writ - W.P. No. 22474/ 2014:

GHIAL vs. AERAAT & 2 others

Details:

As the Appellate Tribunal refused to hear the above said Appeal filed by GHIAL due to the fact that the Tribunal was not constituted as per the

AERA Act. GHIAL approached the HC at Hyderabad and filed this WP for transmitting the appeal from the Tribunal to HC.

Status:

By mutual consent of the Parties the Appeal has been transmitted by AERAAT to the HC and the HC will hear the matter in due course. The writ is pending for adjudication."

1.7. Lastly, HIAL filed a third writ petition, seeking the restoration of its UDF. The High Court gave an interim direction permitting HIAL to collect Airport Charges as were being collected prior to The Authority's Order 38/2013-14. HIAL continues to collect user charges as restored on an interim basis till date. A summary of the proceedings is given below,

"3. Third Writ - W.P. No. 27390/ 2015

GHIAL vs. UOI & other

Details

As AERA has not taken any decision on the order issued by the Central Govt. U/s 42, GHIAL filed this Writ Petition seeking restoration of UDF.

Status:

The HC has granted an interim relief and permitted GHIAL to collect UDF as was being collected prior to AERA's Order and consequent to AIC issued by DGCA, GHIAL started collecting the UDF w.e.f. 06th Nov 2015."

MYTP Submissions for the 2nd Control Period

- **1.8.** For the 2nd Control Period, HIAL submitted its Multi-Year Tariff Proposal (MYTP) on shared till basis. HIAL submitted an initial MYTP on 25.03.2016 which requested a YPP of Rs. 924.47 per passenger. HIAL further submitted a revised MYTP proposal dated 5.12.2016 and subsequently updated its tariff financial model which was submitted on 28.01.2017 (where it updated with HIAL's audited financial results for FY 2015-16). This resulted in changes to HIAL's YPP to Rs. 924.01 and Rs. 912.11 respectively.
- **1.9.** Lastly, HIAL made another submission to the Authority dated 31.08.2017 with revisions on the following accounts:

- a) Revised implementation plan for capital expenditure
- b) Treatment of Foreign Exchange Variation
- c) Correction in the rate of depreciation and
- d) Computation of revenues form other than aeronautical service(s) for crosssubsidization

Vide, the abovementioned submission HIAL revised its YPP requirement to Rs. 1212.42 per passenger; which was to be implemented from 1.10.2017. These submissions have been discussed as part of the relevant chapters.

2. Guiding Principles for the Authority

Legislative Policy Guidance and Principles

- 2.1. The legislature has provided policy guidance to the Authority regarding the determination of tariff for the aeronautical services under the provisions of the AERA Act. The Authority is required to adhere to this legislative policy guidance in the discharge of its functions in respect of the major airports. These functions are indicated in Section 13 (1) of the AERA Act:
 - 2.1.1. Determination of the tariff for the aeronautical services;
- 2.1.2. Determination of the amount of the development fees including User Development Fee;
- 2.1.3. Determination of the amount of the passenger service fee levied under rule 88 of the Aircraft Rules, 1937 made under Aircraft Act, 1934; and
- 2.1.4. Monitoring the set performance standards relating to quality, continuity and reliability of service as may be specified by the Central Government or any authority authorised by it in this behalf.
- **2.2.** Further to the specification of functions to be performed by the Authority, the legislature also provides policy guidance on the factors, which are to be considered by the Authority in performing these functions. Under Section 13 (1) (a) of the AERA Act, the legislature requires the Authority to determine tariff for the aeronautical services taking into consideration the following factors:
- 2.2.1. capital expenditure incurred and timely investment in improvement of airport facilities;
- 2.2.2. service provided, its quality and other relevant factors;
- 2.2.3. cost for improving efficiency;
- 2.2.4. economic and viable operation of major airports;
- 2.2.5. revenue received from services other than aeronautical services;
- concession offered by the Central Government in any agreement or memorandum of understanding or otherwise;
- 2.2.7. any other factor which may be relevant for the purposes of the Act

- 2.3. Thus the Authority is acting in accordance with the legislative policy guidance as above. To operationalize the mandate of the legislature, the Authority had issued the Airport Order and the Airport Guidelines; which formed the guiding principles of the Authority's tariff determination methodology. The legislature also provides the Central Government the power to issue a directive which is binding on the Authority. The relevant clause; Section 42 of The Airports Economic Regulatory Authority of India Act, 2008 highlighting the same has been reproduced below,
 - "... 42. Directions by Central Government.—(1) The Central Government may, from to time to time, issue to the Authority such directions as it may think necessary in the interest of the sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality.
 - (2) Without prejudice to the foregoing provisions, the Authority shall, in exercise of its powers or the performance of its functions, be bound by such directions on questions of policy as the Central Government may give in writing to it from time to time:

Provided that the Authority shall, as far as practicable, be given an opportunity to express its views before any direction is given under this subsection.

- (3) The decision of the Central Government whether a question is one of policy or not shall be final... "
- 2.4. In normal course the Authority would have proceeded to determine the aeronautical tariffs in accordance with the Airport Order and the Airport Guidelines issued by itself. The Airport Guidelines of the Authority in this regard prescribe a single-till mechanism which was used in the Authority's Order No. 38/2013-14 for the 1st Control Period of HIAL. However, in view of a directive given to the Authority by MoCA dated 10.06.2015 the Authority has examined the submissions of HIAL using shared till where 30% of non-aeronautical revenues cross-subsidize aeronautical operations. An extract of the directive dated 10.06.2015 has been reproduced below,
 - "... Pursuant to the above directions and after obtaining the legal advice of the M/o of Law & Justice, the Competent Authority has deeded to

approve 30% Shared Till in respect of RGIA. Hyderabad. Accordingly, under Section 42(2) of AERA Act, 2008. AERA is directed to adopt 30% Shared Till Mechanism in respect of RGIA, Hyderabad... "

HIAL vide its submission dated 31.08.2017 submitted that it had inadvertently applied 30% on the gross non-aeronautical revenues towards cross-subsidization instead of applying 30% on the profit before taxes; i.e. revenue net of costs. HIAL justified its interpretation as given below,

"... From the above, it is clear that in both the Single and Dual Till, both the revenue and cost in respect of non-aeronautical services have been considered or both revenues and costs have been ignored while treating the non-aeronautical revenue.

Similarly in Shared (Hybrid) till both revenues and costs in relation to the non-aeronautical services needs to be taken in consideration before appropriating a certain percentage (in this case 30%) of revenues for the purpose of cross subsidizing the aeronautical charges..."

- 2.5. However, the Authority's Order No. 14/2016-17 on the Adoption of Regulatory Till adequately clarifies the Authority's intent of computing cross-subsidy based on non-aero revenues only. It is also noted by the Authority that the Airport Operator gets to retain the balance 70% of non-aeronautical revenue to provide for expenses to be incurred in the non-aeronautical side, which are not intensive in nature due to most of it being incurred by concessionaire engaged for it. The Authority proposes to apply the decision of the abovementioned order in the case of HIAL. The relevant extract clarifying the Authority's interpretation of Hybrid Till with 30% cross subsidy has been given below,
 - "... The Authority will in future determine the tariffs of major airports under "Hybrid Till" wherein 30% of non-aeronautical revenues will be used to cross-subsidize aeronautical charges. Accordingly, to that extent the airport operator guidelines of the Authority shall be amended. The provisions of the Guidelines issued by the Authority, other than regulatory till, shall remain the same..."

HIAL as a Standalone entity

2.6. The Authority has considered HIAL as a stand-alone entity based on the accounts of HIAL without any consolidation with its subsidiaries or taking into account the balance sheets and income statements of other subsidiaries. Hence the equity of HIAL at Rs. 378 crore as on 01.04.2016, as a stand-alone entity, is taken into account for further consideration.

Taxation

2.7. As regards taxation, the general principle adopted by Authority is to consider taxes paid on actual by the regulated entity, namely HIAL - as a stand-alone entity. In the Authority's Order No. 38/2013-14 for the 1st Control Period of HIAL, the Authority had considered tax paid by the standalone entity of HIAL. The Authority had also decided to true up the taxes actually paid by the stand-alone entity of HIAL. However, due to the switch in regulatory till from a single till to a 30% shared till, the Authority has decided to consider only the aeronautical portion of the taxes paid on actuals by the regulated entity as explained in paras 8.4 and 8.5 below.

RAB Boundary

- 2.8. In the Authority's Order No. 38/2013-14 for the 1st Control Period of HIAL, the Authority had considered capitalized projects for both aeronautical and non-aeronautical services that such stand-alone entity would be providing at HIAL. As an illustrative list, the non-aeronautical services and activities would include duty free shopping, food and beverages, retail outlets, public admission fee for entry into the terminal, hotel, if any provided inside the terminal building, banks, ATMs, airlines offices, commercial lounges, spa and gymnasium facilities, car parking, etc. The Authority is aware that this is not an exhaustive list. In addition to the above, individual airport operator may innovate and add more non-aeronautical services so as to improve the passenger conveniences or enhancing ambience of the airport and terminal building.
- **2.9.** The Authority, in its Airport Order No. 38/2013-14 for the 1st Control Period of HIAL had outlined the principles for inclusion / exclusion of assets from the aeronautical RAB to be considered for tariff determination. The principles for exclusion

of assets from RAB Boundary as per the abovementioned tariff order are presented below:

- 2.9.1. The assets that substantially provide amenities/ facilities/ services that are not related to, or not normally provided as part of airport services, may be excluded from the scope of RAB;
- 2.9.2. The assets that in the opinion of the Authority do not derive any material commercial advantage from the airport (for example from being located close to the airport) may be excluded from the scope of RAB;
- 2.9.3. The Authority will not include working capital in the RAB.
- 2.9.4. Work in Progress (WIP) assets would not be included in the RAB until they have been commissioned and are in use.
- 2.9.5. The investment made from pre-funding levy (DF) would not be included in the RAB.
- **2.10.** In the current scenario where the tariffs are being determined based on 30% shared till, the RAB would have to exclude the portion of assets attributed to the provision of non-aeronautical services. Only a cross-subsidy from non-aeronautical revenues shall be considered for the purpose of tariff determination.

Considerations specific to Building Blocks in HIAL's tariff determination

2.11. Apart from the above, Authority's approach regarding specific building blocks in HIAL's determination has been indicated in the relevant paragraphs.

Revenue Recognition from Cargo, Ground Handling and Fuel Throughput (CGF)

2.12. As per the provisions of the AERA Act, the Authority considers the services rendered in respect of cargo, ground handling and supply of fuel (CGF) as the aeronautical services. In normal course, the Authority's approach towards recognition of revenue accruing to the airport operator in respect of the CGF services has been that if the service is being provided by the airport operator himself, the revenue accruing to it on account of the provision of the service would be considered as aeronautical service and if the service is outsourced by the airport operator to a third party concessionaire and the revenue accruing in the hands of the airport operator through

revenue share / rental etc. from such third party concessionaire would be considered as non-aeronautical revenue.

2.13. The Authority also notes a letter issued by the Ministry of Civil Aviation to the Authority in respect of "Determination of Multi-year Tariff for Bangalore International Airport Limited (BIAL) - Consultation Paper No. 14/2013-14", where the Ministry has informed its views to the Authority as under,

"

4. Furthermore, in view of the various provision of AERA Act, 2008 with respect to the Aeronautical Services, the Fuel Throughput Charge that is levied by Airport Operator may be considered as Aeronautical revenue in the hands of the Airport Operator. The revenues from cargo, ground handling services and fuel supply which are defined as Aeronautical Services in the AERA Act, 2008 may be reckoned as Aeronautical Revenues and considered accordingly irrespective of the providers of such Aeronautical Services.

This issues with the approval of the Minister of Civil Aviation."

- 2.14. The Authority thus noted the Government's view that revenues from cargo, ground handling services and fuel supply which are defined as Aeronautical Services in the AERA Act, 2008 may be reckoned as Aeronautical Revenues in the case of Bangalore. The concession agreement in the case of Hyderabad is also similar to that of Bangalore and therefore, the Authority is of the view that these services should be treated as aeronautical services in the case of HIAL also.
- 2.15. The Authority vide Order No. 38/2013-14 for the 1st Control Period of HIAL had also stated that it was aware that the distinction of certain assets or revenues therefrom being considered as aeronautical or non-aeronautical would not be material (in a financial sense) in case of tariff determination under single till, but would be material in case of tariff determination under dual till. Therefore, having regard to paras 2.12 to 2.13, the Authority had taken a stand that revenues accruing to HIAL on account of aeronautical services of cargo, ground handling and fuel supply to the aircraft be considered aeronautical revenues of HIAL; even though these services have been

provided by third party concessionaires. In the 2nd Control Period, the Authority proposes to keep its stand and continue treating CGF revenues as aeronautical.

Treatment of income from real estate development

- 2.16. The real estate development by an airport operator through commercial exploitation of land leased or granted to it; which is in excess of the airport requirement, would normally be outside the RAB boundary. This also implies that the revenues from commercial exploitation of such lands would, in normal course, not enter into the calculation of revenues required for aeronautical tariff determination. However, there may be such circumstances which the Authority may be required to take into account (like special covenants in the Concession Agreement or Lease Deed, etc.) that may require separate consideration for taking revenues from real estate development into calculation of aeronautical tariffs.
- 2.17. The Authority vide its Order No. 38/2013-14 for the 1st Control Period of HIAL mentioned that it understood that the real estate development or commercial development on land may be subject to the land zoning restrictions of the local bodies or in other specific covenants or special acts like the Airports Authority of India Act, etc. Additionally, they may also be governed by the covenants of other agreements entered into by the public authorities with the airport operator (for example, OMDA or Lease Agreement, etc.). The treatment considered by the Authority in respect of land in excess of airport requirement for HIAL has been discussed in the following paras which talk about the Authority's approach in this regard.
- **2.18.** The Authority vide its Decision No. 6 regarding the treatment of land in respect of RGI Airport, Hyderabad had decided as follows,

"..

- To calculate RAB for the current Control Period without subtracting the fair market value of real estate development and determine aeronautical tariff accordingly.
- ii. To take into account the treatment of commercial exploitation of land towards aeronautical tariffs after receipt of information from the Government of Andhra Pradesh (as indicated in Para 10.39.3.c

and Para 10.39.3.d above) and to give effect to the same in the tariff determination in the next Control Period

..."

- 2.19. Vide para 10.39.3.b. of the Authority's Order No. 38/2013-14, the Authority had suggested that it would reduce the market value or sale value (premium lease) of land from the RAB to bring about a nexus between real estate development and interest of the passengers. The Govt. of Andhra Pradesh had not commented on the proposed mechanism of reduction of RAB and hence for the 1st Control Period the Authority had not considered this reduction. Para 10.39.3.c. of the Authority's Order No. 38/2013-14 quoted Para 2 (ii) of the letter of GoAP, which stated that "The non-aeronautical revenue would include the revenue generated through commercial activities inside the terminal building as well as through the development of real-estate on the airport land".
- **2.20.** Based on the above context, and given the scenario of following a 30% shared till (compared to a single till which was followed as per Order No. 38/2013-14), the Authority proposes to consider property development as a non-aeronautical activity. Accordingly, the income from property development would be used to cross-subsidize airport operations to the extent of 30%. Any expenditure associated with these revenues would not be allowed through RAB or Operating Expenses.

Treatment of dividend received by HIAL on investment made by it in Joint-ventures / Subsidiaries

- **2.21.** As indicated in para 2.1 of Order No. 38/2013-14, HIAL has invested in a large number of its subsidiaries. The Authority had noted that each of the subsidiaries has its own financial statements including relevant assets. As also indicated in Para 2.6 above, the Authority has considered HIAL as a stand-alone entity for the purposes of aeronautical tariff determination. Hence the assets of the subsidiaries are not considered towards RAB of HIAL.
- 2.22. The Authority has noted from the audited financial statements of HIAL that it has received dividend from two of its subsidiaries including Hyderabad Menzies Air Cargo Private Ltd (HMACPL) and Hyderabad Duty Free Retail Ltd as per the auditor certificate submitted by HIAL on 28.01.2017.

2.23. For the purposes of calculation of ARR, the Authority has taken into consideration only the RAB in the books of accounts of HIAL and has accordingly not reckoned the assets of Hyderabad Menzies Air Cargo Private Ltd. in RAB for the purposes of tariff determination.

3. Consideration of True-ups for Pre Control Period and 1st Control Period

a HIAL Submission on True-up for the 1st Control Period

- 3.1. The Authority notes HIAL's submission with respect to the true up for Pre Control Period and 1st Control Period. HIAL submitted that it started its operations w.e.f. 23.03.2008; and accordingly, determination of aeronautical charges under shared till is required to be done effective from the commencement date. As per HIAL, the period from 23.03.2008 till 31.03.2011 has been defined as pre-control period. Accordingly, HIAL has defined the true up pertaining to 23.03.2008 to 31.03.2011 as pre-control period entitlements and true up pertaining to 1.04.2011 to 31.03.2016 is termed as true up for 1st Control Period.
- 3.2. HIAL further submitted that the aeronautical tariff presently charged at RGIA in 1st Control Period was notified through Authority vide its Order No. 38/2013-14 dated 24.02.2014. The Authority vide its aforementioned tariff order had given HIAL the provision for true up of various items. Accordingly, HIAL in the true-up section of the MYTP submission has listed the true-ups which it requests the Authority to include for tariff computation for the 2nd Control Period. An extract of the MYTP submission which summarizes the changes proposed by HIAL is replicated as under,

"...

The major changes compared to tariff approval from 1st control period are as under:

Issue	Past Treatment	New Treatment			
Till	Single Till	Shared Till based on directions			
		of MoCA			
Classification	Cargo Ground Handling and	Cargo Ground handling and			
of Revenue	fuel as AERO	Fuel treated as Non Aero			
		based on AG opinion enclosed.			
Cost of Equity	16%	24% based on studies			
		undertaken			
Cost of Debt	Rupee: 12.5%	Updated based on actual cost.			
	ECB: 8%				
Орех	Allowed 100% under single till	Allocated between aero and			
		non-aero based on 30%			
		Shared till			
		Considered Cargo GH and Fuel			
		as Non Aero			

Non	100% Cross subsidy	30% cross subsidy
Aeronautical	Forecast for 3 years	Actual Non Aeronautical based
Revenue		on audited numbers.
Tax	Based on Single Till	Based on Shared till- only for
		aeronautical revenue.

..."

True-up of Regulatory Till

3.3. The Authority has taken note of the HAIL's submission that all true-ups have been calculated in line with the directive from MoCA to the Authority regarding adoption of 30% Shared Till for HIAL, under Section 42(2) of the AERA Act (2008) vide letter F.No.AV.20036/778/2015-AD dated 11.06.2015.

True-up of Aero/Non-Aero Allocation

3.4. HIAL has explained that the asset allocation methodology followed for the tariff application is discussed in the 'Allocation Methodology' chapter of HIAL'S MYTP submission. An extract of HIAL's submission regarding the true up with respect to the Aero/Non-Aero Allocation is replicated as under,

" ...

- Assets for Cargo, Ground Handling and Fuel Farm are allocated as Non-Aeronautical Assets.
- AS 11 assets arising from exchange rate fluctuations are included in RAB for true-up.
- The RAB with the updated allocation mix is provided as per concept document.

..."

True-up of Regulatory Asset Base

3.5. As per HIAL's submission to the Authority, the RAB has been recalculated in line with the previous notes based on aero/non-aero allocation of the RAB and capitalization of future capex. HIAL further submitted that AS-11 assets accumulated due to forex fluctuations are included in the RAB submitted for tariff determination. The updated RAB proposed by HIAL as per its revised financial model date 28.01.2017 is as presented below,

"...

Amounts in Rs. crores	FY2012	FY2013	FY2014	FY2015	FY2016
As per Order No. 38	2041.01	1944.41	1863.62	1821.83	1799.99
As per Actuals (Aero RAB)	1735.92	1688.96	1640.27	1552.88	1490.97

,,,,

True-up of Cost of Debt

3.6. HIAL (referring to the Authority's tariff Order No. 38/2013-14) submitted that the Authority had decided to true-up the cost of debt with actual values (determined as weighted average rate of interest for the individual tranches of loan drawn within the Control Period). HIAL added that the interest rate true-up was subject to a ceiling of 12.5% p.a. for RTL and 8% p.a. for ECB exposures. HIAL further submitted that the Authority had decided to review the abovementioned ceilings, provided reasonable evidence be presented to the Authority. HIAL also admitted to a retrospective change in spread for ECBs; an extract of which is provided as below,

"...

Post-RBI approval dated March 20, 2014 to increase the spread from 1.75% to 2.75%, ECB ROI underwent a change. ECB Spread increased by 1% with effect from 1st July 2012. Accordingly, the effective rate of interest on ECB is now 8.73% p.a. Company paid an additional Interest of Rs 11.43 crs in the FY 2014 (USD 1.89 Mn converted at exchange rate of Rs 60.49/\$), paid retrospective from July 1st 2012 on account of increase of interest rate on ECB Loan from 7.68% to 8.73%.

RBI approval for increase in spread is enclosed along with the auditor certificate."

3.7. The Authority notes from HIAL's submission that any change in cost of debt affects the Fair Rate of Return ("FROR") and the difference in interest cost is recovered through the FROR which the airport operator is allowed on its RAB. Hence, HIAL states that the differential interest cost is getting trued up through FROR calculations.

True-up of Cost of Equity

3.8. Regarding true-up of HIAL's Cost of Equity, HIAL submitted (referring to the Authority's tariff Order No. 38/2013-14) that the Authority had decided to allow HIAL a post-tax return of 16% p.a. towards HIAL's Cost of Equity; for the purpose of calculation of FRoR. HIAL however, submitted that they have considered the post-tax Cost of Equity to be 24% p.a. in line with their previous filing and explanations given in the relevant chapter of the MYTP submission. Further HIAL has explained that the change in cost of equity is recovered through the FRoR which is allowed on the RAB.

True-up of Weighted Average Cost of Capital

- **3.9.** With respect to the Weighted Average Cost of Capital, HIAL submitted (referring to the Authority's tariff Order No. 38/2013-14) that the Authority had calculated FRoR of 10.01% for 1st Control Period. The Authority had further stated at that time that FRoR may be trued up for:
 - Changes in Equity and Reserves and Surplus (accumulated profits / retained earnings), and
 - Cost and level of debt as well as any other means of finance that HIAL may contract in this regard.
- **3.10.** The Authority notes from HIAL's submission that the cost of equity has been taken as 24% by HIAL for FRoR calculations. Subsequently, HIAL requested the Authority to reconsider its stand on this matter. The impact of FRoR true-up on tariff calculation as submitted by HIAL vide its revised financial model dated 28.01.2017 is given below,

"

Amounts	in Rs. crores		FY2012	FY2013	FY2014	FY2015	FY2016
I -	per Order No a*b)	o. 38	204.31	194.64	186.55	182.37	180.18
	RAB (a)		2041.01	1944.41	1863.62	1821.83	1799.99
	FRoR(b)		10.01%	10.01%	10.01%	10.01%	10.01%
As	per Aero Act	tuals (f=c*c	<i>200.60</i>	195.17	189.54	179.45	172.29
	RAB (c)		1735.92	1688.96	1640.27	1552.88	1490.97
	FRoR(d)		11.56%	11.56%	11.56%	11.56%	11.56%
Tru	True-Up (f-e)		-3.71	0.54	3.00	-2.92	-7.89

True-up of Depreciation

- **3.11.** The Authority notes from HIAL's submission regarding the truing up of depreciation that it has been re-calculated on the RAB consisting of Aeronautical Assets allocated on the basis of the Concept Note on allocation, considering eligibility under 30% Shared Till.
- **3.12.** HIAL explained vide its MYTP submission dated 25.03.2016 and 05.12.2016 (referring to the Authority's tariff Order No. 38/2013-14) that the Authority had decided to work out the difference between the amounts of depreciation calculated on the actual date of commissioning/disposal of assets and the amount of depreciation considering that the asset has been commissioned/disposed half-way through the Tariff Year. That difference was supposed to be adjusted at the end of the 1st Control Period considering future value of the differences for each year in 1st Control Period.
- 3.13. However, the Authority is in receipt of the audited financials of HIAL for FY 2013-14, FY 2014-15 and FY 2015-16. HIAL has submitted that the depreciation of individual assets has been calculated/adjusted based date of on commissioning/disposal and the true-up amount has been calculated accordingly. The Authority also notes that that effective depreciation rates have changed under the Companies Act 2013. Subsequently, HIAL has requested the Authority to true up based on the new rates. The updated calculations as submitted by HIAL as part of its revised financial model dated 28.01.2017 has been reproduced as below,

"...

Amounts in Rs. crores	FY2012	FY2013	FY2014	FY2015	FY2016
As per Order No. 38 (a)	110.62	113.24	113.95	97.11	92.73
As per Actuals (Aero) (b)	97.76	102.50	107.65	158.03	158.93
True-Up (b-a)	-12.86	-10.74	-6.30	60.92	66.20

True-up of Operating Expenses

3.14. HIAL submitted (referring to the Authority's tariff Order No. 38/2013-14), that the Authority had decided to true-up the following costs in case of Operating Expenses:

"..

- Mandated costs incurred due to directions issued by Regulatory Agencies like DGCA
- Costs on actuals related to electricity and water charges
- Operating expenses pertaining to the selected projects, proposed by HIAL to be undertaken under the Future Capital Expenditure based on evidential submissions may be HIAL.
- All statutory levies in the nature of fees, levies, taxes and other such charges directly imposed on and paid by HIAL.

..."

3.15. The Authority also notes HIAL's request to true up certain additional operating expenses:

"...

- Bank Charges The increased bank charges `are due to refinancing of the Rupee Term Loan, which was necessitated after Tariff Order No. 38 dated 24.02.2014 in order to manage cash flows and minimize impact on Airport operations.
- Bad Debts Written Off Bad debts of Kingfisher Airline (KFA) to the extent of Rs 12.33 Crores have been written off in the FY 2013-14. The amount was due from the Airlines towards various charges as it stopped operations. Despite various legal attempts made by HIAL to recover the amount, there was no hope of recovering of the amount from the airline as it was due for more than 2-3 years, hence the same was charged off in the FY 2013-14.

..."

3.16. Based on these inclusions, the true-up requested for Operating Expenses by HIAL in its revised tariff model submitted on 28.01.2017 is presented below,

"...

Amounts in Rs. crores	FY2012	FY2013	FY2014	FY2015	FY2016
As per Order No. 38 (d=a+b+c)	243.76	250.93	267.30	270.74	291.96
Eligibility with no true-up (a)	206.07	199.25	214.61	216.95	239.96

True-Up (h-d)	-42.28	-47.22	-43.61	-56.62	-62.82
	0.00	0.00	12.33	0.00	0.00
Bad Debts Written-Off	0.00	0.00	12.33	0.00	0.00
Bank Charges	2.78	1.71	2.65	8.67	4.50
Rates & Taxes	5.83	12.40	8.11	7.25	4.75
Utilities	15.83	23.32	20.40	18.99	22.18
True-Up Requested (Aero) (g)	24.44	37.43	43.5	34.92	31.43
CGF moved to Non-Aero (f)	-	-	-	-	-
Aero Eligibility (No True-Up) (e)	177.04	166.28	180.19	179.20	197.71
As per Actuals (h=e+f+g)	201.48	203.71	223.69	214.12	229.14
Bank Charges	2.98	1.81	1.81	1.81	1.81
Rates & Taxes	6.25	13.14	13.14	13.14	13.14
Utilities	15.89	23.48	23.48	23.48	20.48
True-Up Requested (c)	26.23	40.54	40.54	40.54	37.54
CGF (No True-Up) (b)	11.46	11.14	12.15	13.25	14.46

..."

True-up due to Taxation

3.17. HIAL submitted (referring to the Authority's tariff Order No. 38/2013-14), that the Authority had decided to consider taxes paid on actuals in each year of 1st Control Period. However, HIAL's submission states the above mentioned approach was under the single till mechanism. HIAL further stated that under the Shared Till mechanism, tax liability is supposed to be estimated on the basis of Aeronautical P&L after considering 30% non-aeronautical revenue share. Accordingly, the updated computations submitted by HIAL in its revised tariff model dated 28.01.2017 is as below,

"..

Amounts in Rs.		FY2012	FY2013	FY2014	FY2015	FY2016
С	rores					
	As per Order No. 38 (a)	8.96	30.99	33.96	0.00	0.00
	As per Actuals (Aero) (b)	0.00	12.58	9.42	0.00	0.00
	True-Up (b-a)	-8.96	-18.41	-24.54	0.00	0.00

..."

True-up due to Cross-Subsidy from Non-Aeronautical Revenues

- **3.18.** HIAL submitted (referring to the Authority's tariff Order No. 38/2013-14) that the Authority had decided that the cross subsidy from non-aeronautical revenue for HIAL in 1^{st} Control Period will be trued up at the time of tariff determination for 2^{nd} Control Period.
- **3.19.** HIAL's submission regarding the adjustments made to NAR cross-subsidy true-up (as mentioned in tariff Order No. 38/2013-14) are as under,
 - The Authority had erroneously considered Interest Income for crosssubsidization of ARR. This has been corrected and the resulting true-up is calculated.
 - The Authority had considered revenues from subsidiaries like Hotel and SEZ and from Commercial Property Development as Non-Aeronautical Revenues.
 These revenues have been excluded from cross-subsidization.
 - 30% of the audited Non-Aeronautical Revenues are considered in the tariff calculation for true-up considering CGF as non-aero revenue.
- **3.20.** True-up for non-aeronautical revenue (NAR) as per the revised tariff model submission by HIAL dated 28.01.2017 is as below,

"...

Amounts in Rs. crores	FY2012	FY2013	FY2014	FY2015	FY2016
As per Order No. 38 @ 100% (a)	156.65	186.23	164.37	184.48	206.77
Non-Aero Revenue	129.39	151.75	160.93	180.86	202.97
Interest Income	24.58	29.70	0.00	0.00	0.00
Revenue from Non-airport Land	2.68	4.78	3.44	3.62	3.80
As per actuals @ 30% (b)	62.10	68.20	74.97	82.83	91.40
Eligible Non-aeronautical Revenue	123.93	145.13	162.17	188.12	216.36
Cargo, Ground-handling, Fuel Farm Revenues	91.69	91.66	98.16	99.48	101.00
Interest Income (Exempt from Cross Subsidy)	0.00	0.00	0.00	0.00	0.00
Revenue from Subsidiaries(Exempt from Cross Subsidy)	0.00	0.00	0.00	0.00	0.00
True-Up (a-b)	94.55	118.03	89.40	101.65	115.37

..."

True-up due to Cargo, Ground Handling and Fuel Farm

3.21. The Authority notes from the HIAL's submission that the revenues from Cargo, Ground Handling and Fuel Farm have been considered as Non-Aeronautical Revenue streams and 30% of these revenue streams are considered towards cross-subsidization.

True-up of Aeronautical Revenue of 1st Control period

3.22. The Authority notes from the HIAL's submission the calculations in the revised tariff financial model submitted on 28.01.2017 regarding the truing up of Aeronautical Revenue of 1st Control period. The same has been presented below,

"...

Amounts in Rs. Crs	FY2012	FY2013	FY2014	FY2015	FY2016
As per Order No. 38 (c=a+b)	467.06	544.59	564.54	181.92	198.53
Aero Revenue (a)	376.25	454.31	473.70	84.79	95.85
CGF Revenue (b)	90.81	90.28	90.84	97.13	102.68
As per Actuals (d=e+f)	377.78	455.29	453.91	118.98	288.77
Aero Revenue (e)	377.78	455.29	453.91	118.98	288.77
CGF Revenue (f)	0.00	0.00	0.00	0.00	0.00
True-Up (c-d)	89.28	89.30	110.63	62.94	-90.24

True-up pertaining to Pre-Control Period

- **3.23.** In addition to the true-up for the five years of the 1st Control Period, HIAL, in its MYTP submission dated 25.03.2016 and revised MYTP submission dated 05.12.2016 has also proposed true-up of losses incurred by it during the pre-Control Period from April 2008 to March 2011. As per HIAL's submission,
 - "... The period between 23rd March 2008 till 31st March 2011 has been defined as pre-control period. The true up pertaining to 23rd March 2008 to 31st March 2011 is defined as pre-control period entitlements..."
- **3.24.** According to HIAL, the Authority in its Consultation Paper 09/2013-14 dated 21.05.2013 for the 1^{st} Control Period had estimated an amount of $^{\sim}$ Rs. 261 crore as the pre-control period entitlement for HIAL's tariff determination. Further, HIAL submitted

that Section 22 of the Consultation Paper computed this loss as ~Rs. 333 crore. However, as per the tariff Order No. 38/2013-14, the Authority decided to allow a pre-Control Period entitlement of Rs. 40.25 crore for the period from 01.09.2009 to 31.03.2011 towards determination of aeronautical tariff for 1st Control Period. As per HIAL, "This decision created immense burden…"

3.25. HIAL further submitted that it has recalculated the pre-Control Period entitlement for the period starting from 23.03.2008 till the beginning of the 1st Control Period on the basis of the following features:

"...

- Building blocks for entitlement is calculated on the basis of 30% shared till
- CGF is treated as non-regulated charges
- The assets allocation (including AS11 treatment for forex fluctuation) and FRoR has been recalculated.
- Expenses pertaining to aeronautical operations is considered as part of building blocks.
- The resultant entitlement till the beginning of Control Period 1 is considered as trued-up and brought to its present value by applying the relevant discount rate, i.e., FRoR for Control Period 2 which works out to Rs.806.13 crores.

..."

3.26. In this context, the revised computations submitted by HIAL in the tariff financial model submitted on 28.01.2017 has been provided below,

"...

Pre-Control Period Entitlement (Rs. crores)	FY2009	FY2010	FY2011
As per Order No. 38	0	39.6	-3.09
As per Actuals			
Return on Capital Employed	192.64	189.89	188.95
Total Expenses (incl. Concession Fee)	170.29	153.84	176.00
Depreciation	89.76	92.23	100.8
Tax	-	-	-

NAR Cross-Subsidization	-49.28	-50.33	-53.69
Aggregate Revenue Requirement	403.41	385.63	412.05
Less: Actual Aero Revenue	-194.81	-256.88	-324.78
Pre-Control Period Entitlement	208.6	128.75	87.27
True-Up for pre-Control Period	208.6	89.15	90.36
Discounting Period	-7.5	-6.5	-5.5
Discounting Factor	1.107	1.107	1.108
PV of True Up	462.66	178.68	163.67
True up for Pre Control Period	805.01		
Entitlements			

3.27. The Authority also notes the total True up amount submitted by HIAL in its tariff financial model submitted on 28.01.2017 as below,

Amounts (in Rs. crore)
805.01
769.05
1574.06

Authority's examination of HIAL's submission on True-up for the pre-Control Period and 1st Control Period

True-up of the Regulatory Till

- 3.28. The Authority had vide its Order No. 38/2013-14 decided to determine tariffs under a single till mechanism. However, the Authority proposes to true-up aeronautical tariffs under the 30% Shared Till mechanism; the rationale for which has been discussed in para 2.4 above.
- The aeronautical tariff charged at RGIA in 1st Control Period was notified 3.29. through Authority vide its Order No. 38/2013-14 dated 24.02.2014. Vide this order, the Authority had given certain provisions for true up of various items based on actual values of regulatory building blocks for the 1st Control Period, covering Regulatory Asset Base (RAB), Weighted average Cost of Capital (WACC), Depreciation, Operating Expenses, Taxation and Non-Aeronautical Revenue as per the audited financial results. The actual entitlement has been compared with the actual aeronautical revenue as per audited financials to arrive at the true-up value of over / under recovered ARR that are to be accounted for the tariff determination for the 2nd Control Period.

3.30. The Authority notes the true-ups which HIAL has requested for tariff computation for the 2nd Control Period. The Authority's examination of the HIAL's submission regarding the true-up is elaborated below.

True-up of Cost of Equity

3.31. Regarding true-up of HIAL's Cost of Equity, the Authority notes from HIAL's MYTP submission dated 05.12.2016 that HIAL has urged the Authority to reconsider its stand of calculating WACC based on Cost of Equity of 24%. However, the Authority proposes to maintain its stand and to consider the cost of equity at 16% for tariff determination. The rationale for keeping the Rate of Return at 16% has been fully documented in Paras 6.41 to 6.55 below.

True-up of Cost of Debt

3.32. As regards the cost of debt, the Authority proposes to maintain its stance as per the Decision No. 8 of Order No. 38/2013-14 and accordingly true-up the cost of debt for the 1st Control Period with audited financial results (determined as weighted average rate of interest for the individual tranches of loan drawn within the Control Period). With regards to the ECB foreign currency borrowings, the Authority proposes to stay with its current stand of not considering foreign exchange fluctuations towards cost of debt. However, the Authority proposes to consider foreign exchange losses as operating expenses and the position of the Authority on this matter is presented in paras 7.88 to 7.91 below. The Authority has also noted a recent exercise of debt restructuring undertaken by HIAL (paras 6.29 to 6.30 below), where HIAL has undertaken a Bond issue to replace its entire Rupee Term Loan and External Commercial Borrowing. Accordingly while the true-up of cost of debt for the 1st Control Period will be governed by the mechanism stated in paras 7.88 to 7.91 below, true-up of the next Control Periods will consider the Bond Issue (paras 6.29 to 6.30 below).

True-up of Weighted Average Cost of Capital

3.33. As per its Decision No. 10 of the HIAL's Tariff Order No. 38/2013-14, the Authority had calculated WACC at 10.01% and decided to true up the WACC on account of changes in equity, and reserves and surplus, adjustments to cost of debt (subject to the cap imposed on the cost of debt as per Decision No. 8 of the Order No. 38/2013-14) and additional means of finance that HIAL may contract. Thus, considering the audited

financial results for the period FY 2008-09 to FY 2015-16 and cost of equity at 16%, the Authority has computed the WACC to be as under,

Table 2: Weighted Average Cost of Capital considered by the Authority for true up for the 1st Control Period

Particulars (in Rs. crores)	2012	2013	2014	2015	2016
Debt (Average Balance)	1,756.0	1,668.0	1,565.8	1,480.4	1,474.7
IFL	315.1	315.1	315.1	315.1	315.1
Equity*	378.0	378.0	378.0	378.0	378.0
Debt (including IFL) + Equity	2,449.1	2,361.1	2,258.8	2,173.4	2,167.7
Cost of Debt (Kd)	10.86%	10.82%	11.04%	10.51%	10.19%
Cost of IFL	0.00%	0.00%	0.00%	0.00%	0.00%
Cost of Debt (Including IFL)	9.21%	9.10%	9.19%	8.67%	8.39%
Cost of Equity (Ke)	16.00%	16.00%	16.00%	16.00%	16.00%
Individual year Gearing (including debt as IFL) (G)	84.57%	83.99%	83.27%	82.61%	82.56%
	FY 2011-12 to FY 2015-16				
Weighted Average Gearing (WG)			83.44%		
Weighted Average Cost of Debt	0.020/				
(including cost of IFL) (Rd)	8.93%				
Cost of Equity (Re)	16.00%				
Fair Rate of Return	10.10%				

True-up of Aero/Non-Aero Allocation

- **3.34.** Under the Shared Till Mechanism, proper classification of assets becomes a necessity. Thus, with respect to the classification of assets and their inclusion and exclusion in the RAB with respect to the 1st Control Period, the Authority's proposals are presented in the following paragraphs.
 - 3.34.1. The Authority proposes to consider cargo, ground handling and fuel farm services as aeronautical and accordingly, assets pertaining to these services have been included in the calculation of RAB. The rationale for the proposed treatment of cargo, ground handling and fuel farm services has been discussed in para 5.40 and para 5.41.
 - 3.34.2. The Authority proposes to consider vehicle fuelling service as aeronautical for reasons discussed in para 5.43. As HIAL does not possess any assets pertaining to the service, it would not impact the RAB.

- 3.34.3. The Authority proposes to treat CUTE, CUSS and BRS IT as aeronautical services as these are considered part of the overall ground handling activity, which itself has been treated as an aeronautical service by the Authority. A discussion on the above treatment can be referred to in para 5.44 above.
- 3.34.4. Further, the Authority proposes to treat Cargo Satellite Building (CSB), as an aeronautical asset in line with the treatment of cargo services; as discussed in para 5.45.
- 3.34.5. The Authority proposes to consider Fixed Electrical Ground Power (FEGP) service, which is a part of the overall ground handling activity, as an aeronautical service in line with the treatment for ground handling services, as discussed in para 5.46.
- 3.34.6. As regards the project site office, the Authority proposes to clearly demarcate the office area between non-aeronautical and common areas. Further, the common area has been allocated between aeronautical and non-aeronautical in the ratio of gross block of assets. The rationale for this treatment has been explained in para 5.47. Further, due to HIAL's inability to provide a building-wise break-up of depreciation, the Authority has reallocated the depreciation for the project site office on a proportionate basis, considering their gross blocks and the gross block of aggregate assets.
- 3.34.7. The Authority proposes to restore the previous allocation of the New Office Building (NOB) between non-aeronautical and common in the ratio of 60:40 from FY 2008-09 to FY 2014-15. Subsequently, the Authority proposes to revise this ratio to 40:60 for FY 2015-16 based on increased usage of the office space by HIAL's staff (as discussed in para 5.48). Further the Authority proposes to allocate the common portion of the NOB, which is being used by HIAL's staff engaged in both aeronautical and non-aeronautical services, across all the years, in the ratio of gross block of aeronautical and non-aeronautical assets. In addition, similar to the project site office, the depreciation for the new office building has been reallocated on a proportionate basis, considering their gross blocks and the gross block of aggregate assets.

- **3.35.** The Authority proposes to treat the Advance Development Fund Grant (ADFG) of Rs. 107 crore as a grant, not to be included in the calculations of RAB. However, the Authority proposes deducting this amount from the aeronautical assets and aeronautical depreciation to calculate the RAB. The rationale for this treatment is that any inflow to an airport operator which is of the nature of a grant, should be used to finance aeronautical assets only.
- **3.36.** Further, as per Order No. 38/2013-14, the Authority had observed that "sourcing of funds is a conscious business decision of the airport operator" and accordingly decided to disallow the capitalization of adjusting for forex losses as per AS 11 and exclude it from the calculation of RAB. The Authority proposes to continue with its existing stance while truing up the RAB, as discussed in para 5.57. However, based on its rationale described in para 7.41.9, the Authority has allowed for the recovery of forex losses as an operating expense to the extent that the effective cost of borrowing in foreign currency (net of forex gains / losses) is not higher than the cost of RTLs. Computation of foreign exchange losses allowable to HIAL is as given below,

Table 3: Foreign exchange losses considered as Operating Expenses by the Authority

Recovery of Foreign Exchange Losses through	2009	2010	2011	2012	2013	2014	2015	2016	Aggregate for 1 st CP
Operating Expenses									
(in Rs. Crores) Principal Repayment of ECB Loan	0.00	0.00	28.54	30.39	34.28	39.21	55.32	58.71	217.90
Principal Repayment without Forex Loss / Gain	0.00	0.00	25.35	25.35	25.35	25.35	36.30	36.30	148.65
Foreign Exchange Losses on account of principal repayment	0.00	0.00	3.19	5.04	8.93	13.86	19.02	22.41	69.25
Interest Payment of ECB Loan	46.08	45.90	43.62	48.64	42.75	62.77	53.07	51.24	258.47
Interest Payment Without forex adjustment	39.36	39.47	38.71	36.87	34.77	40.88	34.70	31.59	178.81
Foreign Exchange Losses on account of interest payment	6.72	6.43	4.91	11.77	7.98	21.89	18.37	19.65	79.66
Foreign Exchange Gain	0.93	0.00	0.03	0.05	0.27	0.31	0.23	0.20	0.00
Foreign Exchange Loss (Net of Gains)	5.79	6.43	8.07	16.76	16.64	35.44	37.16	41.86	147.85
Cost of RTLs (Excluding IFL)	0.11	0.12	0.11	0.12	0.12	0.12	0.11	0.11	
Cost of ECB (Excluding Forex Loss)	0.08	0.08	0.08	0.08	0.08	0.10	0.09	0.09	

Difference in Costs	0.03	0.04	0.03	0.04	0.04	0.02	0.02	0.02	
5e.e	507.0	507.0	494.3	469.0	443.6	418.3	387.4	351.1	
	4	4	7	2	6	1	8	8	
Average ECB Loans									
Maximum Allowable forex	14.44	19.56	16.11	20.03	18.64	8.38	8.80	5.48	
Losses (A)									
	5.79	6.43	8.07	16.76	16.64	35.44	37.16	41.86	
Total Forex Losses (B)									
Recovery Allowed to HIAL	5.79	6.43	8.07	16.76	16.64	8.38	8.80	5.48	56.05
(Minimum of A & B)									

True up of the RAB

- **3.37.** With respect to the true up of the additional capital expenditure for FY 2015-16, the Authority undertook an examination of the actual amount capitalised in FY 2015-16 against the amounts approved in the Order No. 38/2013-14 for the 1st Control Period. The Authority's examination is presented as below,
- a. **5MW Solar Power Plant**: As discussed in para 5.58.1 (a), out of the Rs. 40 crore approved by the Authority, HIAL had capitalised Rs. 31.59 crore and the same is proposed to be approved by the Authority for true up.
- b. **Flood control and rainwater harvesting:** As discussed in para 5.58.1 (b), the Authority proposes to allow true up the entire amount of Rs. 20 crore which was approved in the 1st Control Period and has been capitalized in FY 2015-16. The Authority has also allowed to include the same for determination of RAB for FY 2015-16.
- c. **Fuel Farm:** The Authority proposes to true up the capex of Rs. 12 crore for FY 2014-15 as allowed in Order No. 38/2013-14 to be included in the aeronautical RAB, as per the rationale discussed in para 5.58.1 (c).
- d. **General Capex:** The Authority proposes to true up the general capital expenditure worth Rs. 18.84 crore incurred by HIAL out of the Rs. 59.70 crore capex amount approved in the Order No. 38/2013-14 for the 1st Control Period, as discussed in para 5.58.1 (d). Further, the Authority proposes to treat this as a common capital expenditure, which has been allocated between aeronautical and non-aeronautical RAB while truing up the RAB.
- e. **Employee Township:** The Authority has noted from HIAL's submission dated 05.12.2016 that an employee township worth Rs. 82.32 crore was to be capitalized

in FY 2015-16. As discussed in para 5.88 below, the Authority proposes to approve the capex as part of the RAB for the time being for true up but reserves the right to alter the treatment in the final tariff order for the 2nd Control Period based on the response received from HIAL in the future.

3.38. The Authority had vide its Order No. 38/2013-14 for the 1st Control Period decided to work out the difference between the values of Return on RAB calculated based on actual date of commissioning/disposal of assets and that calculated considering such asset has been commissioned/disposed half way through the tariff year. The Authority had further decided to adjust this difference at the end of the 1st Control Period while determining tariffs for the 2nd Control Period while considering the future value of these differences for each year of the 1st Control Period. Accordingly, the Authority proposes to compute RAB using the additions and deletions based on the actual financial results of HIAL, as certified by its auditor for such purpose.

True up of Depreciation

3.39. The Authority has carefully analysed the submissions of HIAL with respect to depreciation. As discussed in para 5.61, the Authority proposes to disallow the depreciation owing to forex losses as per AS 11 in the total depreciation to be allowed for true-up by the Authority.

The Authority is in receipt of the audited financials of HIAL for FY 2013-14, FY 2014-15 and FY 2015-16. The Authority proposes to approve HIAL's depreciation based on its audited financial statements, subject to adjustments on account of asset allocation and the principles of computing the Regulatory Asset Base. The Authority notes that HIAL's depreciation based on depreciation rates as per the new Companies Act 2013.

3.40. The updated RAB calculated in line with the proposed aero/non-aero allocation, capitalization of capex and depreciation is presented below:

Table 4: RAB considered by the Authority for true-up for 1st Control Period

Particulars (in Rs crores)	2012	2013	2014	2015	2016
Opening RAB	1877.02	1771.63	1696.21	1601.99	1470.96
Add: Additions to RAB	15.21	31.59	15.34	15.64	117.83
Less: Deletions to RAB	16.19	0.25	3.00	20.63	1.70
Less: Depreciation					
(including ADFG	105.88	106.12	106.73	139.19	153.38

Particulars (in Rs crores)	2012	2013	2014	2015	2016
adjustment					
Closing RAB	1771.63	1696.21	1601.99	1470.96	1445.12
RAB for Tariff					
Determination	1824.33	1733.92	1649.10	1536.48	1458.04

Note: The Closing RAB is computed after reallocation of the common gross block based on the asset allocation ratio for the current year.

True up of Operating Expenses

- **3.41.** Authority proposes to true-up the following elements of Operating Expenses in line with Decision No. 12 of the Order No. 38/2013-14,
 - Mandated costs incurred due to directions issued by Regulatory Agencies like DGCA.
 - Costs on actuals related to electricity and water charges.
 - Operating expenses pertaining to the selected projects, proposed by HIAL to be undertaken under the Future Capital Expenditure based on evidential submissions made by HIAL.
 - All statutory levies in the nature of fees, levies, taxes and other such charges by Central or State Government or local bodies, local taxes/levies, directly imposed on and paid by HIAL.
- **3.42.** In addition to the above, the Authority also proposes to true up the bank charges due to refinancing of the Rupee Term Loan and bad debts as explained below.
- **3.43.** The Authority notes HIAL's submission on bad debts worth Rs. 12.33 crore. It was observed by the Authority that while HIAL stated in its MYTP submission dated 05.12.2016 that the bad debts incurred by it were on account of Kingfisher Airlines, as per the auditor certificate submitted by HIAL on 05.04.2017, HIAL also suffered bad debts from other entities. The relevant extract from the auditor certificate has been reproduced below,

"...

Customer Name	Amount (in Rs crore)				
Kingfisher Airlines Limited	12.22				
Paramount Airways Private Limited	0.01				
TVS GMR Aviation Logistics Limited	0.10				

	Total	12.33
--	-------	-------

3.44. Thus, in addition to two airline customers, Kingfisher Airlines and Paramount Airways, HIAL was unable to recover dues worth Rs. 10 lakh from one of its own group companies, TVS GMR Aviation Logistics Limited. While the Authority proposes to allow the recovery of bad debts on account of default by HIAL's airline customers worth Rs. 12.23 crore, it proposes to disallow the bad debt arising from default by its group company since it is believed that HIAL would have had enough influence on its group companies to be able to extract the pending dues from them. The Authority observes that while airport operators may genuinely not be able to recover all their dues from their group companies, it would be unfair to pass on such a burden to passengers since such a practice may lead to misuse by airport operators in the future. Therefore, the Authority proposes to allow true up for bad debts only to the tune of Rs. 12.23 crore for FY 2013-14. In case any amount is received on this account at a later date it will be taken into consideration for determining ARR.

3.45. Based on these inclusions, Operating Expenses being considered for true up for the 1st Control Period is presented below,

Table 5: Operational expenses considered by the Authority for true up for the 1st Control Period

Operational expenses (in Rs. Crores)	2012	2013	2014	2015	2016	Aggregate 1st CP
Aero Eligibility (Items without						
True-Up including forex adj.)	204.66	193.66	199.74	201.03	219.62	1018.72
Utilities	15.89	23.48	20.68	19.23	22.42	101.69
Rates & Taxes	6.35	13.59	8.86	7.94	5.15	41.89
Bank Charges	3.04	1.88	2.91	9.50	4.89	22.22
Bad Debts Written-Off	0.00	0.00	12.23	0.00	0.00	12.23
Total	229.93	232.61	244.42	237.70	252.08	1196.75

True-up due to Taxation

3.46. The Authority's proposed treatment on taxation has been explained in para 8.4 below. The Authority proposes to allocate HIAL's taxes (as per the aggregate profit & loss account) between aeronautical and non-aeronautical components based on the

ratio of taxes as per both aeronautical and non-aeronautical profit & loss accounts.

Based on the above allocation method, HIAL's taxes for true-up are as given below,

Table 6: Computation of Corporate Tax considered by the Authority for true-up of the 1st Control Period

Computation of Tax for 1 st Control Period for true-up (in Rs. crores)	2012	2013	2014	2015	2016	Aggrega te 1st CP
Aeronautical PBT	-0.47	98.24	94.29	-221.35	-60.08	-89.37
Aeronautical tax (A)	0.00	20.59	19.76	0.00	0.00	40.35
Non-Aeronautical PBT	73.36	94.27	115.93	128.12	159.16	570.84
Non-Aeronautical Tax (B)	15.77	29.38	37.28	47.18	57.51	187.12
PBT for HIAL as a standalone entity	29.44	143.69	82.41	-191.37	20.09	84.26
Tax for HIAL as a standalone entity (C)	8.96	30.99	36.04	0.00	0.00	75.99
Ratio for allocation of taxes to be incurred by HIAL as a standalone entity {A/ (A+B)} = D	0%	41%	35%	0%	0%	
Aeronautical portion of the total tax to be considered for tariff determination { D*C}	0.00	12.77	12.49	0.00	0.00	

True-up of non-aeronautical revenue

- **3.47.** The Authority proposes to true-up the non-aeronautical revenue for HIAL for the 1st Control Period in line with Decision No. 14 of the Order No. 38/2013-14. Since, the Authority proposes to apply 30% shared till for determination of tariffs, 30% of non-aeronautical revenues shall be used to cross-subsidize aeronautical operations.
- **3.48.** In addition, the Authority, vide its proposal submitted in para 3.31.1 above, has excluded the revenues earned from cargo (including cargo satellite building), ground handling and fuel farm while computing cross subsidy on account of non-aeronautical revenue.
- 3.49. In addition, HIAL submitted that in Order No. 38/2013-14, the Authority had considered revenues from subsidiaries like Hotel and SEZ and from Commercial Property Development as Non-Aeronautical Revenues. HIAL however, submitted that these revenues have been excluded from cross-subsidization. The Authority however, proposes to treat revenues from commercial property development as non-aeronautical revenues. The Authority's position on this matter is discussed in paras 2.16 to 2.20 above.

- **3.50.** The Authority's treatment of interest and other income has been discussed in para 9.83 to 9.89 below. The Authority proposes to consider the same for the computation of true-up of non-aeronautical revenues for the 2nd Control Period.
- **3.51.** Accordingly, the non-aeronautical revenue considered by the Authority for true up is as under,

Table 7: Non-Aeronautical Revenues considered by the Authority under true-up for the 1st Control Period

Non-Aeronautical Revenues (in Rs. crores)	FY2012	FY2013	FY2014	FY2015	FY2016	Aggregate 1st CP
As per Order No. 38 @ 100%						
(a)	156.65	186.23	164.37	184.48	206.77	898.50
Non-Aero Revenue	129.39	151.75	160.93	180.86	202.97	825.90
Interest Income	24.58	29.70	0.00	0.00	0.00	54.28
Revenue from Non-airport						
Land	2.68	4.78	3.44	3.62	3.80	18.32
As per actuals @ 30% (b)	36.79	44.13	48.93	56.21	64.17	250.22
Eligible Non-aeronautical						
Revenue	127.74	153.21	169.88	195.18	222.82	868.83
True-Up (a-b)	119.86	142.10	115.44	128.27	142.60	648.28

3.52. The Authority has compared the target aeronautical revenue for HIAL against aeronautical revenues realised by HIAL as per its audited financial results of the 1st Control Period. The difference in the net present value of the target revenue (entitlement) and actual aeronautical revenue (realisation) is to be considered by the Authority as the amount eligible for true-up. The audited aeronautical revenues are based on the financial statements and auditor certificates submitted by HIAL. Accordingly, the true-up computed is as below,

Table 8: Total aeronautical revenue considered by the Authority under true-up for the 1st Control Period

Revenue from Aeronautical Charges (in Rs. crore)	2012	2013	2014	2015	2016	Aggregate 1st CP
Passenger Service Fee						
(Facilitation Component)	28.01	32.60	32.38	-0.03	15.60	108.56
Landing Charges	56.79	72.98	70.83	77.16	85.78	363.54
Parking Charges	1.21	1.58	1.58	1.72	1.74	7.83
User Development Fee	263.39	314.75	316.48	-0.09	142.76	1037.29

Common Infrastructure						
Charges	25.97	31.02	30.30	37.50	40.81	165.60
Revenue from Cargo						
Satellite Building	2.23	2.46	2.70	3.11	3.49	13.99
Dividend Income from						
Cargo subsidiary	1.04	5.98	4.17	5.20	6.40	22.79
Interest Income from Cargo						
subsidiary	0.00	0.00	0.00	0.01	0.02	0.03
Revenue from PSO	0.00	0.00	0.00	0.00	0.00	0.00
Revenue from NOB	0.00	0.00	0.00	0.00	0.00	0.00
Service Tax Adjustment	0.00	0.00	0.00	0.00	0.00	0.00
Rentals from ATC facilities	2.41	2.36	2.36	2.60	2.12	11.85
Revenue from Cargo	16.50	16.48	17.78	17.87	21.29	89.92
Revenue from Ground						
handling	6.10	7.41	8.69	9.67	10.08	41.95
Revenue from						
CUTE/CUSS/BRS IT services	0.00	0.00	0.00	0.00	0.00	0.00
Revenue from Fuel Farm	69.09	67.77	71.69	71.94	69.63	350.12
Revenue from Vehicle						
Fueling Services	0.42	0.41	0.42	0.45	0.47	2.16
Employee Township	0.00	0.00	0.00	0.00	0.63	0.63
Income from SFI Scrips	1.30	3.19	0.00	0.00	0.00	4.49
Total Aeronautical						
Revenue	474.46	558.99	559.37	227.11	400.82	2220.76

Table 9: Total true-up of aeronautical revenue considered by the Authority for the 1st Control Period

Amounts (in Rs. crore)	FY	FY	FY	FY	FY	Aggregate
Amounts (in Rs. crore)	2012	2013	2014	2015	2016	1st CP
As per Order No. 38 under						
Single Till	467.06	544.59	564.54	181.92	198.53	1956.64
Aeronautical Revenue	376.25	454.31	473.70	84.79	95.85	1484.90
Cargo, Ground handling						
and Fuel Farm	90.81	90.28	90.84	97.13	102.68	471.74
As per Actuals	474.46	558.99	559.37	227.11	400.82	2220.76
Aeronautical Revenue	379.50	458.89	454.35	119.31	289.91	1701.96
Cargo, Ground handling,						
Fuel Farm and cargo						
satellite building	94.96	100.10	105.03	107.80	110.92	518.81
True He					-	
True Up	-7.40	-14.40	5.17	-45.19	202.29	-264.12

True up of Pre-Control Period

- **3.53.** The Authority has examined HIAL's submissions for consideration of the pre-Control Period losses under the current MYTP for the 2nd Control Period and has presented its analysis in the following section.
- 3.54. The Authority notes HIAL's submission for considering a pre-Control Period entitlement for the period starting from the day of commencement of the airport's operations till the beginning of the 1st Control Period. The Authority observes that while HIAL had proposed the same duration for calculating the pre-Control Period entitlement in the tariff determination for the 1st Control Period, the Authority as per Decision 2.a under Section 5 of Order No. 38/2013-14 for the 1st Control Period had decided "to consider the Pre-Control Period deficit (losses) of Rs 40.25 crore, as on 01.04.2011, (for the period 01.09.2009 to 31.03.2011) towards determination of aeronautical tariff for the current Control Period commencing from 01.04.2011."
- 3.55. While the Authority had initially proposed to consider the "Pre-Control Period Loss (for the period 23.04.2008 to 31.03.2011) (inclusive of carrying costs) as of 31.03.2011 at Rs. 260.68 crores under single till and Rs. 447.14 crores under dual till" as per Proposal No. 1.a under section 4 of the Consultation Paper 09/2013-14 for the 1st Control Period, it decided to revise the pre-Control Period duration to nineteen months starting from September 2009 i.e. after the Authority came into existence. In response to concerns raised by stakeholders like IATA, which believed that the Authority had no legal jurisdiction over the period prior to its establishment, the Authority had stated that the financial position and concerns of the airport operator were already being considered by the government, which was functioning as the independent regulatory body in the absence of the Authority. Hence, the Authority decided to reconsider its original stance of considering a three-year pre-Control Period to finally only focussing on the period after 1.9.2009 till 31.3.2011 to ensure truing-up of any losses incurred by HIAL within this period. The relevant extracts stating the Authority's position in section 5.38 of Order No. 38/2013-14 for the 1st Control Period is reproduced below,

"Upon reading the responses of various stakeholders including that of AAI mentioned above, it appears to the Authority that some of the stakeholders have viewed the Authority's approach regarding consideration of Pre-Control Period losses as extending the Authority's

ambit to the period "prior to its establishment"....the powers and functions of the Authority were notified from 01.09.2009. The Authority feels that the financial position of the airport operator before 01.09.2009 were addressed by the then Regulator, namely Government and that the Authority should focus on the period after 01.09.2009 till 31.03.2011 to examine if the airport operator has incurred any deficit (loss) for this period."

3.56. The Authority maintains its position regarding pre-control period losses since it is of the view that it cannot determine tariffs for a period prior to its existence in order to arrive at the pre0control period entitlement of the operator. Hence, as the pre-Control Period is to be considered from 01.09.2009, the deficit (loss) for the entire year FY 2009-10 has been worked out by the Authority as per its approach of building blocks (discussed throughout this Consultation Paper but mainly due to adoption of shared till) to be Rs. 112.26 crore and deficit for FY 2010-11 to be Rs. 51.17 crore. Finally, the true-up so computed vis-à-vis the amounts allowed in Order No.38/2013-14 for the 1st Control Period is Rs. 42.39 crore for the seven months of FY 2009-10 and Rs. 54.26 crore for the entire FY 2010-11. The steps for computation are given in the table below,

Table 10: Pre-Control Period deficit (losses) in respect of HIAL as considered by the Authority for the 2nd Control Period

Pre-Control Period Losses (in Rs. Crore)	FY 2009-10	FY 2010-11	Aggregate Pre-CP
As per Order No. 38 under Single Till	39.6	-3.09	36.51
As per Actuals			
Return on Capital Employed	197.66	192.38	390.03
Total Expenses (incl. Concession Fee)	169.35	196.81	366.16
Depreciation	102.67	105.00	207.67
Tax	0.00	0.00	0.00
NAR Cross-Subsidization	-27.52	-30.99	-58.51
Average Revenue Requirement	442.15	463.19	905.34
Less: Actual Aero Revenue	-329.89	-412.02	-741.91
Annual Deficit (Pre-Control Period Entitlement)	112.26	51.17	163.43
True-Up (Considering 7 months in FY			
2009-10 and FY 2010-11)	42.39	54.26	96.65
Discounting Period	-8.3	-7.3	
PV of True-Up	93.70	109.02	202.72

Total True-Up as on 01-01-2018	202.72
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3.57. The Authority thus proposes a true-up of Rs. 501.37 crore as on 01.01.2018 towards determination of aeronautical tariff for the 2nd Control Period. The computation of the total true-up amount is presented below,

Table 11: True-up for the 1st Control Period to be considered by the Authority for Tariff Determination of the 2nd Control Period

Particulars	Amount (in Rs. crore)
True-up for Pre-Control Period	202.72
True-up for 1 st Control Period (Computed in the table below)	298.64
Total True-up	501.37

True-Up for 1st Control Period excluding Pre-CP losses (in Rs. crore)	2012	2013	2014	2015	2016	Aggregate for 1 st CP
Absolute Values						
RAB & FROR	-20.07	-19.53	-20.01	-27.20	-32.94	-119.75
Depreciation	-4.74	-7.12	-7.22	42.08	60.65	83.64
Eligible Opex	-13.83	-18.32	-22.88	-33.04	-39.88	-127.94
Taxation	-8.96	-18.22	-21.47	0.00	0.00	-48.65
Non-Aeronautical Revenue	119.86	142.10	115.44	128.27	142.60	648.28
Aeronautical Revenue	-7.40	-14.40	5.17	-45.19	- 202.29	-264.12
Total of Absolute Value	64.86	64.51	49.03	64.92	-71.86	171.45
Total True-Up Adjusted for		_	_	_		
Time Value	118.24	106.97	73.84	88.81	-89.23	298.64
Total value as on 01.01.2018	298.64					

Proposal No. 1. Regarding true-up of ARR for the 1st Control Period, based on the material before it and its analysis, the Authority proposes:

1.a. To consider the amount given in Table 11 above as the adjustment for trueup in respect of RGI Airport, Hyderabad for the 1st Control Period at the time of tariff determination for the 2nd Control Period.

4. Control Period

a HIAL Submission on Control Period

4.1. As per its initial MYTP submission dated 25.03.2016, HIAL submitted that it has considered the 2nd Control Period of 5 years from 01.04.2016 up to 31.03.2021. The relevant excerpt from HIAL's MYTP submission has been reproduced below,

"Control Period 2, considered for this filing, is a period of five years from FY2017 to FY2021. Necessary true-ups from the prior periods (i.e. from April 2008 to March 2016) including the impact of Shared Till on tariff determination have been taken to factor in the impact of the 30% shared till directive."

4.2. In its revised MYTP submission made on 05.12.2016, HIAL re-iterated its position as stated above.

b Authority's Examination of HIAL Submissions on Regulatory Period

4.3. The Authority proposes to follow the 2nd Control Period in respect of RGI Airport, Hyderabad from 01.04.2016 to 31.03.2021 in line with the Airport Guidelines and as per the submission made by HIAL.

Proposal No. 2. Regarding Control Period

- 2.a. Based on the material before it and its analysis, the Authority tentatively proposes:
 - i. To consider the 2nd Control Period in respect of determination of tariffs for aeronautical services in respect of RGI Airport, Hyderabad to be from 01.04.2016 up to 31.03.2021.

5. Regulatory Asset Base

a HIAL submission on Regulatory Asset Base (RAB)

Principles for determination of Regulatory Asset Base

5.1. According to its submissions dated 25.03.2016 and 05.12.2016, HIAL has mentioned that it has calculated RAB (representing aeronautical assets) using the principles given below,

```
"...
RAB at the start of a year/period (Opening RAB)
+
Projected/Actual Capital Investment (based on capitalization date)
-
Projected/Actual Disposals
-
Projected/Actual Depreciation
=
RAB at the end of a year/period (Closing RAB)
..."
"...
RAB for Tariff Determination = (Opening RAB + Closing RAB) / 2
"
```

5.2. Further, as per the submission, HIAL has computed RAB for each year under the 30% Shared Till mechanism, which includes only aeronautical assets. HIAL acknowledged that this is in contrast to the mechanism approved by the Authority as per Order No.38/2013-14 for the 1st Control Period, wherein both aeronautical and non-aeronautical assets have been included in the RAB under the Single Till Mechanism. In this regard, HIAL submitted that,

"In compliance with the MOCA issued directions u/s 42(2) of the AERA Act to adopt 30% Shared Till, we have included only the aeronautical assets in the RAB for the purpose of determination of ARR."

5.3. Further, HIAL also made the following submissions regarding the aeronautical RAB:

- "Aero RAB has been firmed up by taking actual aero asset additions and deletions, based on the auditor's certificates for the prior periods...
- Under Shared Till, the Aeronautical Assets capitalized in the relevant years are added to the RAB for Control Period 2...
- Depreciation is based on the revised depreciation rates as per the Companies Act 2013. Only depreciation on the Aeronautical Asset Base has been considered in the RAB calculations."

Allocation of assets

5.4. Also, HIAL in its MYTP submissions dated 25.03.2016 and 05.12.2016, has segregated the RAB for aeronautical and non-aeronautical assets. In this regard, HIAL submitted a Concept Note as part of its MYTP submission (Annexure 3), which highlights the allocation methodology adopted by HIAL for asset classification into aeronautical, non-aeronautical and common assets. As per the note, HIAL has relied on the concept of "Regulated Charges" as mentioned in clause 10.2 and Schedule 6 of the Concession Agreement executed between the Government of India, Ministry of Civil Aviation and HIAL on 20.12.2004. An extract of the abovementioned Concept Note pertaining to aeronautical assets submitted by HIAL is as given below,

"...

The aeronautical assets are assumed to be those assets which are necessary or required for providing the below mentioned aeronautical services at the Airport and all such assets that the Company may procure in accordance with the written directions of Gol for or in relation to provision of any of the Reserved Activities including intangible assets and other assets which are directly related to the aeronautical services.

The following are the identified aeronautical services:

- Aerodrome Control Services
- Airfield
- Airfield lighting and associated works
- Runways
- Taxiways
- Apron and aircraft parking area

- Remote parking stands
- Air traffic Control Building and associated assets
- Special Handling Terminal HAJ
- Airport Seating
- Airside access roads
- Connectivity roads
- Lifts, escalators and elevators
- Flight information and public address system
- Compound wall
- Traffic forecourts
- Rescue and Firefighting Service
- Air field crash fire Service
- Bird Scaring system
- Passenger Boarding Bridges
- Baggage Handling system and Hold baggage In line x-ray screening
- Visual docking and Guidance System
- Operational vehicle like rubber removal machine, runway Sweepers, Golf carts, trolley pulling scooters
- Airport Operation and Control Centre
- Airport Operational database
- Airport Community Network
- Airport Management Administrative Network
- Other IT system for airport operation
- Surface Drainage
- Plumbing and Sewerage system
- Water and Sewerage Treatment Facilities
- Signage
- Waste disposal
- Information desks
- Emergency Services
- General maintenance and upkeep of the Airport
- Customs and Immigration halls
- VVIP and VIP lounges
- Public Transport Centre
- Facilities for the disabled and other special needs people
- Any other service and facility deemed to be necessary for the safe and efficient operation of the Airport

5.5. Similarly, the non-aeronautical assets identified by HIAL are those that have been identified as necessary for performing non-aeronautical services at the airport. An indicative list of non-aeronautical services provided by HIAL in the abovementioned Concept Note has been reproduced below:

"...

- Car park, Airline lounges and other commercial lounges
- General retail facilities
- Vending machine
- Vehicle Fueling services
- Kirby Sheds Temporary office Spaces
- Flight catering services
- Duty Free
- Ground Handling Services including Ground Power Unit and CUTE, CUSS & BRS Services
- Cargo Handling Services
- Fuel Farm Services
- Porter service
- Any other service or facility other than aeronautical services
- **5.6.** Further, HIAL submitted vide the abovementioned Concept Note that all those assets that are not identifiable/categorized into either aeronautical or non-aeronautical categories have been classified by HIAL as common assets. An indicative list submitted by HIAL has been reproduced below,

"...

- Passenger Terminal Building
- Heating Ventilation and Air Conditioning system for PTB
- Office Building (including Furniture & Fixtures) and associated works
- Quarters for outside Security Personnel
- Common Hardware, software and Communication System
- Central Stores Building

..."

5.7. HIAL also submitted that these common assets have subsequently been allocated into aeronautical and non-aeronautical components in the manner given below,

"..

S. No.	Description of the Asset	Basis of Apportionment
1.	Passenger Terminal Building (PTB) - Area allotted for Airline Lounges and other commercial lounges, General retail facilities, Office spaces etc is treated as non-aero asset and	Area of Terminal Building used for aeronautical and non-aeronautical services (i.e. 84.6% and 15.4% respectively)

	remaining area as aero asset.	
2.	Heating Ventilation and Air Conditioning system for Passenger Terminal Building. In the ratio of PTB area classified in to aero and non-aero.	Area of Terminal Building used for aeronautical and non-aeronautical (i.e. 84.6% and 15.4%)
3.	Site Office Building (including Furniture & Fixtures) and associated works. Common area is allocated in the ratio of total aero and non-aero assets.	aero and non-aero assets ratio Any incidental income recovered as rent from the available space at the Site Office Building, pending its utilization for common airport activities, to be netted off against total operating expenses.
4.	New Office Building (Including Furniture & Fixtures) and associated works	aero and non-aero assets ratio Any incidental income recovered as rent from the available space at the New Office Building, pending its utilization for common airport activities, to be netted off against total operating expenses.
5.	Quarters for outside Security Personnel	aero & non-aero assets ratio
6.	Common Hardware, software and Communication System	aero & non-aero assets ratio
7.	Central Stores Building	aero & non-aero assets ratio

5.8. In addition, HIAL submitted that it has revised the classification of certain categories of assets compared to their allocation in the 1st Control Period. The following table summarizing the changes along with the reasons for the same has been reproduced from HIAL's submission dated October 14, 2015,

"...

Previous allocation	Revised allocation	Reasons for change
Considered	CIA includes Aero	Common Infrastructure Charges (CIC)
as Aero	Bridge, VDGS, BHS,	are proposed to be discontinued from
	CUTE, CUSS and BRS.	1st April 2016 (or from the date of the
		implementation of the tariff order for
	CUTE, CUSS and BRS	CP2, whichever is later) and merged
	are considered as	into UDF.
	Non-Aero.	
	allocation Considered	allocation Considered as Aero Bridge, VDGS, BHS, CUTE, CUSS and BRS. CUTE, CUSS and BRS are considered as

CUTE, CUSS, BRS and other technology enabled solutions	Considered as Aero as it was forming part of composite services as above	Considered as Non Aero (prospectively w.e.f 1 st April 2016) post separate out of CUTE, CUSS and BRS assets.	CUTE, CUSS and BRS assets are used for providing common Airport Passenger IT Services and are regarded as part of Ground handling activities. Hence, these services (CUTE, CUSS BRS and other technology enabled solutions) are also treated as non-aeronautical in line with the treatment of Ground Handing Assets
Cargo Satellite Building (CSB)	Considered as Non Aero	Considered as Non Airport Activity and not used for allocation into aero and non aero.	As per schedule 3 - Part 2 of Concession Agreement dated 20 th December 2004 executed between Government of India (GOI), Ministry of Civil Aviation (MOCA) and GMR Hyderabad International Airport Limited (GHIAL), Offices for freight consolidators/forwarders or agents at cargo complex are classified as landside non airport activities. Cargo Satellite building being a rented office space for freight forwarders and Cargo Agents is a Non Airport Asset
Fixed Electrical Ground Power (FEGP)	Considered as Aero	Considered as Non Aero	and is not considered for the purpose of asset allocation. FFGP services can be availed by the Airlines to use electric ground power in place of APU (Auxiliary power unit) or a GPU (diesel generator) and is part of ground handling activity. Hence, FEGP assets are also treated as non-aeronautical in line with the
New Office Building (NOB)	Considered as Non-aero and Common in the ratio of 60:40	Considered as Common asset	treatment of Ground Handling Assets. NOB has total 5 floors. Currently 3 floors are being utilised by employees working for Airport. The balance available floor area at the NOB will be used for the increased manpower in the coming years. Current manpower strength is around 500 and is going to double in the next 4-5 years on account of the planned expansion of the airport. Any incidental income recovered as rent from the available space at the NOB, pending its utilisation for

			common airport activities, has been netted off against total operating expenses.
Project Site Office	Considered as Non-aero	Considered as Common	Site office building also houses the common assets like IT room, Record room, Staff canteen, parking, auditorium, Store rooms and training halls. Hence, it is allocated as a common asset instead of non-aero. Any incidental income recovered as rent from the available space at the project site, pending its utilisation for common airport activities, has been netted off against total operating expenses.
PTB	PTB Area (Sq. Mts) as on 2011 Considered in the ratio of 85.5:14.5 as Aero and non-aero	PTB Area (Sq. Mts) as on 2015 Considered in the ratio of 84.6:15.4 as Aero and non-aero	Previous allocation was based on the area statement for the year 2011. This has been changed to aero- non aero area statement for the year 2015 due to additions in commercial area.
Landscapin g	Common	Aero	Landscaping is part of the overall airport infrastructure and intended to enhance the passenger experience. Landscaping along the main access road, rotaries and inside the airport premise is primarily used by the passengers. Hence, the cost of assets pertaining to landscaping is treated as aero.

"

Adjustments to Regulatory Asset Base

5.9. Further, HIAL has stated that no returns or depreciation has been claimed on the assets funded by the Advance Development Fund Grant (ADFG). An extract of HIAL's MYTP submission in this regard has been reproduced below,

"No returns or depreciation has been claimed on the assets funded by the ADFG. An adjustment has been made to deduct the amount from the RAB as well as from depreciation for tariff determination."

5.10. In addition, HIAL submitted that they have treated foreign exchange losses as per the provisions of Accounting Standard 11 issued by the Institute of Chartered

Accountants of India. Accordingly, HIAL submitted that it has considered additions to assets on account of forex losses owing to rupee depreciation till the 1st Control Period ending on FY 2015-16.

Additions to Regulatory Asset Base: Future Capital Expenditure

5.11. As per its initial submission dated 25.03.2016 and revised submission dated 05.12.2016 for the 2nd Control Period, HIAL has proposed to incur future capital expenditure under two main heads: Capital Expenditure for FY 2015-16 and Capital Expenditure for the 2nd Control Period.

Capital Expenditure for FY 2015-16

- **5.12.** Capital Expenditure for FY 2015-16: HIAL proposed to incur capital expenditure and general expenditure in FY 2015-16 which had been approved by the Authority in its Order No. 38/2013-14 for the 1st Control Period. Details of these capex items, submitted by HIAL, have been provided below.
- 5.13. Capital Expenditure for FY 2015-16: Regarding the capital expenditure to be incurred for FY 2015-16, HIAL has further classified this under two categories, namely future capex including general capital expenditure approved by the Authority in Order No.38/2013-14, and the future capex approved in the Airports User Consultative Committee (AUCC) meeting. Out of the amount of Rs 135.20 crore approved by the Authority in the Order No. 38/2013-14 for the 1st Control Period, HIAL in its submission dated 05.12.2016 proposed to capitalize Rs. 75.10 crore in FY 2015-16. An extract of the abovementioned submission on the capitalizations proposed by HIAL for FY 2015-16 has been reproduced in the table below:

"...

Capex components proposed to be capitalized in FY2016 (Figures in Rs. crores)	Amount Approved in Order No.38 (in Rs crore)	Additional Amount to be Capitalized in FY16 (in Rs crore)
5 MW Solar Power Plant	40.00	31.59
Flood Control and Rainwater Harvesting (Reservoir)	20.00	20.00
Fuel Farm	15.50	4.67
General capex	59.70	18.84
Total	135.20	75.10

5.14. General capital expenditure for FY 2015-16: With respect to the general capital expenditure, HIAL submitted that these expenses needed to be incurred on account of rehabilitation works at the airport and did not require user consultations owing to them being small to medium sized items costing lower than the threshold prescribed under the Authority's (AUCC) guidelines. It submitted that,

"RGIA has various facilities that were developed during the construction phase and which now need to be reconstructed/rehabilitated to continue their proper usage. Being small to medium sized items, these capital expenditure items do not call for user consultation under the extant AERA quidelines."

- **5.15.** Further, HIAL submitted that on account of liquidity issues faced by the HIAL due to the Authority's Order No.38/2013-14 (wherein the UDF was reduced to zero), some of the capital expenditures planned for the 1st Control Period had to be deferred in order to save cash. HIAL, however, planned to undertake these deferred capital expenditures in FY 2015-16 and FY 2016-17.
- **5.16.** Employee Township: With respect to the additional capital expenditure over and above the capex approved in Order No. 38/2013-14 for the 1st Control Period, HIAL submitted that it had acquired an employee township, worth Rs. 82.32 crore, located in close proximity to the airport for housing the staff needed for handling critical airport operations, airport fire safety services, security services, etc. HIAL stated that since the airport was located outside the city, having an employee township closer to the airport would improve the response time in case of an emergency. In this context, HIAL submitted,

"Earlier, the space was taken on rent for such staff as accommodation was not built near the airport. Hence to smoothen the airport operations, in FY 2016, GHIAL acquired an integrated township located close to the airport, outside the airport boundary. This township is constructed on 8.2 acres of land and consists of 128 residential units constructed in six blocks."

5.17. HIAL also submitted that although the valuation of the property done by valuers empanelled with State Bank of India and other banks assessed the township at Rs. 96.74 crore, an all-inclusive price of Rs. 82.32 crore was finalized by HIAL following which the asset was capitalized on 17.06.2015. An extract of HIAL's submission on the above has been reproduced below,

"Prior to the acquisition, GHIAL engaged the services of an approved valuer empanelled with State Bank of India and other Banks to carry out a detailed valuation of the property. The valuer carried out a detailed evaluation of the prevalent market prices of various properties built to similar specifications and located within a range of 15-20 kms from the township. The report submitted thereafter assessed the township at a value of Rs. 96.74 crores.

However, GHIAL negotiated further and finalized the all-inclusive price at Rs. 82.32 crores. The State Government approved the purchase of the Employee Township in May 2015. Subsequently, the asset was capitalized on 17th June 2015."

- **5.18.** HIAL further submitted that it presented the capital expenditure on the employee township in the Airports User Consultative Committee meeting, which was held on 16.09.2015.
- **5.19.** Finally, HIAL submitted a total capital expenditure worth Rs. 165.30 crore for FY 2015-16, which included those approved by the Authority (including general capex) and the additional capex which HIAL had presented in its AUCC Meeting, were funded through additional loans taken from banks and internal accruals.
- **5.20.** Further HIAL highlighted in its submission that there could be some deviations in the projected amounts due to the nature of general capex. Consequently, HIAL has requested the Authority for complete true-up of approved projects and general capex incurred by HIAL in the 1st Control Period.
- **5.21.** Finally, in its response to queries dated 14.02.2017, HIAL submitted that it had revised the tariff financial model with the actual capex for FY 2015-16 and any "residual CP1 capex moved to FY 17." In this regard, as per HIAL's revised tariff model

submission, the Authority observed that the proposed capitalization of fuel farm worth Rs. 4.67 crore has been deferred to FY 2016-17.

5.22. Further, vide its submissions dated 28.1.2017, HIAL furnished auditor's certificate dated 15.11.2016, which contained HIAL's actual capitalization in the financial year FY 2015-16. An extract of the certificate which segregates HIAL's capitalizations into aeronautical and non-aeronautical assets is as reproduced below,

"...

Particulars	April 1, 2015 to March 31, 2016					
	Aero	Non Aero	Total			
Buildings	18.72	0.04	18.76			
Buildings on Freehold land	62.31	0.00	62.31			
Electrical Installations	8.40	0.24	8.64			
Furniture and Fixtures	1.16	0.05	1.21			
Free hold land	16.13	0.00	16.13			
Improvements to Leasehold	0.00	0.00	0.00			
Land						
IT Systems	4.37	0.51	4.88			
Office Equipment	0.16	0.01	0.17			
Other Roads	2.43	0.00	2.43			
Plant and Machinery	24.54	0.07	24.61			
Runways	0.00	0.00	0.00			
Software	0.02	0.00	0.02			
Vehicles	0.16	0.03	0.19			
Forex Loss Adjustment as per AS	27.32	5.41	32.73			
11						
Total	165.72	6.36	172.08			

..."

5.23. Further, vide their responses dated 05.04.2017, HIAL submitted the breakup of amounts capitalized between FY 2013-14 to FY 2015-16; excluding foreign exchange losses. An extract of HIAL's submission in this regard has been reproduced below,

"..

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
a) Sustainability through Renewable Energy (5 MW)	-	-	29.98
b) Employee Township	-	-	82.32
c) Flood Control & Rainwater Harvesting	-	-	16.57

d) Capitalization of Fixed Assets other than above (d)=(e) -(a+b+c)	16.33	18.54*	10.48
Grand Total (e)#	16.33	18.54	139.35

Capital Expenditure for the 2nd Control Period

5.24. Capex for the 2nd Control Period: As per HIAL's initial MYTP submission dated 25.03.2016 and its revised submission dated 05.12.2016, the capital expenditures planned by HIAL for the 2nd Control Period include items like terminal expansion, airside improvement, additional solar power generation capacity and general maintenance. The details of each capex item proposed by HIAL have been provided below.

Expansion Capex - Approved in AUCC

5.25. HIAL submitted that the passenger volume at the airport increased from 6.2 million passengers per annum (MPPA) in FY 2008-09 and had surpassed 12 MPPA by FY 2015-16. It further submitted that the airport had already begun experiencing bottlenecks at different touchpoints. It stated that while several immediate measures were being taken to remove constraints, it has proposed capacity expansion during the 2nd Control Period to solve the problem in the long run. In this regard, an extract from HIAL's submission is reproduced below,

"... the long term solution lies in capacity expansion, hence GHIAL is embarking on capacity expansion to cater to passenger throughput to 20 MMPA in Control Period 2. The estimated hard cost for the expansion is Rs. 1989 crores. The breakup of the cost components is provided below.

	Projects Identified	Capex (Rs. crores)	Basis of Allocation
1	Additional Four-Lane Forecourt Ramp	108.50	Aero
2	Terminal Expansion including Weather	1008.05	Common
	Proofing of Airport Forecourt and Main		
	Terminal Building Expansion		
3	Pier Expansion	742.65	Common
4	Apron Development	129.84	Aero
	Sub -total	1989.04	
5	Financing Allowance	235.24	
	Total	2224.28	

5.26. Additionally, HIAL also highlighted that while cost estimates are based on historical data, current market prices and expert judgment, the contracts related to construction, purchase of equipment, finishing works etc., are proposed to be awarded through a competitive bidding process and might change during the course of time. Hence, HIAL has requested the Authority to true-up the actual capital expenditures incurred during the 2nd Control Period for tariff determination in the subsequent Control Period.

Other Assets - Runways & Taxiways

5.27. In its MYTP submission dated 25.03.2016 and revised submission dated 05.12.2016, HIAL submitted that all its runways and taxiways including apron service roads, which were constructed in November 2007, have undergone operational wear and tear and would require re-carpeting in the 2nd Control Period. As per HIAL's submission,

"Main Runway (09R27L), Secondary Runway (09L27R) and all Taxiways including Apron service roads at RGIA were completed in November 2007. The asset is in its 8th year of usage and due to centrifugal forces, increases in aircraft movement, operational wear and tear, fatigue and pushback operations of aircraft from apron stands to respective taxiways have led to a decrease in the runway friction coefficient. Oxidation of the asphalt binder on the runway is also a common phenomenon and restricts life of the top layer to 5 years.

It is critical to undertake re-carpeting of the Main Runway (09R27L), Secondary Runway (09L27R) and all Taxiways including Apron service roads in CP2. Total cost for re-carpeting is estimated at Rs. 103.59 crores."

5.28. HIAL has submitted a planned phasing of the capital expenditure to be incurred for capacity expansion, which has been provided below,

"…

Projects (Amounts in Rs. crores)	FY17	FY18	FY19	FY20	FY21	Total
----------------------------------	------	------	------	------	------	-------

Terminal Expansion						
Additional Four-lane	43.40	65.10	-	-	-	108.50
Ramp						
Terminal +	105.94	370.64	495.48	35.99	=	1008.05
Forecourt Expansion						
Pier Expansion	36.22	287.45	390.46	28.51	=	742.65
Airside Improvements						
Apron Development	ı	54.10	75.74	=	=	129.84
Runway Re-	19.77	33.26	25.28	25.28	-	103.59
Carpeting						
Hard Cost	205.33	810.55	986.96	89.79	=	2092.63
Financing Allowance	6.74	52.07	110.63	65.81	=	235.24
Total Capital	212.07	862.62	1097.59	155.60	-	2327.87
Expenditure						
Capitalization	84.93	154.59	764.61	1323.73	=	2327.87
Schedule						

5.29. Further, HIAL has proposed to fund the expansion projects, except runway recarpeting and general capex, through debt and internal accruals in the ratio of 60:40. Meanwhile, runway re-carpeting and general capex are proposed to be funded through internal accruals to the extent available with HIAL. HIAL submitted the funding composition for the 2nd Control Period as below:

"…

Funding (in Rs. crores)	FY2017	FY2018	FY2019	FY2020	FY2021	Total
Debt	115.38	612.99	1256.38	1334.57	1334.57	1334.57
Internal Accruals	96.69	461.69	915.89	993.30	993.30	993.30
Total	212.07	1074.68	2172.27	2327.87	2327.87	2327.87

..."

5.30. Also, HIAL submitted that the capital expenditures on capacity expansion and re-carpeting of runways and taxiways were presented for user consultation in the AUCC meeting conducted on 16.09.2015. According to the submission, HIAL states that since Hyderabad airport falls within the category of 'major airport' as per the definition provided in the AERA Act, 2008, it had to follow a user consultation process specified by the Authority for any significant capital expenditure, which exceeds 5% of the RAB or Rs. 50 crore (whichever is lower), to be incurred at the airport.

5.31. Finally, HIAL submitted that since there were no objections raised to the proposed plans up to six months after the AUCC meeting, the requirement of seeking approval from the AUCC for investments in the 2nd Control Period was fulfilled.

CISF Township

5.32. In addition, HIAL submitted that it had constructed a residential township for the Central Industrial Security Force (CISF) personnel deployed at the airport. In this regard, HIAL submitted that,

"GHIAL constructed a residential township for CISF personnel deployed at the airport based on advice from the MHA and the SOP issued by MoCA dated 6th March 2002. On completion of the project, the cost of township and land amounting to Rs. 69.92 crores was capitalized in the books of the PSF (SC) Fund under intimation to MoCA."

- 5.33. HIAL further submitted that after completion of the project, MoCA issued Order No. AV 13024/03/2011-AS (Pt. 1) dated 18.02.2014 directing airport operators to reverse all the expenses incurred towards procurement and maintenance of security systems/equipment, and on creation of fixed assets using funds from the PSF (SC) escrow account.
- **5.34.** As per HIAL's submission, it moved court challenging MoCA's abovementioned Order; following which the High Court at Hyderabad has stayed the Order for the time being. In this regard, HIAL submitted that,

"The Hon'ble High Court, vide its order dated 3rd March 2014 followed by further clarifications dated 28th April 2014 and 24th December 2014, stayed the MoCA order with an undertaking that, in the event the decision of the writ petition goes against GHIAL, it would reverse the expenditure from PSF (SC)."

5.35. With the matter still pending in the High Court, HIAL has submitted that it has not included the capital and maintenance costs associated with the township for tariff determination for the 2nd Control Period with the caveat that in case of an adverse order from the High Court, it would amend the tariff application.

General Maintenance Capex

5.36. Further, HIAL has submitted that a general capital expenditure to the tune of Rs 269.79 crore will have to be incurred during the 2nd Control Period on account of general maintenance of the airport, in addition to undertaking the capital expenditures deferred to conserve cash due to Order No.38/2013-14 for the 1st Control Period in FY 2016-17. HIAL's year-wise projections for the general maintenance capex to be incurred in the 2nd Control Period is reproduced below,

"...

General	Cape: rores		FY17	FY18	FY19	FY20	FY21	Total
Planned	for	Control	126.59	61.05	34.13	25.52	22.49	269.79
Period 2								

..."

- **5.37.** Additionally, HIAL submitted that since general capex consists of several items, segregating them into aero, non-aero and common assets becomes cumbersome. As a result, a historical asset ratio has been applied by HIAL for segregating the assets into aero and non-aero. HIAL further submitted that since the individual items classified under general maintenance expenses, which will be undertaken separately, do not exceed Rs. 50 crore, they were not required to be presented for stakeholder consultation.
- **5.38.** Finally, HIAL submitted that these expenses will be funded through internal accruals to the extent available with HIAL and in case of a shortage, debt may be raised by HIAL to fund the remaining expenditures.

Additional 8MW solar plant

- **5.39.** Finally as per HIAL's submission, the airport plans to add capacity for the generation of solar power in phases to be used at the airport as part of its green initiative. Following the operationalisation of a 5MW captive power plant since October 2015 to meet the current minimum load at the airport, HIAL has proposed the addition of an 8MW captive generation capacity to the existing solar power generation capacity in FY 2016-17 at a cost of Rs. 44 crore as part of the second phase of the project.
- **5.40.** Summarizing the overall capital expenditure proposed for the 2nd Control Period, HIAL submitted the following table,

"...

Project (Amount in	FY17	FY18	FY19	FY20	FY21	Total
Rs. crores)						
Expansion & Runway	212.07	862.62	1097.59	155.60	=	2327.87
Re-carpeting						
8MW Solar Power	44.00	-	-	-	=	44.00
Plant						
General Capex	126.59	61.05	34.13	25.52	22.49	269.79
Total	382.66	923.67	1131.72	181.12	22.49	2641.66

5.41. Summarizing the abovementioned capital expenditure, HIAL submitted the following,

Table 12: Capital Expenditure Schedule submitted by HIAL for the 2nd Control Period

Capex Projections	FY17	FY18	FY19	FY20	FY21
(in Rs. crores)					
Approved in AUCC	•		•		
Expansion + Runway Re-	212.07	862.62	1097.59	155.60	-
carpeting					
Sub-Total (A)	212.07	862.62	1097.59	155.60	-
User Consultation not requi	red		•		
Solar Power	44.00	-	-	-	-
General Capex for CP2	126.59	61.05	34.13	25.52	22.49
Sub-Total (B)	170.59	61.05	34.13	25.52	22.49
Total Capex (A + B)	382.66	923.67	1131.72	181.12	22.49
Capitalization Schedule	255.52	215.65	798.74	1349.26	22.49

5.42. Furthermore, the capitalization schedule was categorized by HIAL into aeronautical and non-aeronautical. A summary of the same is as given below,

Table 13: Capital Expenditure Schedule for the 2nd Control Period classified between aeronautical and non-aeronautical

Capitalization (in Rs. crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Aggregate 2 nd CP
Aeronautical	224.41	205.48	701.57	1145.05	18.75	2295.26
Non-Aeronautical	31.11	10.17	97.18	204.21	3.74	346.41
Total	255.52	215.65	798.74	1349.26	22.49	2641.66

Depreciation

5.43. As per its initial MYTP submission dated 25.03.2016 and its revised submission dated 05.12.2016, HIAL stated that it has considered depreciation rates as per provisions of Part-C of Schedule-II of the Companies Act, 2013 after it came into effect on 1.04.2014. HIAL also stated that no depreciation has been charged on assets

funded from ADFG. The relevant excerpts from the submission in this regard have been reproduced below,

"Capital cost of the airport assets must be recovered over the life of these assets. This capital recovery is achieved via depreciation of the Regulatory Asset Base. Historical depreciation has been taken as per audited accounts, and the projections for depreciation have been taken in line with the provisions of the Companies Act 2013...

... As per Schedule-II of the Companies Act 2013, carrying amount (written down value) as on 31st March 2014 of the asset is to be depreciated over the remaining useful life of said asset. Where the remaining useful life of an asset is nil, entire written down value of the asset is to be depreciated in FY 2015 and the same at the option of the company was debited to the statement of profit and loss for the year."

5.44. In line with the provision, HIAL submitted that the book value of its fixed assets as on 01.04.2014 was depreciated on a prospective basis over the remaining useful life, wherever applicable. It further submitted that as per a notification issued by the Ministry of Corporate Affairs dated 29.08.2014, it opted to charge off the carrying amount of certain fixed assets amounting to Rs 23.31 crores as on 01.04.2014, whose remaining useful life was nil as on that date, as depreciation and amortization expenses in its financial statements. In this regard, HIAL stated that,

"As a result of such change in the estimated useful lives, the depreciation and amortization expenses for the year ended 31st March 2015 is higher by Rs. 76.49 crores with a corresponding reduction in the net book value of the fixed assets and reserves and surplus."

5.45. HIAL submitted that based on the provisions of Part-C of Schedule-II of the Companies Act, 2013, the appropriate depreciation rate is derived from the useful life, which has been defined therein as

"Effective Depreciation Rate (%) = 1 / Useful Life, where Useful life is the minimum of:

• Remaining term of Concession Agreement, and

- Useful life for the asset class as defined under Companies Act,
 2013."
- **5.46.** In addition, HIAL submitted a comparative table for the depreciation rates for existing assets vis-à-vis depreciation rates prescribed under the Companies Act, 2013. The table has been provided below,

"...

Asset Classification	Companies Act, 1956	Companies Act, 2013			
	Rate	As per Schedule-II		Existing Assets (Dec 2015)	
		Useful Life (Years)	Effective Depreciation Rate	Effective Depreciation Rate Used	
Buildings	3.34%	30	3.34%	3.29%	
Electrical Installations	4.75%	10	10.00%	16.53%	
Furniture and Fixtures	6.33%	10	10.00%	13.07%	
Freehold Land	-	-	-	-	
Improvements to Leasehold Land	1.67%	30	3.34%	3.76%	
IT Systems	16.21%	6	16.67%	2.65%	
Office Equipment	4.75%	5	20.00%	1.72%	
Other Roads	1.63%	10	10.00%	22.09%	
Plant & Machinery	5.28%	15	6.67%	7.31%	
Runways	3.34%	30	3.34%	3.36%	
Software	16.21%	6	16.67%	2.07%	
Vehicles	7.07%	8	12.5%	16.71%	

..."

5.47. As per HIAL's initial submission dated 25.03.2016 and revised submission dated 05.12.2016, the effective depreciation rates for the existing assets had been derived from the audited financials for the nine-months ending December 2015. HIAL has reworked the useful lives of fixed assets over the average remaining useful life of the asset class with effect from 01.04.2014 in line with the requirements of Part-C of the Schedule-II of the Companies Act, 2013. In the case of runways, taxiways and apron, however, HIAL made an exception and submitted that,

"GHIAL, in the absence of any specific mention of useful lives of these assets in Schedule-II to the Companies Act, 2013, has considered that these assets have a useful life justifiably different than that indicated in

the Companies Act, 2013 in the specific context to the airport sector, and has continued to depreciate these assets over their estimated useful lives as was being followed during FY 2014 i.e. useful life of 30 years resulting in effective depreciation rate of 3.34%."

5.48. Subsequently, the depreciation rates were updated by HIAL to incorporate the actual financial results for FY 2015-16, in the revised tariff financial model submitted on 28.01.2017. The revised rates for existing assets as per actuals of FY 2015-16 submitted by HIAL have been reproduced in the table below:

"...

Asset Classification	Depreciation rates used for existing assets as per actuals of FY 2015-16		
Buildings	3.44%		
Electrical Installations	16.59%		
Furniture and Fixtures	12.68%		
Freehold Land	0.00%		
Improvements to			
Leasehold Land	3.75%		
IT Systems	2.70%		
Office Equipment	1.61%		
Other Roads	22.08%		
Plant & Machinery	9.62%		
Runways	3.35%		
Software	2.04%		
Vehicles	10.00%		

..."

5.49. HIAL also submitted a comparative table for depreciation rates adopted for new assets, which has been reproduced below

"...

Asset Classification	Companies Act, 2013					
	As pe	r GHIAL	As per Schedule-II			
	Useful Life Effective (Years) Depreciation		Useful Life Effective (Years) Depreciati			
		Rate		Rate		
Buildings	23	4.35%	30	3.34%		
Electrical Installations	10	10.00%	10	10.00%		
Furniture and Fixtures	10	10.00%	10	10.00%		

Improvements to	23	4.35%	30	3.34%
Leasehold Land				
IT Systems	3	33.34%	6	16.67%
Office Equipment	5	20.00%	5	20.00%
Other Roads	10	10.00%	10	10.00%
Plant & Machinery	15	6.67%	15	6.67%
Runways	23	4.35%	30	3.34%
Software	6	16.67%	6	16.67%
Vehicles	8	12.5%	8	12.5%

5.50. As per HIAL's submission, it has reworked the useful lives of fixed assets except those pertaining to runways, taxiways and apron with effect from 01.04.2014 in line with the requirements of Part-C of the Schedule-II of the Companies Act, 2013. With respect to assets pertaining to runways, taxiways and apron, HIAL submitted that;

"GHIAL, in the absence of any specific mention of useful lives of these assets in Schedule-II to the Companies Act, 2013, has considered that these assets have a useful life justifiably different than that indicated in the Companies Act, 2013 in the specific context to the airport sector, and has continued to depreciate these assets over their estimated useful lives as was being followed during FY 2014 i.e. useful life of 30 years resulting in effective depreciation rate of 3.34%."

5.51. The effective rates for projecting depreciation of assets in the 2nd Control Period submitted by HIAL in its response dated 28.01.2017 for inclusion in the RAB are provided below,

"...

Asset Classification	Companies Act, 2013				
	New	Assets	Existing Assets (FY2016)		
	Useful Life Effective (Years) Depreciation Rate		Average	Effective	
			Remaining	Depreciation	
			Useful Life	Rate	
			(Years)		
Buildings	23	4.35%	30	3.44%	
Electrical Installations	10	10.00%	6	16.59%	
Furniture and Fixtures	10	10.00%	7	12.68%	
Improvements to	23	4.35%	30		
Leasehold Land				3.75%	
IT Systems	6	33.34%	3	2.70%	

Office Equipment	5	20.00%	3	1.61%
Other Roads	10	10.00%	4	22.08%
Plant & Machinery	15	6.67%	13	9.62%
Runways	23	4.35%	30	3.35%
Software	6	16.67%	6	2.04%
Vehicles	8	12.50%	5	10.00%

- **5.52.** Additionally, HIAL submitted that depreciation was only considered on aeronautical assets which it has identified based on the Concept Note of the Allocation Methodology it has submitted as Annexure 3 of its MYTP proposal dated 25.03.2016.
- **5.53.** As per the submission, HIAL has capitalized the forex loss adjustments as per Accounting Standard 11 and as a result, depreciation has been considered on this capitalized amount.
- **5.54.** Finally, as per HIAL's submission, depreciation has not been claimed on assets funded by the ADFG for the purpose of tariff determination. HIAL stated that,

"Accordingly, the value of depreciation used in the regulatory building blocks is reduced by the appropriate amount."

5.55. HIAL had revised its estimation of the RAB in its final submission dated 28.01.2017, which was updated with the actual results for FY 2015-16. The final RAB for tariff determination has been computed for the period FY 2016-17 to FY 2020-21 by taking an average of the opening and closing RAB for each financial year as provided below.

"…

Particulars	FY17	FY18	FY19	FY20	FY21
(in Rs. crores)					
Opening RAB	1493.84	1568.98	1591.97	2115.35	3039.17
Additions to RAB	244.72	205.55	701.60	1145.07	18.77
Less: Depreciation	-169.58	-182.56	-178.22	-221.26	-261.52
(incl ADFG					
adjustment)					
Closing RAB	1568.98	1591.97	2115.35	3039.17	2796.42
RAB for Tariff	1531.41	1580.48	1853.66	2577.26	2917.79
Determination					

..."

b Authority's Examination of HIAL Submissions on Regulatory Asset Base (RAB)

- **5.56.** The Authority has carefully examined the calculation of RAB and HIAL submissions in this regard. The Authority's examination of HIAL submissions is as follows:
- **5.57.** The Authority, in its Airport Guidelines, has provided for a mechanism for calculation of Regulatory Asset Base, wherein the Initial RAB takes into consideration original value of fixed assets, accumulated depreciation, accumulated capital grants, subsidies or user contribution, and adjustment for value of land excluded from the scope of RAB. The same has been considered by HIAL in its MYTP submissions while computing RAB.
- 5.58. Also, the Authority has observed from the MYTP submission made by HIAL that it has computed RAB under the 30% Shared Till mechanism in line with the direction issued by the MoCA under section 42(2) of the AERA Act, 2008. Also as per clause 12(c) of the National Civil Aviation Policy (NCAP) 2016, "future tariffs at all airports is to be calculated on a hybrid till basis unless otherwise specified for any project being bid out in future. 30% of non-aeronautical revenue will be used to cross-subsidise aeronautical charges." Hence, the Authority approves the adoption of the 30% Shared Till mechanism for the 2nd Control Period as per the direction issued by the Ministry, which is also in line with the provisions of the National Civil Aviation Policy, 2016.
- **5.59.** As per the Authority's Airport Guidelines, 2011, for the purpose of determination of ARR, RAB is to be calculated as the average of the RAB value at the end of a tariff year and the RAB value at the end of the preceding tariff year. The Authority observed from the MYTP proposal submitted by HIAL on 25.03.2016 and the revised submission dated 05.12.2016, whereby RAB has been computed by taking the average of the opening and closing RAB of the particular year, which yields the same value as that calculated by the approach mentioned in the Airport Guidelines and hence, the Authority proposes to approve the same.
- **5.60.** The Authority acknowledges that HIAL has correctly applied shared till methodology by computing RAB based on aeronautical assets and accordingly, depreciation too comprises only aeronautical depreciation.

Authority's Examination of HIAL Submissions on Allocation of Assets

- 5.61. The Authority proposes to calculate aeronautical tariffs under 30% Shared Till mechanism whereby the proper classification of assets becomes a necessity. The Authority has noted HIAL's submission dated 25.03.2016 on the allocation of assets into Aeronautical, Non-aeronautical and Common assets. With respect to the classification of assets and their inclusion and exclusion in the RAB, the Authority has outlined the principles of RAB boundary. It has been the stated position of the Authority that the assets, which are integral to the Airport or the activities pertaining to it or are integral for the functioning of the airport should form part of the RAB. Consequently, the assets pertaining to those activities, which are not integral or non-related to the airport, should be excluded from the RAB.
- 5.62. The concept note on asset allocation submitted by HIAL revealed that assets pertaining to cargo, ground handling and fuel farm (CGF) services were classified as non-aeronautical and thereby not included in the estimation of the aeronautical RAB. However, as per Decision 15a. of the Authority's Order No. 38/2013-14 for the 1st Control Period; cargo, ground handling and fuel farm services were considered as aeronautical and subsequently, the assets pertaining to these services were treated as aeronautical. As per the abovementioned Order, the Authority had observed that HIAL's Concession Agreement defines 'airport activities' to mean provision at or in relation to the airport, of the activities set out at Schedule-3, Part-1, as amended from time to time, pursuant to ICAO guidelines. The provision of ground handling, cargo and aircraft fuelling services have been included in the list of 'airside facilities' provided in Schedule-3, Part-1 of the Concession Agreement. Hence, even going by the Concession Agreement, the Authority is to regulate "any aspect" of "airport activities" thus, including cargo, ground handling and fuel farm. Accordingly, the Authority in Order No. 38/2013-14 for the 1st Control Period had ruled that,

"The remit of the Authority would thus be what the legislature has given to it and this has already been embodied and expressly provided for in the Concession Agreement. After the promulgation of AERA Act, there can be no doubt that it needs to determine tariff for cargo, ground handling and fuel services."

- 5.63. The Authority had further observed that the Government suo moto added the services of cargo and ground handling in the list of aeronautical services in the AERA Act, 2008. Therefore, classifying cargo and ground handling as aeronautical services was a conscious decision of the Government during the formulation of the Act and this decision was taken much after the concession agreements of all the four metro airports. Hence, this rendered the Concession Agreement irrelevant in the context of the classification of Cargo and Ground Handling as aeronautical services.
- 5.64. In this context, the Authority observed that the asset additions, deletions, gross block and depreciation pertaining to the cargo, ground handling and fuel throughput services had all been clubbed within the non-aeronautical category. Hence, through a clarification dated 26.12.2016, the Authority sought the segregated amounts of asset additions, deletions, gross block and depreciation for each of the three assets cargo, ground handling and fuel throughput. HIAL through its response dated 28.01.2017 submitted the segregated amounts for the three assets based on which these assets were included in the aeronautical RAB.
- 5.65. The Authority noted that HIAL in its concept note on allocation methodology submitted as Annexure 3 to the MYTP submission dated 25.03.2016 and revised submission made on 05.12.2016 had included Vehicle Fuelling Services in the list of non-aeronautical services. However, it was observed by the Authority that fuelling of vehicles at an airport is incidental to aircraft operations since these vehicles are necessary to support the operation of aircraft services, cargo and passenger services, emergency services, and maintenance of the airport and hence, qualify as an aeronautical service. In this regard, the Authority sought a clarification from HIAL dated 16.01.2017 regarding segregation of the asset additions, deletions, depreciation, revenues and expenses pertaining to vehicle fuelling service. Through its response dated 14.02.2017, HIAL submitted that the service was being provided to airside vehicles and had been concessioned out to BPCL. Further, HIAL submitted that there were no assets pertaining to the service in its books and that it was only earning a revenue from BPCL. As per HIAL's submission, "Vehicle fuelling services for the airside vehicles has been concessioned to BPCL. Details pertaining to revenues from BPCL have been shared... There are no expenses or assets booked in GHIAL financials with respect

to BPCL vehicle fuelling services." Hence, while the Authority has decided to include vehicle fuelling service as aeronautical it notes that there will be no change in the RAB in the absence of any assets pertaining to the same.

- 5.66. With respect to CUTE, CUSS, BRS and other technology enabled services, the Authority noted HIAL's submission of treating CUTE, CUSS and BRS assets, which are used for providing common Airport Passenger IT Services, as part of ground handling activities. Further, the Authority observed that while these services were treated as aeronautical in the 1st Control Period, HIAL has decided to treat these services as non-aeronautical in line with the treatment of ground handing assets with effect from 01.04.2016 post the separation of CUTE, CUSS and BRS assets from the common infrastructure assets. The Authority disagrees with HIAL's proposal of treating CUTE, CUSS and BRS IT as non-aeronautical from the 2nd Control Period onwards as these are considered as part of the overall ground handling activity, which itself has been treated as an aeronautical service by the Authority. Accordingly, the Authority proposes to continue treating CUTE, CUSS and BRS IT services as aeronautical even for the 2nd Control Period.
- 5.67. The Authority also noted that HIAL revised its treatment of Cargo Satellite Building (CSB) from a non-aeronautical to a non-airport asset as per Annexure 3 submitted along with its MYTP submission dated 25.03.2016. HIAL has thereby not included the CSB in its (aeronautical) RAB. During its airport visit, the Authority observed that the Cargo Satellite Building was being used as an administrative office for the staff of freight forwarders and some portion of the building was also being used as a storage/warehouse for cargo parcels. The Authority observed that since the building was being used to undertake cargo related operations, it needs to be treated as an aeronautical asset in line with the treatment of cargo services as decided by the Authority in paras 5.62 and 5.63 above. Accordingly, the Authority proposes to add the cost of CSB to aeronautical RAB.
- **5.68.** Another reallocation observed by the Authority pertained to fixed electrical ground power (FEGP), which according to HIAL's initial submission dated 25.03.2016 and revised submission dated 05.12.2016 was originally considered as aeronautical and was now being considered as non-aeronautical. The Authority notes that HIAL in its

submissions has recorded that FEGP services are a part of ground handling activity that allow airlines to make use of electric ground power in place of an auxiliary power unit (APU) or a ground power unit (GPU) (diesel generator). The Authority further observed that APUs, which run on normal jet fuel, are believed to generate more CO2 emissions and hence, many airports abroad have mandated the use of FGEP, which draws electricity straight from the local power grid (including solar power) to provide power to the aircraft when it is on the ground. Also, in response to a clarification dated 16.01.2017 sought by the Authority, HIAL submitted in its response dated 14.02.2017 that assets pertaining to FEGP have already been considered within ground handling assets. Based on the submissions made by HIAL regarding the FEGP service being considered as a part of the overall ground handling activity, which itself has been categorised by the Authority as an aeronautical service, the Authority proposes to include FEGP also within the aeronautical category and this has accordingly been included in the RAB.

5.69. In addition, the Authority observed that as per HIAL's initial submission dated 25.03.2016 and revised MYTP submission dated 05.12.2016, a project site office (PSO) building was operational and was being used for housing the IT room, record room, staff canteen, parking, auditorium, store room and training halls. Further, the Authority noted that HIAL had classified the project site office building as a common asset, which was further allocated based on the ratio of gross block of aeronautical and nonaeronautical assets. The Authority was of the opinion that a project site office was created as a substitute office when an asset was under construction and since the construction of the airport had been completed, the Authority could not ascertain the purpose of such an asset continuing in the books of HIAL. Hence, vide letter dated 16.01.2017, the Authority sought clarifications with respect to the total area of the project site office and the exhaustive list of all the current uses of the building. HIAL, in its response dated 14.02.2017, submitted that of the total project site office area of 28,642.81 sq. m., 3,443.34 sq. m. of land area had been given on lease to GMR Airports Developers Limited, GMR Varalakshmi Foundation, Asia Pacific Flight Training Academy, RAXA Security Service Limited, Premier Airways and GMR Airports Limited. The remaining land was being used by HIAL for maintaining a "record room, an inward desk,

a facility management store, meeting rooms, a call centre desk, technical maintenance office, auditorium, IT Training centre, exhibition hall, library, BSNL exchange room, Tata Teleservices office, GCM office, a doctor's clinic, a crèche, day care, accommodation centre, staff canteen and store/stationery room." Based on the response received from HIAL, the Authority proposes that, the project site office should be treated similar to the passenger terminal building having areas clearly demarcated as aeronautical, nonaeronautical and common; where the common areas are further allocated between aeronautical and non-aeronautical in the ratio of gross block of assets. Accordingly, the Authority vide its clarification dated 07.03.2017 sought auditor certificates for the leased out portions of the project site office from FY 2008-09 to FY 2015-16. Further, the Authority noted that as per the auditor certificate submitted by HIAL on 05.04.2017, the area leased out in FY 2015-16 was 3,325.61 sq. m. Accordingly the Authority proposes to consider the leased out area (being used for non-aeronautical purposes) of 3,325.61 sq. m., as certified by the auditor, as non-aeronautical and subsequently excludes the same from RAB. Further, the Authority has observed that the remaining portion of 25,316.39 sq. m. is being used for both aeronautical and non-aeronautical purposes and hence, this area is treated as a common asset, which it proposes to allocate based on the ratio of gross block of aeronautical and non-aeronautical assets.

5.70. Similarly, the Authority observed that a new office building (NOB) had been constructed by HIAL. Out of the five floors of the NOB, only three were being used by its employees while the remaining two floors were not. As per HIAL's Concept Note, the asset had been allocated as a common asset. Also, HIAL in its concept note on Allocation Methodology submitted as Annexure 3 of the MYTP submission dated 25.03.2016 stated that "Any incidental income recovered as rent from the available space at the NOB, pending its utilization for common airport activities, has been netted off against total operating expenses." Further, the Authority noted that as per the abovementioned concept note HIAL had revised the historical allocation of new office building from 60% non-aeronautical and 40% common considered in the 1st Control Period to 100% common in the 2nd Control Period. HIAL's rationale for the same was the increased usage of the office space by the employees of the airport.

- 5.71. In order to be able to arrive at a reasonable basis for allocating the new office building, the Authority sought a clarification dated 16.01.2017 from HIAL regarding the entities renting out space at the NOB. As per the response received from HIAL on 14.02.2017, the NOB has been rented out to GMR Aerospace Engineering Limited, GMR Krishnagiri SEZ Limited, Kakinada SEZ Private Limited, GMR Hotels and Resorts Limited, Hyderabad IT Support Services Private Limited, GMR Energy Limited, GMR Highways Limited, Nipro Medical India Private Limited and GMR Airports Limited. Further, the Authority noted that HIAL in its concept note on Allocation Methodology submitted as Annexure 3 of the MYTP submission dated 25.03.2016 has forecast the use of these remaining two floors, which have been currently rented out, owing to increased manpower on account of the proposed terminal expansion in the 2nd Control Period.
- 5.72. The Authority is of the view that the reallocation of the NOB to a completely common asset would be incorrect since two floors of the building were being used by other entities for non-aeronautical purposes. In such a scenario, the Authority has decided to restore HIAL's previous allocation of the NOB between non-aeronautical and common in the ratio of 60:40 from FY 2008-09 to FY 2014-15 and revise this ratio to 40:60 for FY 2015-16 based on increased usage of the office by HIAL's staff. Also the Authority has decided to consider the FY 2015-16 ratio of 40:60 for 2nd Control Period projections. In addition, the common portion of the NOB, which is being used by staff engaged in both aeronautical and non-aeronautical services, across all the years has been further allocated in the ratio of gross block of aeronautical and non-aeronautical assets.
- **5.73.** Further, since the auditor certificates provided by HIAL did not make a distinction between the building types, the Authority vide its query dated 16.01.2017 requested HIAL to provide the asset additions, deletions and depreciation for all buildings for the period from FY 2008-09 to FY 2015-16 in order to undertake its analysis. Based on the response received from HIAL on 02.03.2017 in the form of auditor certificates of building-wise asset additions and deletions, the reallocation of project site office and NOB was undertaken by the Authority. Further, since HIAL stated its inability to provide a building-wise break-up of depreciation. Consequently, the Authority has reallocated the depreciation for both the project site office and new

office buildings on a proportionate basis; considering their individual gross blocks and the gross block of aggregate assets.

- 5.74. It was also observed by the Authority that in HIAL's MYTP submission dated 25.03.2016 and revised MYTP submission dated 05.12.2016, the passenger terminal building (PTB), heating ventilation and air conditioning system for PTB, quarters for outside security personnel, common hardware, software and communication system, and the central stores building had been treated as common assets since they were being used for both aeronautical and non-aeronautical purposes. The Authority agrees with this classification and accordingly proposes to accept the allocation of these assets between aeronautical and non-aeronautical categories based on the ratios considered by HIAL. Further, HIAL's submissions on expenditure on Landscaping have been dealt with as an operating expense, since the same does not create any tangible asset in the books of HIAL.
- 5.75. In addition, the Authority notes that as per Decision No. 15a under Section 19 of the Order No. 38/2013-14 for the 1st Control Period, the Authority had proposed to commission an independent study to assess the reasonableness of the asset allocation and to accordingly use the findings from the study at the time of determination of tariffs for aeronautical services in the 2nd Control Period as may be relevant. The Authority is of the view that it would continue with its assessment of HIAL submission under the 2nd Control Period and will commission a study, as needed based on this assessment.
- **5.76.** The Authority further noted that HIAL had received an Advance Development Fund Grant of Rs. 107 crore from the Government of Andhra Pradesh and, in the tariff financial model, HIAL has proportionately excluded the assets funded out of the Advanced Development Fund Grant from aero and non-aero RAB along with the corresponding depreciation.
- **5.77.** Upon referring to the State Support Agreement (SSA), the Authority observed that clause 2.3 (a) in respect of the Advance Development Fund Grant (ADFG) provides that,

"GoAP shall provide HIAL with an ADFG in the sum of Rupees 107 Crores.

ADFG shall not in any circumstances attract interest payments nor shall it be repayable.

ADFG shall be made available to HIAL by the GoAP in three equal annual instalments, and the first instalment shall be drawn down at the time of financial close. Each instalment shall be paid into a construction proceeds trust and retention account to be established and operated in accordance with the Financing Agreements."

- **5.78.** The Authority notes from the State Support Agreement that this amount of Rs. 107 crore is neither to be repaid nor shall attract any interest. The Authority thus considers this to be treated as a Grant in the calculations of RAB. However, under 30% shared till the Authority proposes to deduct this amount from aeronautical RAB only as opposed to a proportionate deduction from aeronautical and non-aeronautical RAB.
- **5.79.** Further, the Authority observed that HIAL has included "Forex Loss Adjustment as per AS 11" as part of its aeronautical and non-aeronautical RAB for the 1st Control Period. As per the Authority's Order No. 38/2013-14, the Authority had observed that "sourcing of funds is a conscious business decision of the airport operator" and accordingly had proposed to disallow the capitalization of adjusting for forex losses and excluded it from the calculation of RAB. For the current Control Period, the Authority has decided to continue with its extant stance of disallowing the inclusion of forex loss adjustment in the calculation of RAB. However, such losses are proposed to be allowed partially as part of one-time adjustment to operating expenses subject to a certain cap, as per the mechanism which has been discussed in Section 7.41.9 below.
- **5.80.** The Authority proposes to accept HIAL's classification and to allocate the common assets based on the gross block of aeronautical and non-aeronautical assets as classified in paras 5.61 to 5.79 above.

Authority's Examination of HIAL Submissions on Future Capital Expenditure

5.81. The Authority has carefully examined HIAL submissions on future capital expenditure noting that they pertain to two categories namely, (a) Additional Capital Expenditure for FY 2015-16 and (b) Capital Expenditure for the 2nd Control Period. The Authority has noted that the expenditure under both the categories have been segregated into various heads corresponding to respective assets. These are given below:

Capital Expenditure for FY 2015-16

5.82. Capital Expenditure planned by HIAL for FY 2015-16: The Authority understands from HIAL's submission that based on the amounts approved in the Order No. 38/2013-14 of the 1st Control Period, the airport operator capitalised the following expenditures in FY 2015-16:

5MW Solar Power Plant

As per Section 9.26 of the Authority's Order No. 38/2013-14 for the 1st 5.83. Control Period, the Authority had supported HIAL's green initiative pertaining to installation of a 5MW solar power plant to meet the current minimum load of the airport and approved the capitalisation of Rs. 40 crore for the project in FY 2014-15. It is observed by the Authority that HIAL in its MYTP submission dated 25.03.2016 and revised submission dated 05.12.2016 had proposed to undertake a capitalisation of Rs. 31.59 crore in FY 2015-16, which was within the amount approved in the 1st Control Period by the Authority, and was to be treated as an aeronautical capital expenditure to be included in the RAB. Further, in the revised tariff financial model updated with the financial results for FY 2015-16 submitted by HIAL on 28.01.2017, it was unclear to the Authority if HIAL had been able to incur the capital expenditure. Hence, vide its query dated 03.03.2017, the Authority sought auditor certificates to validate the same. Based on the auditor certificate submitted by HIAL on 05.04.2017, it was observed that out of the Rs. 40 crore approved by the Authority, HIAL had completed the project and capitalised Rs. 29.98 crore against the same in FY 2015-16. Therefore, Rs. 29.98 crore is proposed to be approved by the Authority as an aeronautical asset, and considered towards RAB in FY 2015-16.

Flood control and Rainwater harvesting

According to section 9.25 of Order No. 38/2013-14 for the 1st Control Period, 5.84. the Authority had taken note of HIAL's proposal for developing three ponds in the area of 45 acres for flood control and rainwater harvesting. Approving the development work as part of the overall master plan, the Authority allowed capitalization of this expenditure to the extent of Rs. 10 crore for FY 2014-15 and another Rs. 10 crore in FY 2015-16 to be included in the RAB. The Authority notes that as per its MYTP submission dated 25.03.2016 and its revised submission dated 05.12.2016, HIAL proposed to capitalise the entire Rs. 20 crore in FY 2015-16. Further, based on an examination of the revised financial model updated with the actuals for FY 2015-16 submitted by HIAL on 28.01.2017, the Authority was unable to assess if the approved amount had been capitalised and accordingly, a clarification dated 03.03.2017 was sought from HIAL. Based on the auditor certificate submitted by HIAL on 05.04.2017, it was observed that out of Rs. 20 crore to be capitalised over two years as approved by the Authority in the abovementioned Order, HIAL had capitalised only Rs. 16.57 crore in FY 2015-16 and the same is proposed to be allowed as an aeronautical asset for determination of RAB for FY 2015-16.

Fuel Farm

5.85. Under section 9.28 of the Authority's Order No. 38/2013-14, the Authority had recognised and supported the need for HIAL to incur expenses on fuel farm assets like procurement of dispensers, etc. As a result, the Authority had approved the proposed capital expenditure of Rs. 15.15 crore towards the same, whereby Rs. 12 crore was to be capitalized till FY 2014-15 and the remaining Rs. 3.15 crore was to be capitalized in FY2015-16. The Authority has observed in HIAL's submission dated 25.03.2016 and revised submission dated 05.12.2016 for the 2nd Control Period that a capital expenditure on fuel farm of Rs. 4.67 crore has been proposed, which exceeds the amount of Rs. 3.15 crore approved for FY 2015-16 in the tariff order for the 1st Control Period. Further, the Authority notes that as per the response dated 28.01.2017, wherein the tariff financial model was updated with the financial results of FY 2015-16, HIAL has not been able to capitalize the approved amount of Rs. 3.15 crore in FY 2015-16 and instead proposed to defer this capex along with an additional amount of Rs. 1.52 crore, thereby totalling Rs. 4.67 crore for fuel farm, to FY 2016-17. The Authority

proposes to allow this deferment to FY 2016-17 but only to the extent of Rs. 3.15 crore, which had been approved by the Authority in the Order No. 38/2013-14 for the 1st Control Period. Further, the Authority observed that HIAL had categorised this capex as non-aeronautical and consequently, this was not included in the RAB. However, as has been held by the Authority in paras 5.40 and 5.41 above, fuel farm is proposed to be treated as an aeronautical service and therefore the capital expenditure on the same would be included in the aeronautical RAB.

General Capex

- 5.86. The Authority observed that HIAL had proposed to capitalise general capital expenditure worth Rs. 18.84 crore out of the remaining Rs. 59.70 crore approved in the its Order No. 38/2013-14 for the 1st Control Period and thereby included in the RAB. HIAL also submitted that of the total approved amount of Rs. 102.45 crore in Order No. 38/2013-14, Rs. 42.75 crore had already been capitalized till the third quarter of FY 2015-16. Further, the Authority noted that the expenditure was treated as a common type capital expenditure and allocated between aeronautical and non-aeronautical RAB. In principle, the Authority approves such a treatment and proposes to allow the same as submitted by HIAL.
- 5.87. Employee Township: The Authority has noted from HIAL's submission that it has acquired an employee township worth Rs 82.32 crore to be capitalized in FY 2015-16. The Authority recognises that with the airport being located far away from the city, it would be inconvenient and risky to have airport staff, employed for handling critical airport operations, airport fire safety services, security services and the like, residing far away from the airport. The Authority also notes that the capital expenditure on the employee township had been presented for consultation to the Airport Users Consultative Committee (AUCC) by HIAL. Further, it was observed by the Authority that there are a total of 128 residential units in the township and as per Form 11a of the tariff financial model submitted by HIAL on 28.01.2017 indicating the details of employee staff strength in different divisions, the Authority observed that 486 employees were employed by HIAL in FY 2015-16. Hence, if the township only housed airport critical staff, this would mean that 28% of HIAL's employees were engaged in airport critical operations, which seems to be on the high side. While the Authority, in

principle, is in agreement with including the proportionate cost of Employee Township occupied by critical staff within the RAB, it was not clear from the MYTP submission if all the employees living in the township are engaged in airport critical operations and exactly how HIAL defines 'critical operations' at an airport. Hence, vide a query dated 03.03.2017, the Authority had requested for a clarification pertaining to the same. HIAL vide its response dated 22.05.2017 has provided a breakup of rentals recovered from the township as given below but was silent on the list of activities which it classifies as critical,

"...

Year		lats allotted to neet	Total no. of	Total no. of flats in the township	
rear	Critical requirement	Non-critical requirement	vacant flats		
FY 2011-12	96	12	20	128	
FY 2012-13	100	14	14	128	
FY 2013-14	94	15	19	128	
FY 2014-15	89	14	25	128	
FY 2015-16	96	10	22	128	

...'

- **5.88.** The Authority notes HIAL's submission on the segregation of Employee Township rentals between critical & non-critical requirement. Based on the above submission by HIAL, the Authority notes that the percentage of critical staff by total staff (Critical Requirement / Total Headcount) of HIAL is ~20%, which is reasonable. The Authority proposes to allow the proportionate amount of capex incurred on employee township in proportion to the number of critical employees residing in the township, as submitted by HIAL, as part of the aeronautical RAB in FY 2015-16.
- **5.89.** Further, the Authority notes HIAL's auditor certificate on capital expenditure incurred in FY 2015-16 and its categorization between aeronautical and non-aeronautical. As per the certificate HIAL has incurred aeronautical capital expenditure of Rs. 165.7 crores which includes Rs. 27.3 crores that has been capitalized on account of Forex Loss Adjustment. The Authority proposes to treat forex losses as per AS 11 in the manner explained in para 5.115 below and approve the balance amount of Rs. 138.4 crores.

- **5.90.** The Authority also acknowledges HIAL's submission dated 05.04.2017 linking its capitalizations in FY 2015-16 to individual assets. Based on the same, the Authority notes that Rs. 10.48 crores have been capitalized by HIAL on fixed assets other than identified project, i.e. a) Sustainability through Renewable Energy (5 MW), b) Employee Township and c) Flood Control & Rainwater Harvesting. Therefore, Authority proposes to allow this amount as general capex in Order No. 38/2013-14.
- **5.91.** Based on the analysis above, the Authority proposes to allow the capital expenditure mentioned in paras 5.82 to 5.90 above incurred by HIAL in the 1st Control Period.

Future Capital Expenditure planned by HIAL for the 2nd Control Period

5.92. Expansion capex: The Authority has taken note of HIAL's submission proposing to increase the terminal capacity in the 2nd Control Period from the current passenger capacity of 12 MMPA to 20 MMPA by 2021. The Authority recognizes the need for such a terminal expansion in order to remove bottlenecks and improve the passenger experience at the airport. HIAL has submitted an estimated cost of Rs. 2,224.28 crore including a financing allowance of Rs. 235.24 crore. Based on the proposal made by HIAL in its MYTP submission dated 25.03.2016, its revised submission dated 05.12.2016 and discussions during the airport visit conducted by the Authority on 06.02.2017, the Authority in principle agrees with the need for expanding the terminal so as to cater to the increasing traffic volume at the airport and maintaining service quality. However, the Authority has observed that the assessment of such an expansion plan and its phasing is a technical matter and requires the analysis to be undertaken by an expert. In this regard, the Authority decided to engage an independent consultant to undertake an assessment of the reasonableness of the proposed expansion plan and phasing thereof based on which it will give a final decision in the tariff order for the 2nd Control Period.

The Authority appointed RITES Limited ("RITES") to examine the expansion project cost submitted by HIAL including the terminal expansion including ramp and forecourt and airside improvements. The capital expenditure components proposed by HIAL which were to be examined by RITES are as per the table given below:

Table 14: Project Cost Components Examined by RITES Ltd.

	Projects Identified	Capex Proposed by HIAL (Rs. crores)
1	Additional Four-Lane Forecourt Ramp	108.50
2	Terminal Expansion including Weather	1008.05
	Proofing of Airport Forecourt and Main	
	Terminal Building Expansion	
3	Pier Expansion	742.65
4	Apron Development	129.84
	Sub -total	1989.04

- **5.93.** The findings of the report submitted by RITES are as reproduced below:
 - "... The proposal for expansion of the terminal building, apron and approach ramps submitted by GHIAL is justified in view of the traffic trend and the growth witnessed in the recent years at Hyderabad airport as discussed in Chapter 3...
 - ... The airport was commissioned in 2008, i.e. prior to issue of IMG norms. Hence, the area standards recommended by IMG did not apply to the existing terminal building. However, the total area of terminal building including the proposed expansion is within the norms prescribed as discussed in Chapter 5. (para 5.1.2)...
 - ... A macro level examination of the capital cost estimate submitted by GHIAL has been conducted based on the information provided by GHIAL and engineering in practice. The revision to total capital cost is recommended as under:

SN	Item	Capital Cost as	Revision in
		proposed by	Capital
		GHIAL (in Rs.	Cost
		Crore)	recommended
			(in Rs. Cr.)
1	Expansion of the Terminal Building	1449.83	1239.05
2	Expansion of the Kerb & Approach	108.50	98.83
	ramp		
3	Expansion of Apron	129.38	111.00
	Sub-Total	1687.71	1448.88
4	Preliminaries @ 2%	34.00	28.98
5	Insurance and Permits	20.00	20.00
6	Design Development & PMC	142.20	72.44
7	Contingencies	105.10	43.47

1989.01	1613.77
1989.01	1613.77

- ... The proposal is for extension of the existing terminal building and hence the specifications of the proposed terminal building have to match with the existing building to provide uniformity. The works are yet to be undertaken GHIAL...
- ... The time schedule proposed by GHIAL is considered adequate and reasonable..."
- **5.94.** Based on the observations and findings in the RITES report, the Authority proposes to allow HIAL Rs. 1613.77 crores towards expansion for the terminal, apron and kerb areas for the purposes of determination of RAB instead of Rs. 1989.01 crores requested by HIAL. Further, the true-up of the expansion project in the subsequent Control Period shall be capped at this value determined by the independent consultant.
- **5.95.** Further, HIAL submitted vide its letter dated 08.08.2017 that the implementation of the expansion was put on hold post the Authority's Order on Normative Capital Cost pending the vetting of HIAL's capital cost by an independent consultant. Accordingly, HIAL submitted a revised capital expenditure schedule starting from FY 2017-18. An extract of HIAL's submission is reproduced below,

"...

Projects (Amounts in Rs.	FY2017	FY2018	FY2019	FY2020	FY2021	Total
Crores)						
Terminal Expansion						
Additional Four-lane	0.00	54.25	54.25	0.00	0.00	108.50
Ramp						
Terminal+Forecourt	0.00	158.97	613.99	235.10	0.00	1008.05
Expansion						
Pier Expansion	0.00	36.22	330.22	361.95	14.26	742.65
Airside Improvements						
Apron Development	0.00	64.92	64.92	0.00	0.00	129.84
Runway Re-Carpeting	0.00	53.03	25.28	25.28	0.00	103.59
Hard Cost	0.00	367.39	1088.66	622.32	14.26	2092.63
Financing	0.00	17.98	81.98	79.16	14.52	193.64
Total Capital Expenditure	0.00	385.37	1170.64	701.48	28.78	2286.27
Capitalization Schedule	0.00	53.03	350.77	1600.87	281.61	2286.27

..."

5.96. HIAL also revised its project capitalization schedule based on the above expenditure schedule. An extract of HIAL's projected capitalizations are as given below,

"...

Projects (Amounts in	2017	2018	2019	2020	2021	Aggregate ¹
Rs. Crores)						
Runway Re-carpeting		53.03	25.28	25.28	0.00	103.59
Apron Development			129.84			129.84
4-lane Ramp			108.50			108.5
Forecourt Expansion			58.27			58.27
Terminal East Mod				949.78		949.78
Pier Expansion				486.03	256.63	742.66
Capitalization of Hard		53.03	321.89	1461.09	256.63	
Cost						2092.64
Financing Allowance		0.00	28.88	139.78	24.98	193.64
Total Capitalization		53.03	350.77	1600.87	281.61	2286.28

..."

5.97. Based on the recommendation of RITES (of reduction in project cost) and the revised implementation schedule proposed by HIAL, the Authority proposes to allow the capital expenditure as given below,

Table 15: Capital expenditure proposed to be allowed by the Authority for the expansion project and the relayering of runways and taxiways

Capital Expenditure Schedule (in Rs. Crore)	2017	2018	2019	2020	2021	Aggregate 2nd CP
Additional 4-lane Ramp	0	55.04	55.04	0	0	110.08
Forecourt Expansion	0	40.19	5.74	0	0	45.93
Terminal Expansion - East Module 1	0	0	137.78	100.2	0	237.98
Pier Expansion - East Module 1	0	28.55	114.21	38.07	0	180.83
Terminal Expansion - West Modules	0	85.12	340.48	85.12	0	510.72
Pier Expansion - East Module 2	0	0	89.91	112.4	0	202.3
Pier Expansion - West Module	0	0	56.19	134.9	11.24	202.29
Apron Development	0	61.82	61.82	0	0	123.64
Relayering of Taxiways and Runway	0	53.03	25.28	25.28	0	103.59
Total Capital Expenditure (Excluding Interest During Construction)	0	323.8	886.45	495.9	11.24	1717.39

5.98. Also, the Authority noted HIAL's submission to fund the expansion projects through debt and internal accruals in the ratio of 60:40. However, based on the

¹ Aggregated by the Authority for ease of comparison with Table 15

Authority's Guidelines, the financing allowance has been computed for the entire project cost. The financing allowance proposed to be allowed to HIAL for the 2nd Control Period is as given below,

Table 16: Financing Allowance proposed to be allowed for the expansion project in the 2nd Control Period

Particulars (in Rs. Crore)	2017	2018	2019	2020	2021	Aggregate 2nd CP
Financing Allowance	0.00	13.34	55.56	51.52	9.30	129.72

5.99. Accordingly, the capitalization of expansion capex and relayering of taxiways (along with financing allowance) proposed to be allowed by the Authority is Rs. 1847.08. A capitalization schedule of the same is given below,

Table 17: Capitalization Schedule proposed to be allowed by the Authority for the expansion project and relayering of taxiways for the 2nd Control Period

Particulars (in Rs. Crore)	2017	2018	2019	2020	2021	Aggregate 2nd CP
Aero		53.03	319.76	1059.78	184.90	1617.47
Non-Aero		0.00	7.64	188.31	33.66	229.61
Common		0.00	0.00	0.00	0.00	0.00

5.100. Other assets – runways and taxiways: The Authority observed that HIAL has proposed a re-carpeting of all its runways and taxiways including apron service roads owing to operational wear and tear at a total cost of Rs. 103.59 crore to be capitalized through a planned phasing across the 2nd Control Period. Recognizing the need for long term maintenance of the runways and taxiways due to heavy use and ageing of the asset, the Authority proposes to approve the capital expenditure of Rs. 103.59 crore proposed for re-carpeting of the runways and taxiways. In addition, the Authority proposes to allow HIAL's submission of funding the re-carpeting of runways and taxiways through internal accruals to the extent available with HIAL. HIAL had revised the schedule this re-carpeting project along with the expansion of terminal building, kerb and apron areas. The Authority proposes to consider the revised schedule for this expenditure as mentioned in Table 15 above.

5.101. CISF Township: Further, it was brought to the Authority's notice that HIAL constructed a residential township for the CISF personnel deployed at the airport on the advice from the Ministry of Home Affairs and the SOP issued by MoCA in March 2002. HIAL, however, submitted that once the project, worth Rs. 69.92 crore, was completed

and capitalized in the books of the PSF (SC) Fund under intimation to MoCA, there was an order issued by MoCA on 18.02.2014 directing airport operators to reverse all the expenses incurred towards procurement and maintenance of security systems/equipment, and on creation of fixed assets using funds from the PSF (SC) escrow account. The Authority also noted HIAL's submission that HIAL moved the court against the MoCA order and that the court had stayed the order for the time being. With the matter still pending in the Hyderabad High Court, the Authority observed that HIAL did not include the capital and maintenance costs associated with the township for tariff determination for the 2nd Control Period. Also, the Authority has taken note of HIAL's submission to include the same in case of an adverse judgment from the High Court. The Authority has proposed to accept HIAL's submission in this regard.

- 5.102. General maintenance capex: The Authority has noted from HIAL submissions that this head of expenditure covers the expenditure required for replacements and rehabilitation works of assets created through capital expenditure. It was observed by the Authority that a general capital expenditure of Rs. 269.79 crore has been proposed for the 2nd Control Period. The Authority is of the view that for the maintenance of the airport infrastructure, it is important for major airports like RGIA, Hyderabad to annually incur operating and maintenance capex. The Authority proposes to allow general capital expenditure of Rs. 269.79 crores. The Authority acknowledges that the actual general capital expenditure incurred by HIAL may vary from this proposed figure of Rs 269.79 crore and thus, the Authority proposes to true-up the difference between the General Capital Expenditure considered now and that actually incurred based on evidential submissions along with auditor certificates thereof. This true-up would however, be subject to deliberation by the Authority and after the Authority is convinced that the amount has been spent reasonably. Furthermore, the Authority proposes to allow the funding of this through internal accruals, as submitted by HIAL in its MYTP submissions.
- **5.103.** Additional 8MW solar power plant: The Authority has taken note of the submission made by HIAL regarding adding 8MW generation capacity to the solar power plant at the airport as phase 2 of the green initiative being undertaken at the airport. The Authority, in its Order No 38/2013-14, had allowed HIAL to incur expenses

on the setting up of a 5MW solar power plant to meet the requirements of the airport. The Authority recognizes the need for using sustainable and renewable energy to meet the demands of the airport and hence, proposes to allow the capitalization of Rs. 44 crore to be incurred in FY 2016-17 and accordingly included in the RAB.

5.104. The Authority notes that HIAL has allocated the capex to be incurred in the 2nd Control Period into aeronautical and non-aeronautical components based on classification of individual elements. HIAL's classification as present in the financial model is as given below,

Asset	Classification
Additional 4-lane Ramp	Aeronautical
Forecourt Expansion	Common
Terminal Expansion - East Module 1	Common
Pier Expansion - East Module 1	Common
Terminal Expansion - West Modules	Common
Pier Expansion - East Module 2	Common
Pier Expansion - West Module	Common
Apron Development	Aeronautical

The Authority proposes notes the above allocation and proposes to accept the same for the computation of RAB for the 2nd Control Period.

Authority's Examination of HIAL submissions on Depreciation

- **5.105.** The Authority has carefully analysed the submissions of HIAL in respect of the depreciation of the regulatory building blocks. The Authority's examination of the issue is as follows:
- **5.106.** The Authority noted HIAL's submission that it has considered depreciation rates as per provisions of Part-C of Schedule-II of the Companies Act, 2013 after it came into effect on 1.04.2014.
- **5.107.** HIAL has also submitted that it has charged off certain assets worth Rs. 23.31 crores whose useful life on 01.04.2014 was nil. The Authority proposes to allow such a treatment as the same is in line with the Companies Act, 2013.
- **5.108.** The Authority also notes HIAL's submission that in the absence of any specific mention of useful lives of runways, taxiways and apron in Schedule-II to the Companies Act, 2013, HIAL has continued to depreciate these assets at their effective depreciation rate of 3.34% as was being followed in FY 2013-14. The Authority proposes to accept such a treatment since it is in line with the present approach of the Authority.

- **5.109.** Further, HIAL submitted that it had depreciated the book value of its fixed assets as on 01.04.2014 on a prospective basis over the remaining useful life, which has been defined by HIAL as the minimum of the remaining term of the concession agreement and useful life for the asset class as defined under Companies Act, 2013. The Authority would like to point out that given that as HIAL's concession period is extendable for another 30 years at the discretion of HIAL, the end of the first concession period should not mark HIAL's tenure of operating the airport. An extract of the Concession Agreement in this regard has been reproduced below,
 - "... HIAL may at any time prior to the twenty-seventh (27th) anniversary of the Airport Opening Date, exercise the aforesaid option of extending the term of this Concession Agreement by another thirty (30) years..."
- **5.110.** In addition, there is an indirect handback value given to HIAL in section 13.7.1 of HIAL's Concession Agreement. In case HIAL does not choose to extend the concession period for operating the airport, all of its rights, title and interest in the Airport shall be transferred to the Government of India or its nominee on the payment of the aggregate of the following:

"...

- a. The lowest of the following:
 - i. One hundred per cent (100%) of the par value of equity; or
 - ii. 100% of the equity of HIAL subscribed and paid-up on the TransferDate; or
 - iii. The Net Worth of the Company;
- b. One hundred per cent (100%) of the Debt.

less any proceeds from insurance claims, including political risk insurance, if any, raised by HIAL, Sponsor and Lenders in respect of claims made in respect of the Airport before the expiry of the term.

..."

5.111. Therefore, the Authority is of the view that there is no reason for HIAL to charge depreciation at an accelerated rate depending on the current concession period. Accordingly, the Authority proposes to consider depreciation of the new assets as per Schedule-II of the Companies Act, 2013 without taking into account HIAL's

consideration of a 30-year concession period. The rates considered by the Authority are:

Asset Classification	Depreciation rates used for existing assets as per actuals of FY 2015-16
Buildings	3.34%
Electrical Installations	10.00%
Furniture and Fixtures	10.00%
Freehold Land	0.00%
Improvements to Leasehold Land	3.34%
IT Systems	33.34%
Office Equipment	20.00%
Other Roads	10.00%
Plant & Machinery	6.67%
Runways	3.34%
Software	16.67%
Vehicles	12.50%

- **5.112.** The Authority would also mention that it is in the process of framing separate guidelines for the computation of depreciation for regulatory purposes. Such guidelines after notification would be applicable on HIAL.
- **5.113.** Additionally, the Authority notes HIAL's submission of considering depreciation for only those assets that it has categorised as aeronautical in its Concept Note on Allocation Methodology submitted as Annexure 3 of the MYTP proposal dated 25.03.2016. However, based on the reallocation of assets covered in paras 5.40 to 5.51 above, the Authority has recalculated the depreciation of the Regulatory Asset Base.
- **5.114.** The Authority observed that in the tariff financial model submitted by HIAL, the airport operator has separately determined the depreciation for the gross block of aeronautical, non-aeronautical and non-airport assets. Then from this depreciation on gross block, HIAL has reduced the depreciation on ADFG funded assets for each year to compute the depreciation to be considered for the purpose of determination of ARR.
- **5.115.** Further, as HIAL has capitalized the forex losses adjustments as per AS 11, depreciation on this capitalized amount had been included in HIAL's depreciation for regulatory purposes. As explained in para 5.79 above, the Authority proposes to disallow such capitalization and to ensure consistency remove depreciation

corresponding to the capitalization from the depreciation allowed for regulatory purposes.

5.116. Additionally, the Authority notes HIAL's statement that "No returns or depreciation has been claimed on the assets funded by the ADFG. An adjustment has been made to deduct the amount from the RAB as well as from depreciation for tariff determination." HIAL's treatment is thus in line with the Authority's Order No. 38/2013-14 for the 1st Control Period where it was held that depreciation as reflected in the books of HIAL needs to be adjusted by an amount of depreciation that would be attributable to the funding of ADFG along with any other adjustments being made to RAB (such as forex loss). However, as the tariff determination is being conducted under 30% shared till, the Authority proposes to reduce depreciation corresponding to assets funded through an ADFG from aeronautical depreciation rather than proportionately between aeronautical and non-aeronautical depreciation.

5.117. Further, the Authority observed that HIAL in its revised tariff financial model submitted on 28.01.2017 had updated the depreciation rates of the existing assets based on the actuals for FY 2015-16. However, the Authority was unable to reconcile these rates with the financial statements for FY 2015-16 submitted by HIAL on 28.01.2017. Consequently, vide a query dated 03.03.2017, the Authority has sought from HIAL auditor certificates for the depreciation rates used for existing assets.

5.118. Further to the above, the value of RAB under 30% shared till as proposed by the Authority is presented below:

Table 18: Computation of Regulatory Asset Base for the 2nd Control Period

Particulars (in Rs. crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Opening RAB	1445.12	1469.52	1409.09	1610.17	2515.96
Additions to RAB	183.88	108.40	350.72	1082.93	205.30
Less: Deletions to					
RAB	0.00	0.00	0.00	0.00	0.00
Less: Depreciation (including ADFG					
adjustment	159.48	168.84	149.64	177.14	220.34
Closing RAB	1469.52	1409.09	1610.17	2515.96	2500.92
RAB for Tariff					
Determination	1457.32	1439.30	1509.63	2063.06	2508.44

Proposal No. 3. Regarding Regulatory Asset Base (RAB)

- 3.a. Based on the material before it and its analysis, the Authority proposes:
- To include only aeronautical assets of HIAL in RAB for the purpose of determination of aeronautical tariffs for the 2nd Control Period under the 30% shared till mechanism.
- ii. To calculate the RAB for each year as the average of the opening and closing RAB and calculate the return for each year on the average RAB.
- iii. Accordingly to consider the value of RAB as per Table 18 for determination of aeronautical tariff under.
- iv. To accept HIAL's proposed treatment of allocation of assets between aeronautical and non-aeronautical categories except that of cargo, ground handling, fuel farm, cargo satellite building, fixed electrical ground power (FEGP), vehicle fueling services, CUTE/CUSS/BRS IT services, project site office and new office building. The Authority proposes to treat cargo, ground handling, fuel farm, cargo satellite building, fixed electrical ground power (FEGP), vehicle fueling services and CUTE/CUSS/BRS IT services as aeronautical assets to be included in the calculation of RAB for tariff determination. In addition, the Authority proposes to reallocate the project site office and new office building between aeronautical and non-aeronautical categories as discussed in paras 5.69 above to 5.73 above.
- v. To include the proposed capital expenditure and general capital expenditure of HIAL in the determination of RAB for the 2nd Control Period. The Authority has revised the estimated cost of the expansion project of HIAL based on a study undertaken by an independent consultant.
- vi. To allow deferment of only Rs. 3.15 crore of fuel farm related capital expenditure from FY 2015-16 to FY 2016-17 as opposed to Rs. 4.67 crore proposed by HIAL.

6. Weighted Average Cost of Capital (WACC)

a HIAL Submission on Weighted Average Cost of Capital (WACC)

Cost of Equity

6.1. As per its initial submission dated 25.03.2016, HIAL submitted that it has considered Cost of Equity as 24% based on a study conducted by consultancy firm Jacobs. HIAL has resubmitted its arguments pertaining to estimation of cost of equity, which were made by it during the 1st Control Period, and has resubmitted the Jacobs report. These arguments and the report have been extensively analysed and responded to by the Authority in its Tariff Order for the 1st Control Period. The Authority finds no fresh argument and hence no requirement of fresh examination.

Cost of Debt

- of the airport was funded by term loans from various financial institutions amounting to Rs. 2,120 crores. HIAL further added that these included Rupee Term Loans of Rs. 1,602 crores and Foreign Currency Loan of USD 125 million. Regarding its requirement of debt over 2nd Control Period, HIAL's submission is that its debt shall comprise the following:
 - a) Rupee Term Loan (Existing)
 - b) External Commercial Borrowing (Existing)
 - c) New Debt facility to fund Expansion Capex & Airside expansion
 - d) Interest Free Loan (Existing)

Rupee Term Loan (Existing)

6.3. Vide its submission dated 5.12.2016, HIAL expressed that pursuant to the Authority's Order No. 38/2013-14 for the 1st Control Period, HIAL faced challenges on account of liquidity constraints and had to take remedial measures to manage cash flow. HIAL explained that in June 2014, it refinanced all its existing Rupee Term Loans ("RTL") with a Term Loan from a consortium led by ICICI Bank Limited. HIAL further specified certain remedial measures it was compelled to take. An extract of the same has been reproduced below,

"Under the terms of refinancing, GHIAL took a principal repayment moratorium of two years. The refinanced loan will be repaid over the period in structured quarterly instalments starting from 31st July 2016."

GHIAL also received an additional sanction of Rs. 158 crores (Rs. 65 Crores drawn till December 31, 2015) to enable it to meet its various capex requirements."

- average cost of debt for the Rupee Term Loan as on 31.12.2015 is 10.69% p.a. which has been considered for projecting interest cost for Q4 of FY 2015-16. Regarding the projection of interest rates on RTL over the 2nd Control Period, HIAL has projected an increase of 25 basis points year-on-year over the five year period.
- 6.5. Subsequently, HIAL resubmitted its financial model on 28.01.2017 where it updated the financial model with the financial results of FY 2015-16. HIAL's projected RTL borrowings (Existing loans only) as per its revised financial model submitted on 28.01.2017 is as given below,

Table 19: Rupee Term Loan borrowings projected by HIAL as per the financial model submitted in 28.01.2017

Particulars (in Rs. crores)	2017	2018	2019	2020	2021
Opening Balance	1249.26	1286.89	1239.92	1192.95	1117.99
Drawdown	50.00	0.00	0.00	0.00	0.00
Repayment	12.37	46.97	46.97	74.96	115.43
Closing Balance	1286.89	1239.92	1192.95	1117.99	1002.56
Interest	138.73	141.38	139.16	135.07	126.60

External Commercial Borrowing (ECB)

6.6. Regarding the ECB availed by HIAL, it submitted vide its MYTP submission dated 5.12.2016 that a debt of USD 125 million had been raised during the construction phase of the airport at a spread of 1.75% over the 3 month LIBOR. HIAL also stated that it had entered into an Interest Rate Swap to hedge LIBOR volatility; fixing the same at 5.545% over the tenure of loan. HIAL further submitted that the interest rate was subsequently increased by 100 basis points by the ECB lender, and necessary approval facilitating the same was obtained from RBI dated 20.03.2014.

HIAL has also submitted a copy of this RBI approval as an annexure to its MYTP submission.

accounted for retrospectively from July 2012 and an effective rate of interest of 8.73% p.a. inclusive of withholding tax is considered for projecting the interest cost for FY 2015-16. HIAL's submission on this matter has been reproduced below:

"After the RBI approval (attached as Annexure-9) dated 20th March 2014 to increase the spread from 1.75% to 2.75%, the rate of interest on the ECB has changed retrospectively from July 2012. The effective rate of interest on ECB is now 8.73% p.a. (incl. withholding tax of 5%) which has been considered for projecting the interest cost on ECB for the FY 2016."

6.8. Regarding hedging against foreign exchange fluctuations, HIAL vide its MYTP submission dated 5.12.2016 mentioned that it plans to take a USD-INR swap for the ECB obligations for the principal and coupon (interest) repayments for the next 5 years including an additional exchange cover premium. Pursuant to the above, HIAL has forecasted the ECB Interest Rate for the 2nd Control Period. Accordingly, HIAL's submission to the Authority is given below,

"We propose to hedge the foreign exchange fluctuation risk on ECB based on final approval of Authority in this regard. We also request the Authority to true-up any change in the hedging cost at the time of taking the hedge cover..."

6.9. Accordingly, vide its revised financial model submitted on 28.01.2017, HIAL has projected its ECB borrowings as given below,

Table 20: External Commercial Borrowings projected by HIAL as per the financial model submitted on 28.01.2017

Particulars (in Rs. crores)	2017	2018	2019	2020	2021
Opening Balance	333.03	296.72	260.42	224.11	187.81
Drawdown	0.00	0.00	0.00	0.00	0.00
Repayment	36.30	36.30	36.30	36.30	47.05
Closing Balance	296.72	260.42	224.11	187.81	140.76
Interest	50.92	45.04	39.17	33.30	26.56

New Debt facility to fund Expansion Capex & Airside expansion / new rupee term loan

- debt requirement of Rs. 1,335 crores to finance terminal and airside expansion. HIAL has further submitted that this debt shall be drawn FY 2016-17 onwards and considered the cost of this new RTL at 50 basis points above the existing RTL due to the construction risk involved. Also, regarding projection of the cost of debt for the new RTL, HIAL has assumed a year on year increase of 25 basis points over the duration of the 2nd Control Period.
- **6.11.** Based on the above, HIAL vide its revised financial model submitted on 28.01.2017 has projected its New Debt Facility as given below,

Table 21: New Debt Facility projected by HIAL as per the financial model submitted on 28.01.2017

Particulars (in Rs. crores)	2017	2018	2019	2020	2021
Opening Balance	0.00	115.38	612.99	1256.38	1334.57
Drawdown	115.38	497.62	643.38	78.19	0.00
Repayment	0.00	0.00	0.00	0.00	13.21
Closing Balance	115.38	612.99	1256.38	1334.57	1321.35

Interest Free Loan (IFL)

free loan ("IFL") from the State Government of Rs. 315.05 crores; which it has considered to be a part of total debt at a cost of 0%. HIAL's submission on the matter is as reproduced below,

"The IFL from the State Government has to be repaid in 5 equal instalments from the 16th anniversary of the Commercial Operations Date i.e. 23rd March 2024. Thus the repayment of the interest free loan will not commence in Control Period 2."

6.13. Vide its revised financial model submitted on 28.01.2017, HIAL has projected its IFL as given below,

Table 22: Interest Free Loan projected by HIAL as per the financial model submitted on 28.01.2017

Particulars (in Rs. crores)	2017	2018	2019	2020	2021
Opening Balance	315.05	315.05	315.05	315.05	315.05
Drawdown	0	0	0	0	0
Repayment	0	0	0	0	0

Closing Balance	315.05	315.05	315.05	315.05	315.05
Interest	0	0	0	0	0

6.14. Vide, its revised financial model dated 28.01.2017, HIAL has projected cost of debt considered for existing and new loan facilities as given below:

Table 23: Cost of debt projected by HIAL as per the revised financial model submitted on 28.01.2017

Loan Facility (Rate of Interest %)	2016	2017	2018	2019	2020	2021
Existing Rupee Loans	10.69%	10.94%	11.19%	11.44%	11.69%	11.94%
New Rupee Loans for Capex	-	11.19%	11.44%	11.69%	11.94%	12.19%
Full cost of ECB	8.73%	16.17%	16.17%	16.17%	16.17%	16.17%
Base Cost	2.89%	2.89%	2.89%	2.89%	2.89%	2.89%
IRS	5.84%	5.84%	5.84%	5.84%	5.84%	5.84%
Exch. cover premium	=	7.44%	7.44%	7.44%	7.44%	7.44%
IFL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Consolidated RTLs

expansion capex and airside expansion. Vide its revised financial model submitted on 28.01.2017, HIAL has projected its consolidated RTLs as given below,

"...

		1			
Particulars	2017	2018	2019	2020	2021
Consolidated Rupee Loan -					
Opening Balance	1249.26	1402.27	1852.91	2449.32	2452.56
Drawdown	165.38	497.62	643.38	78.19	0.00
Repayment	12.37	46.97	46.97	74.96	128.64
Consolidated Rupee Loan -					
Closing Balance	1402.27	1852.91	2449.32	2452.56	2323.92
Interest	140.75	149.48	176.79	246.89	288.48

..."

6.16. Subsequently, HIAL made an adjustment for the amount of RTL pertaining to the demerger of HIAL with GMR Hotel and Resorts Limited ("GHRL"). The Authority as per Para 13.23 of its Order No. 38/2013-14 noted that at the time of demerger of the hotel business into GHRL, the assets being demerged were worth Rs. 238.66 crore.

HIAL had further stated vide the auditor certificate that this project was fully debtfunded, so at the time of demerger, Rs. 140 crore (a rounded-off figure) was considered as debt outstanding for GHRL and Rs. 110 crore (a rounded-off figure for Rs. 109.66 crore) was considered as equity investment into GHRL. The Authority thus noted from the auditor certificates that HIAL had used debt to fund the equity investment of Rs. 109.66 crore into GHRL. Pursuant to this adjustment, HIAL's consolidated RTLs are as given below,

"…

Particulars	2017	2018	2019	2020	2021
Consolidated Rupee Loan -					
Opening Balance	1162.15	1236.63	1261.17	1649.43	2374.44
Drawdown	86.23	69.18	432.91	796.25	0.00
Repayment	11.75	44.64	44.64	71.24	122.92
Consolidated Rupee Loan -					
Closing Balance	1236.63	1261.17	1649.43	2374.44	2251.52
Interest	133.81	142.34	169.76	240.06	282.07

"

6.17. Based on the submissions of HIAL presented above, HIAL has requested the Authority to consider its fair rate of return as 17.28%. HIAL's computation in the financial model submitted on 28.01.2017 is presented below,

Table 24: Weighted Average Cost of Capital proposed by HIAL in the 2nd Control Period

Particulars (in Rs. Crores)	2017	2018	2019	2020	2021		
Debt (Average Balance)	1717.7	1707.4	1854.1	2351.0	2583.4		
IFL	315.1	315.1	315.1	315.1	315.1		
Equity	929.3	1561.0	2227.2	2871.6	3475.1		
Debt (including IFL) + Equity	2962.1	3583.5	4396.3	5537.6	6373.6		
Cost of Debt (Kd)	12.67%	12.68%	12.63%	12.54%	12.61%		
Cost of IFL	0%	0%	0%	0%	0%		
Cost of Debt (Including IFL)	10.71%	10.70%	10.80%	11.06%	11.24%		
Cost of Equity (Ke)	24.00%	24.00%	24.00%	24.00%	24.00%		
Individual year Gearing							
(including debt as IFL) (G)	68.63%	56.44%	49.34%	48.14%	45.48%		
		201	6-17 to 2020	-21			
Weighted Average Gearing (WG)			51.59%				
Weighted Average Cost of	10.93%						
Debt (including cost of IFL)							
(Rd)							
Cost of Equity (Re)			24.00%				

Fair Rate of Return	17.26%
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b Authority's Examination of HIAL's submission on Weighted Average Cost of Capital

6.18. The Authority has carefully examined the submissions received from HIAL on the WACC to be considered for the 2nd Control Period. As stated earlier, the Authority does not find any fresh argument from HIAL on cost of equity and hence any need for a fresh examination. The Authority's examination of cost of debt is as below:

Authority's Examination of HIAL's submission on Cost of Debt

- 6.19. The Authority notes HIAL's submission dated 5.12.2016 which states that HIAL's Cost of Debt comprises the following:
 - a) Rupee Term Loan (Existing)
 - b) External Commercial Borrowing (Existing)
 - c) New Debt facility to fund Expansion Capex & Airside expansion
 - d) Interest Free Loan (Existing)

Rupee Term Loan (Existing)

- expressed that it refinanced all its existing Rupee Term Loans ("RTL") with a Term Loan from a consortium led by ICICI Bank Limited. In the process, HIAL has taken a principal repayment moratorium for two years along with an additional sanction of Rs. 158 crore. The Authority proposes to include the refinanced loan for the purpose of tariff determination for the 2nd Control Period.
- Rupee Term Loan (RTL) 1 contained an amount which pertained to GHRL; as mentioned in para 6.16 above. This sum of ~ Rs. 110 crore (rounded of figure) pertaining to GHRL is not supposed to be considered for computation of HIAL's WACC. To exclude the impact of loans corresponding to GHRL, repayments for HIAL's long term debts were being apportioned between the GHRL component (which is outside the regulatory purview) and the other portion which contributes towards the computation of WACC. The Authority however noticed that HIAL's financial model had merged(aggregated) all HIAL's RTLs while pro-rating repayments for GHRL's portion of debt, instead of pro-rating only long term loans which actually contained a GHRL

- component. The Authority therefore proposes to pro-rate only HIAL's long term loans categorized as RTL1 for this purpose of GHRL adjustment.
- 6.22. HIAL had further submitted vide its submission dated 5.12.2016 that its weighted average cost of debt for the Rupee Term Loan as on 31.12.2015 is 10.69% per annum, which has been considered for projecting interest cost for Q4 of FY 2015-16.
- 6.23. The Authority had requested HIAL to update its financial model based on the actual audited results of FY 2015-16. Accordingly, HIAL updated the same and provided an auditor's certificate corroborating the debt outstanding and the average rate of interest. HIAL's auditor certificate dated 19.01.2017 mentions that Rs. 1,249.26 crores of RTLs are outstanding in the books of HIAL at an average interest rate of 10.70% p.a.
- 6.24. Regarding the projection of interest rates on RTL over the 2nd Control Period, the Authority has learnt about an exercise of debt restructuring undertaken by HIAL through a Bond issue. Accordingly projection of cost of debt for FY 2017-18 onwards will be governed by details on cost of this Bond issue. Accordingly the Authority does not find the request of HIAL for an increase of 25 basis points year-on-year in the cost of debt relevant any further.

External Commercial Borrowing (ECB)

6.25. Regarding the ECB availed by HIAL, the Authority notes that a debt of USD 125 million had been raised during the construction phase of the airport at a floating interest rate of 1.75% per annum over the 3 month LIBOR. HIAL submitted that it had hedged its LIBOR in accordance with the sanctioned terms at a fixed rate of 5.545% per annum in USD terms over the tenure of loan. The Authority also noted HIAL's submission that the spread on HIAL's ECB has increased from 1.75% to 2.75% p.a. retrospectively from July 2012. The Authority has had reference to the letter dated 20.03.2014 from Reserve Bank of India allowing increase of such ECB rate from 3 month LIBOR plus 1.75% to 3 month LIBOR to 2.75%. Based on the above, along with withholding taxes at 5% p.a. on the rate of interest, the Authority notes HIAL's effective cost of ECB borrowings to be 8.73% p.a.

- dated 19.01.2017, which confirms the amount of ECB loan outstanding and the effective cost of ECB for HIAL. The Authority notes that as on 31.03.2016, the amount of ECB outstanding in the books of HIAL are USD 82.10 million (INR 548.18 crores) at an effective borrowing cost of 8.732% per annum.
- 6.27. Regarding hedging against foreign exchange fluctuations, HIAL vide its MYTP submission dated 5.12.2016 mentioned that it plans to take a USD-INR swap for the ECB obligations for the principal and coupon (interest) repayments for the next 5 years. As per the latest financial model submitted by HIAL dated 28.01.2017, HIAL's cost of ECBs post hedge is expected to be 16.17% p.a.
- the cost of ECBs from 8.73% p.a. to 16.17% p.a. The Authority is of the view that hedging for a 5 year period may have got such a high cost of hedging while a more prudent practice in the industry is to have hedging for exchange rate risk for a shorter term not exceeding 1 year, which may be more cost effective. The Authority is also of the view that had the hedging been undertaken at the time of borrowing the ECB, the cost would not have been so high. The Authority would also expect adherence to practices mentioned in para 6.32.5 below and the guidelines from Reserve Bank of India to the corporates and their lending banks on unhedged exposure of the corporates. The Authority has also learnt of a debt restructuring exercise by HIAL, which makes this request from HIAL not applicable any further. The same is discussed below:

Bond Issue by HIAL to replace its Rupee Term Loan and External Commercial Borrowing

6.29. Subsequently, the Authority is in receipt of submission from HIAL on the debt restructuring exercise undertaken by it. The submission states as follows:

"GHIAL has raised USD 350 million from bond issue, towards refinancing of Rupee Term Loan, External Commercial Borrowings and a part of the proceeds to be deployed to part finance the expansion program. We have raised the bond at a coupon of 4.25% payable semi-annually with a tenor of 10 year bullet repayment falling due in Oct 2027. ...

- ...Out of USD 350 million issue proceeds, USD 272 million is used for refinancing of existing Rupee Loan and ECB and remaining USD 78 million shall be utilized for expansion funding...
- B. Amortized/Recurring Cost
- a. Coupon- The instrument carries semi-annual coupon of 4.25% payable over the tenor of the instrument, i.e., 10 years.
- b. Withholding Tax In case of ECB, the company is required to gross up all the applicable taxes. ECBs tend to attract withholding Taxes of 5% which needs to be considered by the Authority
- c. Cost of Hedging in order to cover the risk of coupon and principal, the company will have to decide on appropriate hedge structure. The cost of hedging of USD Bond needs to be considered by the Authority. Company is contemplating various hedging structure and the expected cost hedging depending upon the stricture would be in the range of 4.5% p.a. This cost of hedging needs to be considered by the Authority..."
- 6.30. In addition to the above, HIAL has sought consideration of one-time charges incurred by it in respect of this Bond issue. HIAL's submission on these one-time charges are as follows:
 - "... a. Charge off of the Upfront Fee on the Existing Rupee Loan Company had refinanced its Rupee loan in 2014 and had to incur Rs.8.78 crores as upfront processing fee which was being amortized in accordance with the accounting treatment under GAAP. Further the RTL was refinanced in October 2016* where upfront fee of Rs.11.06 crores was paid on this refinancing which will now be charged to P&L post refinancing through bonds. Thus total of Rs.19.02 crores of upfront fee as below accordingly needs to be recognized as one time charge off part of the second control period in FY 17-18 which was not claimed in our earlier MYTP filing for 2nd control period.
 - b. Unwinding of Interest Rate Swap- Company availed External Commercial Borrowing (ECB) from Abu Dhabi Commercial Bank (ADCB) and as part of the sanction stipulation, the company has entered into

Interest Rate Swap (IRS) with ADCB to hedge the risk of upward rise of USD Libor rate. The IRS was carrying Mark to Mark loss and upon unwinding of the structure, company has to pay an amount of USD 8.52 million (equivalent to Rs.55.38 crores) to ADCB which gets charged off to P&L needs to be recognized by the Authority.

- c. Break Cost In case of refinancing of ECB, as per agreement, the company has to pay prepayment premium of 2% which works out to USD 1.37 mn. This amount was negotiated with ADCB and brought down significantly. The break cost we paid to ADCB on account of this refinancing was USD 0.34 million (equivalent to Rs.2.21 crores)...."
- "...d. Issue Expenses The company has incurred an amount of INRs.50 crores towards issue expenses which primarily paid in the form of arranger fee, legal expenses, listing, printing and travelling. The pro-rated portion of such expenses will be charged off to P&L and remaining amount allocated toward expansion will be capitalized. The approximate amortized cost would be 0.35% p.a. over the tenor of the USD Bond..."
- proposed consideration of these charges in two parts; INR 76.61 crores as a one-time expense in FY 17-18 and out of remaining INR 50 crores, INR 11 crores to be capitalized and INR 39 crores to be amortized over a period of 10 years. Through this amortization HIAL has proposed to increase the cost of debt for this Bond issue by 35 basis points (0.35%) on future value basis.
- **6.32.** The Authority proposes to consider the following treatment in respect of RTL and ECB of HIAL:
 - 6.32.1. In line with the information made available by HIAL, the Authority proposes to replace the entire RTL and ECB of HIAL (as presented in paras from 6.20 above to 6.28 above) with this Bond issue.
 - 6.32.2. Cost of debt of this Bond issue comprises the base rate, and withholding tax.
 - 6.32.3. Base rate is stated by HIAL to be at 4.25% p.a.
 - 6.32.4. Withholding tax, as currently applicable, will be 5% on the base rate. Thus the rate will work out to 4.47%

- HIAL has proposed to hedge the foreign exchange exposure for this Bond 6.32.5. issue and the cost of hedge has been stated to be 4.5% p.a. The Authority has maintained in the past that it is a management function to explore cost effective means of financing. While opting for such foreign currency loans, it becomes important to be mindful of likely fluctuations in exchange rates, which could significantly impact the actual cost of debt. Borrowers explore ways of limiting the impact of such fluctuations. It is a common industry practice to hedge foreign currency loans to limit the forex fluctuation losses to be incurred by the borrower on both principal and interest components of the borrowing. Borrowers and their lending banks are also expected to adhere to guidelines from RBI with regard to unhedged exposure. Hedging by a borrowers depends upon the its ability to estimate the movement in exchange rates going forward as well as the natural hedge available to it in the form of earnings in foreign currency. The Authority proposes to consider the proposed cost of hedge at 4.5% p.a. and include the same in cost of Bond and accordingly also proposes not to consider losses, if any, that may be incurred by HIAL on account of fluctuations in foreign currency during the second Control Period from the date of this Bond issue at the time of true-up in the third Control Period.
- 6.32.6. Overall cost of debt for this Bond issue is proposed to be taken at 8.96% p.a. (4.25%*(1+5%)+4.5%) This rate is proposed to be considered from FY 2017-18 onwards.
- 6.32.7. The Authority will consider the issue of one-time charges totalling to INR 126.61 crores separately upon receipt of Auditor certificates from HIAL detailing years of incurring these charges, the reasonableness of treatment accorded to it in the financial statements of HIAL, and a reconciliation of these with the submissions to the Authority in the past.

New Debt facility to fund Expansion Capex & Airside expansion / new rupee term loan

6.33. The Authority has noted HIAL's capital expenditure plans and acknowledges that HIAL would require additional debt to fund the same. However, the Authority understands that the final cost of the project is yet to be determined. Hence, for the

time being, the Authority proposes to accept HIAL's submission requiring Rs. 1,335 crores to finance the terminal and airside expansion.

- part of it (USD 78 million) will be funded through the Bond issue. The Authority understands that the balance will be funded through a Rupee Term Loan. While cost of this Bond Issue is available (refer para 6.32 above), cost of this new RTL has been proposed by HIAL at 50 basis points above the existing RTL due to the construction risk involved. However, HIAL has not submitted any quote / sanction letter corroborating the higher interest rate. In this current environment where interest costs are reducing, the Authority believes that HIAL will be able to obtain RTL finance at more competitive rates than HIAL's submission.
- Also, regarding projection of the cost of debt for new RTLs, HIAL has assumed a year on year increase of 25 basis points over the 2nd Control Period. The Authority has examined this matter as below:
- 6.36. The Authority understands that the base rate of a bank is not a reflection of its average lending rates; and only the minimum rate of interest at which the bank is allowed to lend funds. Moreover, the base rate of a single bank cannot be extrapolated to form a view on the interest rates prevailing in an economy where multiple private, public and foreign banks operate.
- of loans under the name Marginal Cost of Funds based lending rate instead of the base rate from April 2016. Hence, the trend in the base rate of SBI presented by the bank may not be an appropriate indicator to frame a view on lending rates.
- 6.38. Accordingly, the Authority proposes to use broader indicators to frame a view on interest rates. In line with the same, the Authority has referred to the Weighted Average Lending Rates on outstanding Rupee Loans as published by RBI on its website².

Table 25: Bank Group-wise Weighted Average Lending Rates (WALRs)

Weighted Average Lending Rates on Outstanding Rupee Loans

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² https://www.rbi.org.in/rbi-sourcefiles/lendingrate/LendingRates.aspx

	(Per cent)							
End-Quarter	Public Sector	Private	Foreign	WALR of				
	Banks	Sector Banks	Banks	SCBs				
Mar-2012	12.63	12.41	12.08	12.56				
Jun-2012	12.39	12.47	12.23	12.40				
Sep-2012	12.29	12.59	11.87	12.33				
Dec-2012	12.21	12.43	11.73	12.23				
Mar-2013	12.11	12.39	12.58	12.19				
Jun-2013	12.03	12.33	12.47	12.12				
Sep-2013	12.05	12.80	13.10	12.25				
Dec-2013	12.02	12.58	12.70	12.18				
Mar-2014	11.99	12.43	12.32	12.11				
Jun-2014	11.95	12.55	12.32	12.10				
Sep-2014	11.74	12.54	11.68	11.90				
Dec-2014	11.68	12.34	12.01	11.84				
Mar-2015	11.61	12.24	11.84	11.76				
Jun-2015	11.46	12.07	11.69	11.61				
Sep-2015	11.39	11.97	11.56	11.53				
Dec-2015	11.14	11.85	11.33	11.31				
Mar-2016	11.10	11.46	11.29	11.20				
Jun-2016	11.08	11.47	11.13	11.19				
Sep-2016	11.01	11.44	11.02	11.13				
Dec-2016	11.01	11.23	11.01	11.07				
Mar-2017	10.75	10.92	10.93	10.80				
June-2017	10.59	10.82	10.87	10.67				

Note: WALRs have been computed based on data submitted by banks. As banks often revise their past data, these data are provisional.

- have been on a declining trend and HIAL's projection of a 25 basis points increase in RTL interest rates may not be appropriate. Cost of debt for this debt has accordingly been considered same as that of existing RTL of HIAL.
- **6.40.** The Authority thus proposes to consider the cost of debt for expansion capex as follows:
 - 6.40.1. Part of debt (USD 78 million which is equivalent to INR 507 crores at an exchange rate of INR 65/USD) to be considered to be financed through the Bond issue at rates proposed in para 6.32 above, i.e. at 8.96%p.a.
 - 6.40.2. Balance part of debt to be considered to be financed through RTL at the current rates of RTL as incurred by HIAL, which is at 10.70% p.a.

Interest Free Loan (IFL)

6.41. Vide its submission dated 05.12.2016, HIAL acknowledged an existing interest free loan from the State Government of Rs. 315.05 crores which will have to be repaid from FY 2023-24. HIAL has submitted an auditor's certificate corroborating the outstanding balance of IFL submitted by HIAL. Accordingly, the Authority proposes to consider this IFL to be a part of total debt at a cost of 0%.

Ceiling on Interest Cost of Debts

- 6.42. Earlier, the Authority vide Order No. 38/2013-14 for the 1st Control Period had decided to true up the cost of debt with an extra provision of ceiling the Rupee Term Loan at 12.50% p.a. and the ECB Loan at 8.00% p.a. The Authority had also proposed to review the ceiling of 12.5% for the Rupee Term Loan and 8.00% for the ECB Loan upon reasonable evidence that HIAL may present to the Authority in this behalf.
- 6.43. The Authority notes that HIAL's cost of ECB borrowings have increased to 8.732% p.a. which is above the ceiling rate allowed by the Authority vide Order No. 38/2013-14. In the given circumstance, the Authority proposes to true-up HIAL's cost of ECB borrowings based on the actual rate of interest incurred by HIAL; excluding foreign exchange losses. The treatment for foreign exchange losses have been discussed in the chapter on Operating Expenses.
- 6.44. Pursuant to the above submissions, the Authority has projected HIAL's cost of debt as below,

Table 26: Weighted Average Cost of Capital considered by the Authority for the 2nd Control Period

Particulars (in Rs. Crores)	2017	2018	2019	2020	2021
Debt (Average Balance)	1,502.6	1,463.4	1,473.7	1,837.6	2,133.8
IFL	315.1	315.1	315.1	315.1	315.1
Equity	603.3	979.6	1,167.3	1,337.0	1,492.2
Debt (including IFL) + Equity	2,420.9	2,758.1	2,956.0	3,489.6	3,941.0
Cost of Debt (K _d)	10.28%	8.97%	9.03%	9.24%	9.38%
Cost of IFL	0.00%	0.00%	0.00%	0.00%	0.00%
Cost of Debt (Including IFL)	8.50%	7.38%	7.44%	7.89%	8.17%
Cost of Equity (K _e)	16.00%	16.00%	16.00%	16.00%	16.00%
Individual year Gearing (including debt as IFL) (G)	75.08%	64.48%	60.51%	61.69%	62.14%

	2016-17 to 2020-21
Weighted Average Gearing (WG)	64.16%
Weighted Average Cost of Debt (including cost of IFL) (R _d)	7.90%
Cost of Equity (R _e)	16.00%
Fair Rate of Return	10.80%

Proposal No. 5. Regarding WACC

- 5.a. The Authority proposes to adopt the following approach for consideration of cost of debt towards determination of tariffs for aeronautical services provided by HIAL at RGI Airport, Hyderabad:
 - i. To adopt return on equity (post tax cost of equity) as 16% for the purpose of calculation of WACC.
 - ii. To adopt 8.96% as the cost of HIAL's debts (excluding the interest free loan) from FY 2017-18 till the end of the 2nd Control Period.
 - iii. To adopt the existing interest rates (as per HIAL's financial statements for FY 2015-16) for the year FY 2016-17.
 - iv. To consider the outstanding levels of debt and equity as per Table 2: Weighted Average Cost of Capital considered by the Authority for true up for the 1st Control Period.
 - v. Not to accept the proposed increase of 0.25% in the rate of interest of existing rupee term loan and new RTL facility for expansion for calculation of future cost of debt for the 2nd Control Period.
 - vi. To true-up the cost of debt for the 2nd Control Period with actual values (determined as weighted average rate of interest for the individual loans outstanding within the Control Period).
 - vii. To not consider losses, if any, that may be incurred by HIAL on account of fluctuations in foreign exchange rate from the date of the Bond issue and

instead consider the cost of hedge at 4.5% p.a. during the second Control Period.

viii. To consider the weighted average cost of capital as 10.80% as the fair rate of return for HIAL over the 2nd Control Period.

7. Operating Expenses

a HIAL Submission on Operating Expenses

HIAL Submission on Rationale for the Operating Expenses being different from the expenses proposed to be incurred

expenditure for FY 2014-15 and FY 2015-16 is not the representative of the actual amount that was required to be spent. According to HIAL, this was primarily on account of the tariff Order No. 38/ 2013-14 passed by the Authority (to be effective from 1.04.2014). This Order resulted in zero UDF revenue collections in FY 2014-15 and 3 quarters of FY 2015-16. Consequently, overall revenue in FY 2014-15 decreased by over 40% as compared to FY 2013-14 and HIAL incurred PAT losses. This further resulted in a cash crunch and HIAL was forced to undertake several measures to conserve cash. An extract of HIAL's submission stating the detailed reasons for this is as given below,

"...

1. Paucity of Funds

Under the Tariff Order for GHIAL on 24th February 2014, UDF was set to zero. Prior to this, UDF constituted almost 45% of GHIAL revenues. The order resulted in a cash crunch in GHIAL and postponement of various O&M activities and general capex. Operating expenditure of FY 2015 and FY 2016 is therefore not representative of the actual expenditure to be incurred to maintain and operate the airport at the required standards. While there has been some improvement in the cash position post reinstatement of tariff, these activities will be undertaken in due course of time during Control Period 2.

2. There is going to be a significant rise in spare part costs

After 8 years of operation, a majority of the systems and equipment are now ageing and are outside the warranty period. R&M expenditure therefore includes the additional cost of stocks and spare parts. This will

become a major source for escalation in operating costs, as the facility gets older.

3. Airside Infrastructure is getting old

The infrastructure on the airside is getting old and this entails higher maintenance costs. Regular maintenance is required for these assets and this will result in continuously increasing costs year on year.

4. The existing assets will be 13 years old by the end of Control Period 2

The existing infrastructure is now getting older. Some of equipment procured are 6-7 years old and need replacement. By the end of control period these equipment will be 13 years old and since it is not feasible to replace all the equipment, it will need to be maintained and hence the maintenance cost will witness a jump.

..."

7.2. In addition to the above submission, HIAL requested that uncontrollable costs should be allowed to be trued up by the Authority based on the actual expenditure. HIAL explained that such costs could be in the nature of security costs, statutory operating costs (including but not limited to DGCA, Customs, Immigration, etc.), property taxes, safety and environment cost, utilities cost variation due to change in rates (Electricity/Water), cost variance due to increase in service levels etc. Further, HIAL requested that any change in direct and indirect tax rates may be allowed as pass-through.

HIAL Submission on classification of operating expenses

7.3. As per the HIAL's submission, HIAL has provided the six broad classifications of operating expenses as presented below,

"...

- 1. Manpower/Payroll Expenses
- 2. Utility Expenses
- 3. General and Administration Expenses
- 4. Repairs and Maintenance
- 5. Other Operating Expenses

6. Concession Fee

..."

7.4. The Authority is in receipt of an Auditor's Certificate (Annexure-12) from HIAL dated 25.03.2016 with the allocation of the operating expenses into aeronautical, non-aeronautical, common and non-airport components. An extract of the Auditor's certificate explaining the basis for this allocation is presented below,

"...

The classification of Operating Expense has been done based on the revised concept document approved by the management dated October 14, 2015...

... The figures mentioned in this certificate are not comparable with earlier certificate due to change in classification of few operating expenses based on the new concept document (refer Appendix –I Copy of Concept Document Dated February 20, 2013 and copies of the certificates dated March 29, 2013 and November 09, 2013)

...,

- **7.5.** The Authority subsequently examined the revised concept note on allocation of expenses where HIAL has explained its methodology for classification of expenses into aeronautical, non-aeronautical and common expenditure. An extract of HIAL's concept note dated 14.10.2015 is as reproduced below,
 - "... The aeronautical operating expenditure are those expenses which are necessary or required for the performance of Aeronautical Services at the Airport and all other expenditure that the Company may incur accordance with the Witten direction of Gol for or in relation to provision of any of the Reserved Activities.

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

The common operating expenditure has been assumed to include all the operating expenditure that ale not directly identifiable and used

commonly for providing both aeronautical and non-aeronautical Services..."

7.6. HIAL's allocation process for the respective heads of operating expenditure are as given below,

"...

Expenditure Name	Key Used
Personnel Costs	Head count based on cost center
Power Costs & Water	Aeronautical cost (net of amounts
Costs	recovered from concessionaires)
Security Expenses	Common cost
Consultancy/	Based on cost center
Advisory Expenses	
Auditor's Fees	Common cost
Director's Sitting Fees	Common cost
General and	Based on cost center
Administration Cost	
Travelling and	Based on cost center
Conveyance	
Rates & Taxes (incl	Aero & non -aero asset ratio
property tax)	
Recruitment and	Head count based on cost center
Training Charges	
Repair and	Based on cost center
Maintenance cost	
Insurance	Aero & non -aero asset ratio
Rents/ Property	Common cost
Related Expenses	
Manpower	Based on cost center
Outsourcing	
Car Parking expenses	Non Aeronautical cost
Passenger Bus Hire	Common
charges	
Housekeeping	Based on cost center
Expenses	
Bank & other finance	Aero & non -aero asset ratio
charges	

Note: Common costs are allocated between aero and non-aero in the ratio of actual expenditure incurred ..."

- of bank & other finance charges to the allocation ration of bank charges. HIAL has justified the change arguing that as debt funding is obtained for building assets, it is more appropriate to link it to the asset allocation ratio instead of expenses allocation ratio.
- **7.8.** Other modifications in HIAL's expense allocation (as compared to the 1st Control Period) pertains to the treatment of landscaping, facility management, protocol, township expenses. HIAL's rationale for treating them as aeronautical has been reproduced below,

"

- Landscaping is part of the overall airport infrastructure and intended to enhance the passenger experience. Landscaping along the main access road, rotaries and inside the airport premise is primarily used by the passengers. Hence, the cost of landscaping is treated as aero
- Facility Management mainly includes the house keeping cost for keeping the airport terminal clean for passengers and hence it is treated as aero cost.
- Protocol includes costs relating to management and facilitation of certain category of passengers passing through airport terminal.
 Hence, cost related to protocol services is treated aero cost.
- Township includes costs incurred for maintaining the facility which
 is used by airport critical staff deputed at the Terminal/Fire
 station/Airside... "
- **7.9.** Subsequently, HIAL vide its MYTP submission dated and 5.12.2016 provided the basis for projections of operating expenses. An extract of the HIAL's submission with respect to basis of forecast is as given below,

"...

Basis of Forecast

- We have forecasted the expenses for Control Period 2 with FY2016 as the base year. FY2016 costs have been broadly derived from the auditor's certificates for 3 quarters of FY 2016 and prorated for the remaining one quarter of FY 2016. The relevant growth drivers are applied to the base numbers. This is elaborated further in the subsequent sections.
- Operating costs have been allocated as Aeronautical or Non-Aeronautical as per the allocation methodology given in Annexure-3.

..."

HIAL Submission on Manpower Expenses

7.10. The Authority notes HIAL's submission regarding manpower expenses. An extract of HIAL's MYTP submission dated 05.12.2016 showing the increase in manpower expenses is as given below,

"...
Actual manpower expenditure for 9M FY 2016, i.e. from 1st April 2015 to
31st December 2015, has been prorated for 12 months for projecting the
expenditure for FY 2016, along with an additional provision for variable
and bonus payments.

Manpower numbers and Cost for FY 2016 is as forecasted below:

Manpower Numbers	FY2016 (Projected)
Total Manpower	486
Manpower Cost (Rs in	FY2016
Cr)	(Projected)
Salaries and Wages	54.64
Staff Welfare	3.67
Training	0.12
Total Manpower Cost	58.43

..."

7.11. In addition to above the Authority also notes the HIAL's submission regarding the basis for forecast of manpower expenses for 2nd Control Period. An excerpt from the submission showcasing the same is as under,

- Passenger traffic at RGIA has grown 1.7 times in the last 5 years from 6.22
 Mn in FY 2008-09 to 10.51 Mn in FY 2014-15. Personnel at the airport are
 over-stretched on account of the increase in passengers. Also, the airport
 industry in India is getting transformed and is maturing, leading to high
 competition for skilled talent.
- A normal increase in manpower is necessary due to increased activity on account of traffic growth. This is necessary to maintain service quality levels.
 Therefore, projected increase in manpower is based on our internal estimates.
- With new airports coming up in the Middle East, there was poaching of employees and this led to unforeseen attrition and vacant positions which could not be filled during FY 2016 as it took longer time to identify the right talent and skillset required for the aviation sector. However, the recruitment process has been initiated and required manpower shall be taken on board in FY 2017. However this is expected to lead to an increase in manpower costs due to poaching and subsequent recruitment at higher costs. Therefore, we have considered an increase of 16.05% in the manpower numbers in FY 2017.
- The proposed terminal expansion projects for increase in capacity from 12 MPPA to 20 MPPA are planned to be operationalized in FY 2019 and FY 2020.
 Owing to the increase in capacity and facilities, one-time increases of 16% in manpower are being considered in FY2019 and FY2020.
- Below is the projection for manpower numbers for FY 2017 FY 2021:

Year	Manpower at the	Additional requirement du	manpower ring the year	Total Manpower
	beginning of the year (Nos)	Operational (Nos)	Business & Support Services (Nos)	(Nos)
2017	486	48	30	564
2018	564	18	11	593
2019	593	76	47	717
2020	717	91	57	865
2021	865	23	14	902

- The average increment payout during the last 3 years was 7% to 9% i.e. previous increments only covered the effect of inflation, due to the cash crunch faced post the previous AERA Order.
- Keeping in mind the competitive environment GHIAL is subject to, and also addressing the management of attrition levels being currently experienced, we estimate a 7% p.a. real increase in salary rates for Control Period 2.

The table below provides an overview of the same:

Amounts in Rs. crores	FY2017	FY2018	FY2019	FY2020	FY2021
Manpower Cost	72.55	81.62	106.28	138.04	154.02
Aeronautical	59.26	66.58	86.81	114.04	128.55

HIAL Submission on Utility Expenses

- **7.12.** With respect to the Utility expenses, HIAL submitted that utility costs are calculated at gross level, less recovery from the airlines and concessionaires.
- **7.13.** With respect to the Utility Expenses related to electricity, HIAL submitted that the main substation (220/33 KV) for receiving power at the Airport has been built and is owned by TSTRANSCO and has been funded by the State Government. This asset is not in HIAL's books. From this main substation, power is received by load substations. The basis of the forecast for FY 2015-16 revenues as submitted by HIAL is given below,

- The effective electricity rate charged by Telangana State Utility is Rs 7.25 per unit at present.
- Actual power consumption for the 9M FY 2016 (YTD 31st December 2015) has been prorated for 12 months for projecting the power consumption for FY 2016.
- As part of the green initiative for the Airport, we plan to augment our solar power generation capacity in phases. Phase 1 is a 5 MW captive power plant to meet the current minimum load of the Airport. The capex for this project is Rs. 31.59 crores. The project was planned to be taken up in FY 2014, but due to fund shortages faced by the company

on account of zero UDF for Control Period 1 this could not be taken up on time. However, after the sanction of additional term loan from the lenders, GHIAL aggressively took up this project and it was operationalized in October 2015. This will lead to lower power cost and green energy for the airport. The project is expected to provide savings of 3.18 million units in FY 2016 (from October 2015 to March 2016) and 7.88 million units every year from FY 2017 onwards. The expected electricity cost saving (as given below) from this project has been accordingly considered in the projections.

Based on the above, FY2016 forecast is as under:

Power	FY2016
Effective unit cost (Rs/Unit)	7.25
Net Electricity Expense for the year (Rs crores)	18.45

..."

7.14. In addition to the above, HIAL has also submitted the projections for 2nd Control Period as presented below,

- The effective electricity rate has escalated on a CAGR of 11% p.a. during last four years.
 - FY 2011-12 Rs 4.1 per unit
 - FY 2012-13 Rs 5.3 per unit
 - FY 2013-14 Rs 5.92 per unit
 - FY 2014-15 Rs 6.97 per unit
 - FY 2015-16 Rs 7.25 per unit
- We have therefore assumed an escalation of 11% on FY 2016 electricity unit rates for Control Period 2.
- An annual escalation in unit consumption of 2% is considered on account of loss of efficiency in aging equipment and increased utilization on account of higher passenger loads
- We also contemplate increases in electricity unit consumption on account of increase in terminal area and higher traffic at the airport.

Terminal area will increase from 117,000 sqm to 146,601 sqm in FY 2019 and further to 218,175 sqm in FY 2020.

- Savings from Solar Power Plant:
 - Expected savings from phase 1 of the green initiative, 5 MW solar power project, which got commissioned in October 2015 has been considered in the projections from FY 2017 onwards.
 - o Phase 2 of the green initiative is to add 8 MW to the existing solar power generation capacity in FY 2017. The project cost for this addition would be around Rs. 44 crores. The savings from this expansion are expected to kick in from FY 2018.

Amounts in Rs. crores	FY2017	FY2018	FY2019	FY2020	FY2021
Units from Solar (mn kw)	7.88	14.10	20.50	20.50	20.50
Savings = Cost if procured	6.34	12.60	20.32	22.56	25.04
from Grid					

Projections for power costs for the period from FY 2017 to FY 2021 are as follows:

Amounts	in	Rs.	FY2017	FY2018	FY2019	FY2020	FY2021
crores							
Power Cost		•	17.41	14.17	13.02	28.32	42.30

..."

7.15. The Authority notes HIAL's submission regarding the Utility Cost pertaining to Water. HIAL submitted that HIAL's main supply of water is from HMWS&SB (Hyderabad Metropolitan Water Supply & Sewerage Board). The water from HMWS&SB is received through a direct line and stored in raw water underground storage tanks of 4800 KL capacity. The water treatment plant is designed to treat the total flow of 1600 KLD. Further, HIAL submitted that Water consumption at Hyderabad airport has reduced from 7,17,807 Kl in the FY 2011-12 to 4,91,594 Kl in FY 2014-15. This reduction in mainly on account of water conservation initiatives and measures being undertaken by the company. According to HIAL, various water conservation initiatives have been undertaken by the company in 2012-13 and 2013-14. Consequently, HIAL submitted that due to these initiatives HIAL has been able to optimize utilization of the water sources. However, the possibility for further savings in

the water consumption is limited as most of the water conservation projects have been concluded. Further, on account of lowering of water table in the Telangana Region owing to poor monsoon and a very of low rainfall this year, no further reduction in water consumption is expected. On the other hand, due to increase in passengers and increased activity at the airport, there has been an increase in the water consumption.

7.16. The Authority notes the basis of HIAL's forecast for the water expenses. An extract of the MYTP submission dated 05.12.2016 with respect to the water expense projections for FY 2015-16 is presented below,

"...

- Effective per unit water charges charged by HMWS&SB is Rs 183/KL.
- Actual water consumption for the 3 quarters of FY 2016 has been prorated for the full year to estimate the consumption for FY 2016.
- Taking into account the above factors, water costs for the FY2016 has been forecasted as follows:

	Net Units Consumption (FY 2016)	Costs (in Rs Crs)
Water	291490	Rs 5.33 Crs

..."

7.17. The Authority also notes HIAL's submissions on projections for water utility expenses for the 2nd Control Period as given below,

"...

There have been regular increases in water tariffs over the last 5 years and water rates have increased 5 times in the last four FYs with a CAGR of 39.5%. Looking at this trend in increase in water tariff, we have assumed yoy escalation of 25% in water unit rates in future.

- FY 2011-12 Rs 35/KL
- FY 2012-13 Rs 90/KL
- FY 2013-14 Rs 90/KL
- FY 2014-15 Rs 180/KL

- FY 2015-16 Rs 183/KL
- We contemplate an increase in water consumption for Control Period 2 in line with the expected traffic growth over the same period.
- We request for a 100% true up of water cost.
 The water cost forecast for the period starting from FY 2017 to FY 2021 is as follows:

Amounts in Rs. crores	FY2017	FY2018	FY2019	FY2020	FY2021
Water Cost	7.80	10.64	14.46	19.62	26.50

..."

7.18. Based on the aforesaid assumptions, the utility cost for the period from FY 2016-17 to FY 2020-21 is projected as stated below,

"...

Amounts in Rs. crores	FY2017	FY2018	FY2019	FY2020	FY2021
Utility Cost	25.21	24.81	27.48	47.94	68.81
Aeronautical	24.90	24.51	27.14	47.34	67.95

..."

HIAL Submission on General Administrative Expenses

- **7.19.** The Authority notes HIAL's submission regarding the administrative expenses. HIAL submitted that the administrative cost category contains several costs like rates and taxes, rent, consultancy and legal expenses, advertisement and community development, travel and communication costs, etc. The Authority notes from HIAL's submission that administrative cost can be classified into two broad categories:
 - 1) Administrative Expenses (Other than Bank & Finance Charges)
 - 2) Bank & Finance Charges
- **7.20.** The Authority notes HIAL's submission regarding basis of the forecast for Administrative Expenses (Other than Bank and Finance Charges) for FY 2015-16 as given below,

- Actual expenses incurred for 3 quarters of FY 2016 for the expense heads such as communication expenses, director sitting fee, rent, rates and taxes security etc. has been extrapolated for 12 months for projecting the cost for the FY 2016.
- There are a few expenses such as audit fees, travel cost, advertisement, community development, office maintenance etc., which are accounted towards the end of the financial year and hence cannot be projected based on the actual expenses incurred in the first 3 quarters of the year. Hence, a real increase of 7% is considered for projecting such expenses over the expenses of FY 2015.

..."

7.21. The Authority also notes HIAL submission regarding the basis for the forecast for Administrative Expenses (Other than Bank & Finance Charges) for 2nd Control Period as stated below,

"...

- A real increase of 7% is considered for projecting administrative expenses (excluding bank/other finance charges)
- Additional increase of 15% in administrative cost is considered for FY
 2019 and FY 2020 each on account of expansion.

The forecasted administrative cost (without bank charges / other finance charges) for the period starting from the FY 2015-16 to FY 2020-21 is as under:

Amounts in Rs. crores	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Admin Expense (excl Fin	60.88	67.49	80.27	96.19	115.27	122.40
charges)						
Aeronautical	52.16	58.45	68.89	82.76	100.47	107.89

..."

7.22. The Authority further notes the HIAL's submission regarding the projected cost for banking and finance charges for FY 2015-16 and 2nd Control period; an extract of which is presented below,

Forecast for FY 2016

- Bank charges/other finance charges as a percentage of average outstanding debt have been used for projections.
- Actual bank charges and working capital interest for YTD 31st December 2015, has been prorated for 12 months for projecting the bank charges for the FY 2016.

INR Crores	FY 2016 (Projected)
Total Bank Charges	5.60

Forecast for Control Period 2

- Bank charges have been projected proportionately with average outstanding debt.
- Bank charges and other related charges with respect to the financing of expansion capex are considered to be capitalised as part of the project cost.
- Working capital loan interest at 12.19% p.a. has been assumed based on the projected working capital loan.
- Working capital requirement has been worked out based on the levels of FY2015 as following:
 - Months Receivables Outstanding: 2.5 months
 - Months Inventory Outstanding: 1 month
 - Months Payables Outstanding: 0.5 month
- Margin of 25% has been considered for working capital projections as per the sanction terms of the lenders, which is also in line with RBI guidelines for calculation of Maximum Permissible Bank Finance (MPBF) for Working Capital
- Working capital loan projected on this basis is as follows:

Amounts in Rs. crores	FY2017	FY2018	FY2019	FY2020	FY2021
ProJected WC Loan	253.17	277.71	301.83	328.46	356.54

he forecasted bank charges /other finance charges for the period from FY 2017 to FY 2021 are as follows:

"

		1		1		
Amounts in Rs. crores		FY2017	FY2018	FY2019	FY2020	FY2021
Bank & Othe	r Finance	6.21	6.62	7.62	10.08	11.50
Charges						
Working	Capital	15.43	32.36	35.32	38.42	41.75
Interest						
Total		21.64	38.97	42.94	48.49	53.25
Aeronautical		18.10	32.88	36.51	41.21	45.25

7.23.

ased on abovementioned submissions, aggregate administrative expenses and its aeronautical component for the period from FY 2016-17 to FY 2020-21 is as given below,

"...

Amounts in Rs.	FY2017	FY2018	FY2019	FY2020	FY2021
crores					
Admin Expenses	89.14	119.24	139.13	163.76	175.65
Aer'ónautical	76.55	101.77	119.27	141.68	153.14

HIAL Submission on Repairs & Maintenance Cost

- **7.24.** The Authority notes from HIAL's submission that Repair and maintenance of the airport covers two broad categories:
 - A. Repairs & Maintenance of Buildings, Plant and Machinery, IT and others.
 - B. Stores and Spares
- **7.25.** Based on HIAL's MYTP submission dated 05.12.2016, Repairs and Maintenance cost projections for the FY 2015-16 is based on the actual expenses incurred during the period from 01.04.2015 to 31.12.2015 which has been extrapolated for the full year. Projections for the 2nd Control Period are in line with the growth of capitalized assets (i.e. Gross Block).
- **7.26.** HIAL further explained that various R&M activities which were deferred on account of insufficient cash flows in FY 2014-15 and FY 2015-16 are planned to be undertaken in FY 2016-17. The estimated cost for these is Rs. 9.28 crores. Based on above assumptions, R&M cost for the period from FY 2016-17 to FY 2020-21 is projected as stated below,

"...

Amounts in Rs. crores	FY2017	FY2018	FY2019	FY2020	FY2021
R&M Expenses	42.32	49.50	56.78	75.88	108.51

..."

7.27. The Authority notes HIAL's submission regarding the cost pertaining to stores and spares. An extract of the projections has been reproduced below,

"...

Many items installed during the construction of the airport were earlier under warranty and defect liability period. After expiration of the warranty/defect liability, their maintenance is the responsibility of GHIAL. Spare parts costs are therefore expected to rise disproportionately.

- Stores and spares cost projections for the FY2016 are based on the actual expenses incurred during the nine month period (1st April 2015 to 31st December 2015) which has been extrapolated for the full year.
- Control Period 2 expense is projected in line with the growth in capitalized asset base in CP2.
- Further, additional necessity of Rs. 4.5 crores of store and spares in FY2017 has been considered due to the increased requirement of critical stores and spares going forward on account of asset ageing (Annexure 12).
- Details of additional requirement for stores and spares in FY 2017 are given in Annexure-13.

Conclusion

Based on the above, the forecast for Stores and Spares Cost is as follows:

Amounts in Rs. crores	FY2017	FY2018	FY2019	FY2020	FY2021
Stores & Spares	13.34	15.60	17.90	23.92	34.20

..."

7.28. The total projected R&M cost including Stores and spares is given below:

Amounts in Rs. crores	FY2017	FY2018	FY2019	FY2020	FY2021
R&M expenses	42.32	49.50	56.78	75.88	108.51
Stores & Spares	13.34	15.60	17.90	23.92	34.20
Total	55.65	65.10	74.68	99.79	142.72
Aeronautical	51.16	59.83	68.66	92.13	132.25

..."

7.29. With respect to the projections of the insurance expenses likely to be incurred an extract of the HIAL's submission is presented below,

"...

The respective forecasted premium percentage for the above polices is given below:

Policy	Details	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Large Risk	% of asset	0.012%	0.016%	0.017%	0.018%	0.019%	0.020%
Policy	insured						
(Property	+Gross						
Damage &	Revenues						
Business							
Interruption							
(BI))							
AOL/3rd Party	Premium on	\$0.135	\$0.14m	\$0.145	\$0.15m	\$0.155	\$0.16m
Liability Policy	sum insured	mn	n	mn	n	mn	n
	of \$500mn						
Terrorism	Premium as	0.015%	0.016%	0.017%	0.018%	0.019%	0.020%
Policy	% to IAR						
	policy value						
	(i.e., PD +						
	BI)						
Other Policies		Rs 44	Rs 47	Rs 50	Rs 54	Rs 58	Rs 62
		lakhs	lakhs	lakhs	lakhs	lakhs	lakhs

Percentage of insurance premium is calculated over gross block of insured assets and is considered on an increasing basis to take care of reinstatement value over the period upto FY2021.

Conclusion

The insurance expense forecast is as follows:

crores					
Insurance Cost	2.96	3.25	3.77	4.55	4.86
Aeronautical	2.47	2.74	3.21	3.87	4.13

..."

HIAL Submission on Other Operating Cost

- **7.30.** The Authority notes the HIAL's submission regarding Other Operating Cost. HIAL submitted that the other operating expenses include expenses such as housekeeping charges, manpower outsourcing charges, bus hire charges, car park operator fee and maintenance fee etc.
- **7.31.** An extract regarding the assumptions underlying the projections of housekeeping cost for FY 2015-16 and 2nd Control Period is as below,

"…

Housekeeping cost projections for the FY2016 is based on the actual expenses incurred during the nine months period 1st April 2015 to 31st December 2015 which has been extrapolated for the full year. Housekeeping charges for FY 2015 and the forecast for FY 2016 are as follows:

In Rs. Crores	FY2015	FY2016
	(Actual)	(Projected)
Housekeeping charges	9.17	10.55

Forecast for Control Period 2

- A real yoy increase of 7% is considered for the Control Period 2
- Additional increase of 2% is considered in FY17 on account of award of new contracts
- Also, in line with the planned expansion of the Terminal in the FY 2019 and FY 2020, increase in proportion to the floor area addition has been assumed.

Conclusion

Following is the Housekeeping expenditure projected for Control Period 2.

Amounts in Rs.	FY2017	FY2018	FY2019	FY2020	FY2021
----------------	--------	--------	--------	--------	--------

crores					
Hoűsekeeping	11.51	12.08	14.56	21.55	27.59
Cost					

7.32.

he Authority also notes the assumptions underlying the forecast of manpower outsourcing cost for FY 2015-16 and 2nd Control Period as presented below,

"...

Forecast for FY 2016

 Manpower outsourcing projections for the FY2016 is based on the actual expenses for YTD 31st December 2015 which has been extrapolated for the full year.

Based on the above, the projected cost for the FY 2016 is as given below:

Amount in Rs Crores	FY2015 (Actual)	FY2016 (Projected)
Manpower Outsourcing	17.07	19.12
Charges		

Forecast for Control Period 2:

- One-time increase of 15% is considered for the outsourced manpower deployed for IT, PMT, Technical services and Landscaping works (70% of total outsourcing contracts) on operationalization of expansion projects i.e. in FY 2019 and FY 2020.
- The balance 30% of the outsourcing cost which is towards the manpower deployed for activities like taxiway turnaround, vehicle hire, bird control, wildlife management, passenger ferrying services, ramp handling, baggage handling, and other operating services is expected to increase in line with increase in the passengers. Hence, outsourced manpower deployed in the airside and terminal is increased with the projected passenger traffic growth from the FY 2017 to FY 2021.
- Contractual increase of 10% is considered yoy for the forecast of the manpower cost for IT, Landscaping, Technical services and project management and real increase of 7% in manpower Cost for manpower deployed at airside and terminal for the Control Period 2.

- Certain outsourcing contracts were deferred due to paucity of funds following notification of Order No. 38. GHIAL plans to enter the required contracts FY 2017 onwards..."
- **7.33.** Based on the above rationale, manpower outsourcing expenses projected by HIAL for the 2nd Control Period are as given below,

	Amounts in Rs.	FY2017	FY2018	FY2019	FY2020	FY2021
	CIOIES					
7 24	Manpower	22.42	25.42	31.15	38.18	42.94
7.54	Outsourcing Cost					
	n Aeronautical	21.05	23.86	29.25	35.88	40.40

e Authority further noted from HIAL's submission that the other operating expenses are expected to increase on account of increase in manpower cost and R&M activities for these services and a bare minimum of 7% real increase is considered. Also, HIAL has considered a one-time increase of 15% for these expenses on operationalization of expansion projects i.e. in FY 2018-19 and FY 2019-20. Accordingly, HIAL's Other O&M expenditure projections for the period from FY 2015-16 to FY 2020-21 is presented below.

"...

	Amounts in Rs.	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
	crores						
1114	Bus Hire	0.56	0.60	0.64	0.78	0.96	1.03
HIA	Charges						
L's	Others	0.18	0.19	0.21	0.26	0.32	0.34
sub	Other	0.74	0.79	0.85	1.04	1.28	1.37
•-	Operating						
mis	Costs						

sion on Treatment of Land Lease

- **7.35.** HIAL in its MYTP Submission dated 05.12.2016 submitted that land lease is considered in the calculations only towards the airport land. Subsequently, in response to a query raised by the Authority, HIAL vide Annexure A to its submission dated 05.12.2016 further clarified the rationale for the treatment as given below,
 - "... As per the master plan, out of the total leased area of 5492.26 acres, 1500 acres is earmarked for Commercial Property development / Non

Airport Activities. Accordingly land lease is separated into airport (3992.26 acres) and non-airport (1500 acres) land uses and lease rent equivalent to airport land only is considered as part of the administrative cost for tariff calculations.

% of Airport Land= 3992/5492.26=72.69% ..."

HIAL Submission on Concession Fee

7.36. With respect to the Concession Fee, the Authority notes from HIAL's submission that a Concession Agreement has been signed with MoCA (Government of India) on 20.12.2004. As per the terms 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 FY 2018-19. Accordingly, HIAL's projections of concession fee relating to Aero Revenues in the MYTP submission dated 05.12.2016 for the 2nd Control Period is as stated below,

•••

Amounts in Rs. crores	FY2017	FY2018	FY2019	FY2020	FY2021
Aero Concession Fee	50.62	55.87	61.28	66.98	72.78

b Authority's Examination of HIAL Submissions on Operating Expenses

7.37. The Authority carefully considered HIAL's MYTP submission dated 05.12.2016 on operating expenses. The summary of operating expenses thus requested by HIAL via the MYTP submission, for the tariff determination for 2nd Control Period is as under:

Table 27: Projections for operating costs for the 2nd Control Period as per HIAL's MYTP submission dated 05.12.2016

(Rs in crore)	2016- 17	2017- 18	2018- 19	2019- 20	2020- 21	Aggregate 2nd CP
	Payroll E	xpenses				
Salary and Wages	67.85	76.33	99.39	129.08	144.03	516.68
Staff Welfare	4.56	5.13	6.68	8.67	9.67	34.71
Training	0.15	0.17	0.22	0.28	0.32	1.14
Total Payroll expense (A)	72.55	81.62	106.28	138.04	154.02	552.51
	Utility ex	kpenses				
Utility Costs (B)	25.21	24.81	27.48	47.94	68.81	194.25
Electricity Expense	17.41	14.17	13.02	28.32	42.3	115.22
Water Expense	7.8	10.64	14.46	19.62	26.5	79.02
Gen	eral / Adr	nin expen	ses			
Administrative Expenses (excl. Bank Chg)	67.49	80.27	96.19	115.27	122.4	481.62
Bank & Finance Charges	21.64	38.97	42.94	48.49	53.25	205.29
Total General / Admin expenses (C)	89.14	119.24	139.13	163.76	175.65	686.92
Repair a	nd Maint	enance ex	penses			
R&M Expenses	42.32	49.5	56.78	75.88	108.51	332.99
Stores and Spares	13.34	15.6	17.9	23.92	34.2	104.96
Total RM expenses (D)	55.65	65.1	74.68	99.79	142.72	437.94
	Insuran	ce Cost				
Insurance Cost (E)	2.96	3.25	3.77	4.55	4.86	19.39
Oth	er Operat	ing expen	ses			
House Keeping	11.51	12.08	14.56	21.55	27.59	87.29
Manpower Outsourcing expenses	22.42	25.42	31.15	38.18	42.94	160.11
Car Parking Charges	2.69	2.88	3.54	4.36	4.66	18.13
Others	0.79	0.85	1.04	1.28	1.37	5.33
Total Other Operating expenses (G)	37.41	41.22	50.29	65.37	76.56	270.85

Land lease								
Land Lease (H)	3.27	3.43	3.61	3.79	3.98	18.08		
Concession Fee								
Concession Fee (I)	66.22	72.53	78.83	85.54	92.35	395.47		
Incidental Income adj. against Opex	-2.29	-2.41	-2.53	-2.65	-2.79	-12.67		
Total Operating Expense (A+B+C+D+E+F+G+H+I) 350.11 408.8 481.55 606.12 716.16								

7.38. Subsequent to the MYTP submission dated 05.12.2016, HIAL submitted the revised tariff determination model via response e-mail dated 28.01.2017. In the revised tariff determination financial model the projections were based on the audited financial results of FY 2015-16. The summary of operating expenses thus submitted by HIAL for the tariff determination for 2nd Control Period is as under,

Table 28: Projections for Operating costs for the 2nd Control Period as per HIAL's revised tariff financial model submitted on 28.01.2017

(Rs in crore)	2015- 16	2016- 17	2017- 18	2018- 19	2019- 20	2020- 21	Aggregat e 2nd CP	
Payroll Expenses								
Salary and Wages	54.12	67.2	75.6	97.87	126.4	141.04	508.11	
Staff Welfare	3.85	4.78	5.38	6.96	8.99	10.03	36.14	
Training	0.9	1.12	1.26	1.63	2.11	2.35	8.47	
Total Payroll expense (A)	58.87	73.11	82.24	106.47	137.5	153.42	552.74	
	Util	ity expen	ises					
Utility Costs (B)	22.42	23.27	22.94	25.63	46.36	68.02	186.22	
Electricity Expense		16.16	13.25	12.48	28.52	43.93	114.34	
Water Expense		7.12	9.69	13.16	17.84	24.09	71.9	
	General ,	/ Admin e	expenses					
Auditors Fee	0.55	0.59	0.63	0.77	0.95	1.02	3.96	
Directors Sitting Fee	0.2	0.21	0.23	0.28	0.35	0.37	1.44	
Communication Expenses	1.9	2.03	2.18	2.68	3.29	3.52	13.7	
Travelling Expenses	6.77	7.24	7.75	9.54	11.74	12.56	48.83	
Rent	1.42	1.52	1.63	2	2.46	2.63	10.24	
Rates and Taxes	5.7	6.1	6.53	8.03	9.88	10.57	41.11	
Advertisement	2.65	2.84	3.03	3.73	4.59	4.92	19.11	
Office Maintenance	2.36	2.53	2.7	3.32	4.09	4.38	17.02	
Printing and Stationary	0.27	0.29	0.31	0.38	0.47	0.5	1.95	
Event Management	0	0	0	0	0	0	0	

Recruitment	0.06	0.06	0.07	0.08	0.1	0.11	0.42
Community Development	0.36	0.36	12.63	13.32	13.32	13.32	52.95
Other Miscellaneous Business Promotion	1.34	1.43	1.53	1.89	2.32	2.49	9.66
Consultancy	5.06	7.91	5.79	7.13	8.77	9.39	38.99
Total Bank Charges	5.39	21.73	40.11	44.93	51.44	57.35	215.56
Security Cost	8.38	8.97	9.59	11.81	14.53	15.54	60.44
Corporate Common Costs	15.45	16.532	17.689	21.766	26.783	28.658	111.427
Total General / Admin expenses (C)	57.86	80.35	112.41	131.67	155.1	167.33	646.86
Rep	air and M	laintenar	ice exper	ises			
Deferred R&M expenses to be incurred from FY2016		9.28	10.97	12.58	16.81	24.04	73.68
Building	4.71	5.38	6.36	7.3	9.75	13.94	42.73
Plant and Machinery	13.43	15.34	18.14	20.81	27.8	39.75	121.84
Electrical Installations	10.7	12.225	13.426	15.4	20.576	29.423	91.0485
Others	1.56	1.78	2.11	2.42	3.23	4.62	14.16
Diminution in value of Inventory	0	0	0	0	0	0	0
Stores and Spares	8.58	14.3	16.79	19.26	25.73	36.79	112.87
Total RM expenses (D)	38.98	58.31	67.79	77.76	103.9	148.57	456.33
	Ins	urance Co	ost				
Insurance Cost (E)	2.04	2.95	3.24	3.77	4.54	4.86	19.36
	Manp	ower exp	ense				
Manpower Outsourcing expenses (F)	20.16	24.08	26.66	32.75	40.23	45.18	168.9
	Other Op	erating e	expenses				
Fuel Farm Expenses	10.27	10.99	11.76	12.59	13.47	14.41	63.22
Bus Hire Expenses	0.47	0.5	0.54	0.66	0.81	0.87	3.38
Car Parking	2.32	2.48	2.66	3.27	4.02	4.3	16.73
House Keeping	10.26	11.2	11.75	14.16	20.97	26.84	84.92
O&M Expenses	0.2	0.21	0.23	0.28	0.35	0.37	1.44
Total Other Operating expenses (G)	23.53	25.39	26.94	30.96	39.62	46.8	169.71
	L	and lease	9				
Land Lease (H)	3.12	3.28	3.44	3.61	3.79	3.98	18.1
	Con	cession F	ee				
Concession Fee (I)	25.79	66.23	72.55	78.87	85.61	92.43	395.69

Incidental Income adj. against Opex	-3.71	-3.9	-4.09	-4.29	-4.51	-4.74	-21.53
Total Operating Expense (A+B+C+D+E+F+G+H+I)	249.0 6	353.0 8	414.1 3	487.1 9	612.1 5	725.8 5	2592.4

- 7.39. The Authority has noted that there is a difference in the projection for total operating expense between the two submissions on account of the revised tariff determination financial model being based on the audited financial results of FY 2015-16.
- 7.40. The Authority takes note of HIAL's MYTP submission dated 25.03.2016 and revised MYTP submission dated 05.12.2016, which stated that the airport operator was unable to incur the operating expenses that were required to be spent in the 1st Control Period on account of decline in revenue earned by it (owing to zero UDF being allowed by the Authority in Order No. 38/13-14) in FY 2014-15 and FY 2015-16. In order to make projections for the 2nd Control Period, each of the expense heads have been examined individually by the Authority and this analysis has been presented in the following sub-sections.
- **7.41.** Further, upon examining HIAL's submission, the Authority proposes that the real increase in each operating cost head for the 2nd Control Period should be in line with the growth in the underlying cost driver for the respective cost heads. Accordingly, the Authority conducts an assessment of trends in operating costs and drivers associated with each cost head.
- (submitted by HIAL) includes both the real and the inflationary growth; i.e. they are on a nominal basis. However, HIAL's projections for 2nd Control Period are on real basis; i.e. assuming no inflation (WPI inflation as 0%). This creates an inconsistency in determination of aeronautical tariff. Hence, the Authority has proposed to consider inflation in the projections to remove this inconsistency over and above the increase in real terms on expenditure heads where the WPI is relevant. The projected WPI of 3.9% as per the Results of the Survey of Professional Forecasters on Macroeconomic Indicators- Round 44 is proposed to be considered by the Authority for adjustment of inflation.

7.43. Finally, the Authority examined each head of the operating expenses and their respective cost drivers provided in HIAL's MYTP submission dated 25.03.2016 and revised submission dated 05.12.2016. As regards the methodology for projection of operating expenses for the 2nd Control Period the Authority proposes the following treatment of certain items.

Payroll Cost

- **7.44.** As per HIAL's submission dated 05.12.2016, employee cost has been estimated on the basis of projected changes in head-count and escalation in manpower expenses (i.e. increase in salaries).
- 7.45. Regarding manpower costs, the Authority notes HIAL's submission that with new airports coming up in the Middle East, HIAL experienced "unforeseen attrition" due to poaching. HIAL submits that it has begun its recruitment process and intends to on-board the required manpower in FY 2016-17. Accordingly, HIAL has considered an increase of 16.05% in the manpower numbers in FY 2016-17. While HIAL has initiated the recruitment process, HIAL submitted that it anticipates that this subsequent recruitment shall entail higher costs. Further, the Authority notes that owing to the proposed terminal expansion projects planned to be operationalized in FY 2018-19 and FY 2019-20, HIAL has considered a additional increase of 16% in manpower in the corresponding periods.
- 7.46. The Authority acknowledges that HIAL faced "unforeseen attrition" and is of the view that for FY 2016-17, HIAL's manpower headcount should be restored to levels before UDF was taken away i.e. 510 employees in FY 2013-14 where HIAL had normal operations. Further, the Authority also proposes to accept HIAL's request for an additional increase of 16% in manpower numbers in each of FY 2018-19 and FY 2019-20. Consequently, the Authority's projection for manpower numbers for FY 2016-17 to FY 2020-21 is as under,

Table 29: HIAL's headcount requirement considered by the Authority for the 2nd Control Period

Particulars (Units)	2016	2017	2018	2019	2020	2021
Operational Manpower	486	510	510	592	686	686

- 7.47. The Authority notes that HIAL has requested for 7% p.a. real growth in manpower expenses. However, the Authority is of the view that HIAL has not presented any calculations / derivations as the basis for the proposed increase. HIAL has submitted that the escalation requested for is the bare minimum increase for each items and the numbers are based on HIAL's own internal estimates.
- 7.48. Consequently, to determine the escalation in the manpower expenses for the 2nd Control Period, the Authority refers to its Order No. 38/2013-14 for the 1st Control Period. Vide the aforementioned Order, the Authority had decided to grant an increase of 3.0% in real terms over WPI increase (as per latest RBI forecasts). The Authority proposes to maintain the same stance for the escalation in the manpower expense for the 2nd Control Period and grant HIAL an increase of 3.0% in real terms over the WPI increase of 3.9% (as per latest RBI forecasts) i.e. approximately 7% p.a. nominal increase. Further the average salary per employee for FY 2015-16, which is the base year for projections has been computed using the average of the number of employees of HIAL at the end of FY 2014-15 and that at the end of FY 2015-16.

Utility Expense

Utilities Expenses - Electricity

- 7.49. The Authority has noted from the MYTP submission dated 05.12.2016 that HIAL has projected increases in electricity unit consumption on account of increase in terminal area at the airport. The Authority also notes that HIAL has assumed an escalation of 11% p.a. in cost per unit of power bought from grid considering FY 2015-16 as the base. Further, HIAL has netted off recoveries of electricity from concessionaires (towards non-aeronautical costs) from the total electricity cost to arrive at net electricity cost to be recovered by HIAL. In addition to these, an annual escalation in unit consumption of 2% is considered on account of loss of efficiency in aging equipment and increased utilization on account of higher passenger loads.
- **7.50.** Considering the above, the Authority proposed to consider the escalations in the electricity costs as per HIAL's revised projections for the 2nd Control Period except for the escalation in the electricity rate. The Authority is of the view that electricity charges are contingent on multiple factors which cannot be forecasted reliably by the Authority. Therefore, the Authority proposes not to consider an escalation in the unit

rate for the time being and shall true up the electricity cost based on the actual expenditure at the end of the 2nd Control Period.

7.51. The Authority has also noted from HIAL's submission regarding the savings from Phase -1 of the solar power project which got commissioned in October 2015 and future savings from Phase 2 of the green initiative (savings from this expansion are expected to accrue from FY 2018). The Authority is of the view that, should this happen, it would result in lowering of the actual utility expenses. However, it may not be possible for the Authority to accurately determine the extent of these savings at the current point of time. The Authority has thus proposed to consider the estimated savings from the solar plant for 2nd Control Period as submitted by HIAL (presented in the Table 33 below). Differences between the projected and actual savings would be trued up and netted off from electricity expenses.

Table 30: Savings in electricity units upon commissioning of solar plant as submitted by HIAL

Particulars (Rs in crore)	2016-17	2017-18	2018-19	2019-20	2020-21
Power Consumption (mn kw)	64	65	75	106	129
From Grid (mn kw)	56	51	55	85	109
From Solar (mn kw)	8	14	20	20	20

Utility Expenses - Water

- **7.52.** The Authority has examined HIAL's MYTP submission dated 05.12.2016 pertaining to Water Cost and notes that the projections for consumption for the 2nd Control Period is in line with the expected passenger traffic growth over the same period. It is also noted that the estimated recoveries from concessionaires (towards non-aeronautical costs) has been deducted from total water cost to arrive at net water cost.
- 7.53. The Authority notes that the water rate per unit has been projected to increase year on year by 25%. HIAL has justified the above by submitting that regular increases in water tariffs over the last 5 years have resulted in an increase in water rates by 5 times in the last four financial years with a CAGR of 39.5%.

7.54. Based on the above explanations provided by HIAL, the Authority proposes to consider units of water projected to be consumed as per HIAL's projections for the 2nd Control Period. However, the Authority is not in agreement with HIAL's projection of escalation in the water unit rates. The Authority is of the view that water charges are contingent on multiple factors which cannot be forecasted reliably by the Authority. Accordingly, the Authority proposes not to consider any escalation in water tariffs on an annual basis. However, Authority proposes to allow for a one-time escalation in the unit rate by 25% in FY 2018-19 (mid-year of the current Control Period) to compensate HIAL for increasing water tariffs. The Authority also proposes to true up the water cost at the end of the 2nd Control Period based on the actual costs incurred by HIAL.

General and Administrative expenses

Bank & Finance Charges

- **7.55.** The Authority notes that bank charges have been projected proportionately with average outstanding debt in the revised tariff model submitted by HIAL on 28.01.2017. The Authority proposes to allow the same.
- 7.56. In addition, the Authority observed that HIAL's working capital requirement has been worked out based on months receivables outstanding of 2.5 months, months inventory outstanding of 1 month and months payables outstanding of 15 days (0.5 months). The Authority noted that in HIAL's rate card applicable since November 2015, it has provided a credit period of 15 days for airlines to pay aeronautical dues. Further, HIAL has mandated airlines to provide a bank guarantee for an amount equivalent to six months of projected billing for the facilities offered by it, including but not limited to Landing and Parking, Passenger Service Fees, Common Infrastructure Charges and one month of UDF. Further, in a scenario where the abovementioned Bank Guarantee is encashed by HIAL, airlines are required to furnish a revolving Letter of Credit for an amount equivalent to three months projected billing. HIAL has specified that both these instruments will be treated as a security and shall be encashed in case airlines breach any terms of the agreement with HIAL or default on any payments to be made to HIAL. In such a scenario, the Authority finds no reason for HIAL's receivables, most of which are collected in advance from airlines, to be outstanding for 2.5 months on average. Hence, through its query email dated 17.03.2017, the Authority sought a

justification from HIAL for projecting an outstanding period of 2.5 months for its revenues from regulated charges and other sources for the 2nd Control Period.

- **7.57.** In response to the above query HIAL on 22.05.2017 submitted their response which is reproduced below,
 - "... While GHIAL retains the right to encash the Bank Guarantee, in case of delayed payments from a vendor, GHIAL proactively engages with the vendor to identify and understand the underlying issues leading to delayed payments. Regular follow-ups are conducted till the payment is voluntarily made by the debtor. Security is only encashed as a last resort.

Therefore, it is normal for the level of receivables to be higher than the levels stipulated in the credit policy. The working capital is funded through internal accruals or by drawing on working capital limits..."

- 7.58. While the Authority acknowledges HIAL's rationale for having receivables higher than that stipulated by its credit policy, the Authority is of the opinion that HIAL must not levy the cost delayed payments by select airlines / customers on the rest of its customer base. In case of such delays in future, HIAL must recover penal interest from the defaulting customers or encash the security provided by them ensuring that the burden due to delayed payments is not shifted on to other customers who have not delayed on their payments. Accordingly, the Authority proposes to allow HIAL a working capital for receivables commensurate to its credit cycle of 0.5 months vis-a-vis HIAL's requirement for 2.5 months.
- **7.59.** Regarding HIAL's inventory, the Authority notes that these have been conservatively projected below the existing inventory level of HIAL. Therefore, the Authority proposes to accept HIAL's submission on the same.
- 7.60. Further, in the context of trade payables, the Authority observed that HIAL has projected trade payables from Rs. 6.83 crore in FY 2015-16 to Rs. 19.15 crore in FY 2020-21 during the 2nd Control Period, which is much below its trade payables in the previous three years. As per HIAL's financial statements for the last three financial years submitted on 25.03.2016 and 28.01.2017, the trade payables have been reproduced below,

Table 31: Trade Payables as per the financial statements of HIAL

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Trade Payable (in Rs. crore)	54.82	45.01	64.29

- **7.61.** Given the stark difference in the historical and projected amounts, the Authority, vide a clarification dated 17.03.2017, sought justification from HIAL for projecting lower trade payables in its MYTP submission.
- **7.62.** In response to the abovementioned query, HIAL submitted a justification vide its submissions dated 22.05.2017 which has been reproduced below,
 - "... The normal credit period agreed with the suppliers is around 15 days. It is to be noted that in the previous years, release to creditors were bit protracted due to cash flow constraints in the wake of withdrawal of UDF. However, going forward with normalization of cash flows, the payment to creditors would be as per the credit arrangement...
 - ... This is in line with our processes, through which a majority of the vendors are paid within 15 days of the invoice date. This also factored the existing credit arrangements with the suppliers"
- 7.63. The Authority notes HIAL's response with regard to payables and acknowledges that going forward HIAL's payables should be projected at 0.5 months. Accordingly, for computing HIAL's requirement for a working capital loan, the Authority proposes to accept HIAL's computation of payables.
- **7.64.** Based on the above treatment proposed by the Authority HIAL would be allowed the following amount of interest in the respective years of the 2nd Control Period.

Table 32: Working Capital Interest allowed by the Authority for the 2nd Control Period

Particulars (in Rs. Crore)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Aggregate 2 nd CP
Working Capital Interest	2.11	4.21	3.69	3.40	3.90	17.31

7.65. Additionally, to ensure the judicious use and financing of working capital loans, the Authority proposes to cap HIAL's working capital interest at the amount mentioned in Table 32 above. The true-up of working capital interest incurred by HIAL would be capped at the amount currently allowed by the Authority.

Administrative Expenses (Other than Bank & Finance Charges)

- **7.66.** As regards the Community Development costs, the Authority is of the view that the CSR cost (calculated out of HIAL's net profits) must be borne by the HIAL alone and must not be recovered via tariffs from passengers. Hence, the Authority proposes to exclude the community development cost from the General and Administrative expenses.
- **7.67.** As regards the other general and administrative costs, the Authority has proposed to consider only an inflationary increase of 3.9% p.a. for the time being and to true up any additional costs incurred by HIAL at the end of the Control Period.

Repairs and Maintenance

- **7.68.** The Authority notes from HIAL's MYTP submission the basis for projecting various repairs and maintenance expenses.
- The Authority observes that repairs and maintenance cost (which includes the cost towards spares) for the 2nd Control Period has been projected in line with the growth of capitalized assets (i.e. Gross Block). Further, a real increase of 7% p.a. over and above inflationary increase has been used for these costs. The Authority accepts capitalized assets (i.e. gross block) as the driver for projecting the R&M expenses and costs towards stores for the 2nd Control Period. However, the real increase of 7% p.a. considered by HIAL is proposed to be disallowed by the Authority. Instead the Authority proposes to consider only an inflationary increase of 3.9% p.a. on the gross block of capitalized assets.
- 7.70. In addition, the Authority notes that HIAL has also submitted that there are deferred R&M expenses pertaining to buildings, IT, plant and machinery and others to be incurred from FY 2016-17 on account of insufficient cash flows in FY 2014-15 and FY 2015-16. The Authority is of the view that since HIAL was able to meet the required service levels and was ranked as the third best airport in the world in 2015 as per ACI's ASQ Awards for the 7th year in a row in the 5-15 million passengers per annum (MPPA) category, the airport can continue to function with the existing levels of R&M. Accordingly, the Authority has proposed to disallow the additional R&M expenditure but to true up any additional R&M expenditure incurred by HIAL during the 2nd Control Period.

7.71. Additionally, the Authority has noted from the tariff financial model submitted on 28.01.2017 that HIAL has made certain reductions in the R&M expenses from FY 2017-18 on account of outsourcing of CUTE, CUSS, BRS (IT ops) such as IT AMC Costs and stocks & spares. The Authority has proposed to accept these reductions voluntarily considered by HIAL.

Insurance Cost

- 7.72. The Authority notes that HIAL has projected Insurance Cost based on various policies such as Large Risk Policy, Airport Operator's Liability (AOL)/3rd Party Liability Policy, Terrorism Policy and Other Policies. Further, the Authority observes that projections for the Large Risk Policy and Terrorism Policy are made based on both capitalised assets and revenues.
- 7.73. With respect to the Large Risk Policy and Terrorism Policy, the Authority, vide its query dated 03.03.2017 sought extracts of documents pertaining to the Large Risk Policy and Terrorism Policy from HIAL in order to review the basis of the projections considered by HIAL. In response to the Authority's query, HIAL, via its response dated 05.04.2017, has shared its insurance policies for 12 months ending 13.07.2016. The Authority notes that HIAL's premium on its current large risk policy is Rs. 26,00,760 while that on terrorism policy is Rs. 36,70,330 excluding service taxes. The Authority understands that HIAL would have renewed these policies after 13.07.2016. However, in the absence of details on the renewed contracts, the Authority proposes to adjust these premiums by the inflation rate of 3.9% p.a. for the 2nd Control Period and allow the same towards the cost of these insurance policies.
- **7.74.** Further, based on trends in the insurance market, the Authority expects that owing to intense competition and falling insurance policy rates, there will be no substantial increase in insurance cost. Accordingly, for the 3rd Party Liability Policy and Other policies, the Authority has proposed to consider only an inflationary increase on annual basis.
- **7.75.** Furthermore, the Authority proposes to true up insurance costs of HIAL at the end of the 2nd Control Period based on the actual expenses incurred.

Other Operating Cost

Housekeeping Cost

- **7.76.** The Authority notes that HIAL has projected housekeeping costs based on a real growth of 7% p.a. and a proportionate increase based on the expanded terminal area in the FY 2018-19 and FY 2019-20. Further, HIAL has also considered an additional increase of 2% in FY 2016-17 on account of award of new contracts.
- The Authority proposes to accept the planned expansion of the terminal as the driver for the housekeeping cost. However, the Authority is of the view that HIAL is featuring among the world's Top 3 Airports as per ACI's ASQ rankings in its category as mentioned in para 12.7 below. This implies that they are able to manage high service quality even at the current level of housekeeping expenses. Hence, the additional contracts proposed by HIAL do not seem necessary. Accordingly, the Authority has proposed to disallow this additional increase of 2%. Also, the Authority proposes to consider an inflationary increase in housekeeping expenditure of 3.9% p.a. instead of HIAL's proposed real increase of 7% p.a. over and above the inflationary increase. However, if HIAL does happen to incur expenditure in excess of the amount allowed by the Authority, such an amount shall be deliberated upon and trued up at the time of tariff determination for the 3rd Control Period.

Fuel farm

that HIAL has projected fuel farm expenses which have been increased by 7% p.a. on a real basis. The Authority based on past trends notes that fuel farm expenses of HIAL have increased from Rs. 8.55 crores in FY 2011-12 to Rs. 10.27 crores in FY 2015-16. Hence, HIAL's proposal for a real increase of 7% p.a. along with inflation appears to be on the higher side. Accordingly, the Authority has proposed to allow only an inflationary increase of 3.9% p.a. for projecting fuel farm expenses over the 2nd Control Period and to true up any additional cost incurred by HIAL at the end of the Control Period.

Bus Hiring and Car Parking Charges

7.79. The Authority also notes from HIAL's MYTP submission dated 25.03.2016, revised submission dated 05.12.2016 and the revised tariff financial model submitted by HIAL on 28.01.2017 that projections for bus hiring and car parking charges have been made on a real increase of 7% p.a. Additionally, a one-time increase of 15% has

been considered on account of each of the expansion projects in FY 2018-19 and FY 2019-20 respectively. The Authority is of the view that these expenses have no association with terminal expansion and hence, the Authority has proposed to disallow one-time increases of 15% in the years of terminal expansion. Moreover, these expenses have shown a declining trend over the 1st Control Period. Hence, assuming that these have been brought down to an efficient base in FY 2015-16, the Authority proposes to allow only an inflationary increase of 3.9% p.a. for the bus hiring and car parking expenses over the 2nd Control Period. Further, the Authority proposes to true up bus hiring and car parking charges based on actual expenditure at the end of the Control Period.

Other O&M expenses

7.80. Similarly, HIAL's Other O&M expenses have been projected with a 7% p.a. real increase along with an additional increase of 15% on account of terminal expansion in FY 2018-19 and FY 2019-20. However, the Authority takes a similar position as mentioned in para 7.79 above, and proposes to allow only an inflationary increase of 3.9% on the other O&M expenses. The Authority would deliberate upon and true up any other O&M expenses based on actual costs incurred by HIAL at the time of tariff determination for the 3rd Control Period.

Manpower Outsourcing cost

- 7.81. The Authority notes from HIAL's MYTP submission that for projecting the manpower outsourcing cost, HIAL has considered a one-time increase of 15% for the outsourced manpower deployed for IT, PMT, Technical services and Landscaping works in FY 2019-20 and FY 2020-21 on account of expansion projects. In addition to this, a 10% p.a. contractual increase has been considered for these workers from FY 2016-17 to FY 2020-21. The Authority further notes that the outsourced manpower deployed in the airside and terminal is increased in line with the passenger traffic growth from FY 2016-17 to FY 2020-21 and a real increase of 7% p.a.
- **7.82.** Based on the above, the Authority had requested HIAL to provide a copy of the contracts pertaining to manpower outsourcing based on which projections have been made for operating expenditure in the 2nd Control Period. HIAL responded to

the Authority's request vide HIAL's e-mail dated 05.04.2017, an extract of which is as given below,

"…

- 1. Manpower deployed at terminal & airside: These contracts are single year contracts, and therefore do not contain escalation clauses. The cost for such contracts is projected based on increased manpower requirements and pax traffic growth.
- 2. Manpower cost for IT/Technical Services/Landscaping/Project Management: GHIAL has entered a long-term contract for deputation of technical manpower. Yearly revision under this agreement is on negotiation basis. The contractual based increase of 10% projected in the MYTP is based on our past experience and market conditions..."
- **7.83.** Based on the above response, the Authority understands that there is no contractual rate of increase in either of the two outsourcing agreements. In the absence of any such clause, the Authority proposes to allow HIAL an increase in remuneration at 7% p.a. (nominal increase including inflation); as allowed on employee costs (refer para 7.48 above). However, the Authority proposes to accept HIAL's rationale for the projected increase in outsourced manpower numbers.
- **7.84.** Additionally, it is proposed that HIAL's outsourcing expenses shall be trued up based on its actual outgo at the time of tariff determination for the next Control Period.
- **7.85.** The Authority notes that HIAL has also submitted that HIAL plans to enter some new outsourcing contracts from FY 2016-17 onwards.
- 7.86. As regards the new contracts to be entered by HIAL from FY 2016-17 onwards, the Authority had sought for clarification on Vanamitra recommendations associated with bird control contract via query e-mail dated 03.03.2017. HIAL in response to the query vide its e-mail dated 05.04.2017 submitted the Vanamitra report, which recommended HIAL to have a dedicated wildlife management practice. An extract of the recommendation has been reproduced below,
 - "... Create a Dedicated Wildlife Management Team with Dedicated Resources such as Adequate Manpower, Upgraded Equipments and Fully

Equipped Vehicles. Giving the Team Proper Uniforms, Equipments & Incentives will create a sense of belonging to the department and Identity that boosts confidence as well as morale all of which will show in performance..."

- **7.87.** In view of the above, the Authority proposes to allow the outsourcing contracts which HIAL had to defer due to paucity of funds along with an increase in remuneration at 7% p.a. (nominal increase including inflation); as allowed on employee costs (refer para 7.48 above).
- **7.88.** The Authority understands that borrowings in foreign currency are usually associated with a lower rate of interest compared to domestic borrowings. In addition to the airport operator, the users of the airport (i.e. the airlines and commuters) also benefit from this lower interest rate; as it decreases the weighted average cost of capital for the airport operator which is used for the computation of tariffs.
- **7.89.** However, foreign currency borrowings are also associated with currency fluctuations and in many cases lead to foreign exchange losses. Until now, these foreign exchange losses have been borne completely by the airport operator. Thus, while the benefits of lower interest rates are shared with airport users, losses arising to the airport operator as a result of foreign exchange fluctuations are not.
- **7.90.** HIAL, vide its submission dated 31.08.2017 requested the Authority to correct this unilateral treatment. HIAL's submission in this regard has been reproduced below,

"Foreign exchange variation— GHIAL, with the motive of cost effectiveness, had taken the external commercial borrowing initially. The cost benefit of lower financing cost has been passed on to passengers. Simultaneously there is cost attached to foreign loan in term of foreign exchange risk. Since, AERA has considered the benefit for lower financing cost, in the same way it should also allow the losses incurred towards foreign exchange loss suffered by GHIAL. Hence, the foreign exchange risk which is beyond our control should be considered and accordingly the losses suffered by us should be trued up in the tariff determination."

- 7.91. As the Authority, while fixing the cap on cost of borrowing through ECBs, had not considered any fluctuation in foreign exchange rate during the first Control Period. However, the Authority now proposes to compare the cost of borrowing through ECBs (foreign currency borrowings) with that of the RTLs (domestic borrowings) and allow HIAL to recover forex losses to the extent that the effective cost of borrowing in foreign currency (net of forex gains / losses) is not higher than the cost of RTLs. The Authority proposes to execute this treatment at the time of true-up since the Authority believes it is not in a position to forecast foreign exchange losses till the date of issue of foreign currency bond.
- 7.92. The Authority further notes the debt restructuring exercise undertaken by HIAL (para 6.32 above). In context of the foreign currency Bond issue and the hedge cost claimed by HIAL (para 6.32.5 above), the Authority proposes not to consider any losses incurred by HIAL on account of fluctuations in foreign exchange rates from the date of the foreign currency Bond issue. Treatment to be followed by the Authority for consideration of losses on account of fluctuations in foreign exchange rates before the date of this Bond issue has been presented in Table 3 above (while this table is for the first Control Period, similar assessment will be performed during the third control period for the losses, if any may be incurred by HIAL during the second Control Period before the Bond issue). In case HIAL subsequently decides not to partly / fully hedge the foreign currency bond, the losses, if any, due to fluctuations in foreign exchange rates will be calculated in the same manner with a cap of 8.96% p.a. (fixed part plus withholding tax plus cost of hedge) in respect of the second Control Period.

Treatment of Land Lease

- **7.93.** HIAL in its MYTP Submission dated 05.12.2016 had submitted that land lease is considered in the calculations only towards the airport land. The Authority also noted the treatment of land lease in HIAL's financial model submitted on 28.01.2017. HIAL has proportionately allocated lease rentals between airport land & non-airport land considering a ratio of 72.69% as explained in para 7.35 above.
- **7.94.** The Authority understands that the land leased out to HIAL can be divided into two components; one which is essential to airport operations and the other which pertains to property development where the valuations are enhanced as a result of

- the airport activity but the nature of development is not essential to the operations of the airport.
- 7.95. The Authority proposes to accept HIAL's view on considering land lease rentals for 72.69% of land used for airport activities as an aeronautical expense. However, the Authority's view on treatment of property development has been explained in paras 2.16 to 2.20 above where the Authority proposes to consider property development as a non-aeronautical activity. Therefore, the Authority proposes to treat the balance portion of land lease rentals as non-aeronautical expenditure contrary to HIAL's treatment of the same as a non-airport expenditure.

Concession Fee

- **7.96.** The Authority acknowledges HIAL's submission on the concession fee required to be incurred by HIAL comprising 4% of its gross annual revenues. The Authority proposes that the amount of fee corresponding to the aeronautical revenues be allowed for the purpose of tariff determination of the 2nd Control Period.
- **7.97.** Based on the above, a summary of total operating expenses proposed to be allowed by the Authority is presented below (includes the actual operating expenses incurred by HIAL in FY 2015-16):

Table 33: Operating expenses considered by the Authority in the 2nd Control Period

Operating expenses (Rs. in	FY	FY	FY	FY	FY	Aggregate			
crore)	2017	2018	2019	2020	2021	2nd CP			
Payroll Expenses									
Salary and Wages	59.66	63.84	79.24	98.35	105.23	406.32			
Staff Welfare	4.24	4.54	5.64	7.00	7.49	28.91			
Training	1.00	1.07	1.32	1.64	1.76	6.78			
Total Payroll expense (A)	64.90	69.45	86.20	106.99	114.48	442.01			
Utility expenses									
Utility Costs (B)	20.83	17.83	18.87	29.69	38.28	125.50			
General / Admin expenses									
Auditors Fee	0.57	0.59	0.62	0.64	0.67	3.09			
Directors Sitting Fee	0.21	0.22	0.22	0.23	0.24	1.12			
Communication Expenses	1.97	2.05	2.13	2.21	2.30	10.67			
Travelling Expenses	7.03	7.31	7.59	7.89	8.20	38.02			
Rent	1.48	1.53	1.59	1.65	1.72	7.98			

Rates and Taxes	5.92	6.15	6.39	6.64	6.90	32.01			
Advertisement	2.75	2.86	2.97	3.09	3.21	14.88			
Office Maintenance	2.45	2.55	2.65	2.75	2.86	13.25			
Printing and Stationery	0.28	0.29	0.30	0.31	0.33	1.52			
Event Management	0.00	0.00	0.00	0.00	0.00	0.00			
Recruitment	0.06	0.06	0.07	0.07	0.07	0.34			
Other Miscellaneous Business	1.39	1.45	1.50	1.56	1.62	7.53			
Promotion									
Consultancy	7.76	5.46	5.68	5.90	6.13	30.92			
Bad debts written off	0.00	0.00	0.00	0.00	0.00	0.00			
Total Bank Charges	7.96	10.24	10.12	11.77	13.96	54.05			
Common corporate Cost	16.05	16.68	17.33	18.00	18.71	86.77			
Security Cost	8.71	9.05	9.40	9.77	10.15	47.06			
Total General / Admin expenses	64.60	66.50	68.57	72.50	77.06	349.22			
(C)									
Repair and Maintenance expenses									
Deferred R&M expenses to be	0.00	0.00	0.00	0.00	0.00	0.00			
incurred from FY2016									
Building	5.16	5.75	6.21	7.22	10.23	34.67			
Plant and Machinery	14.71	16.40	17.71	20.60	29.45	98.86			
Electrical Installations	11.72	12.04	13.00	15.12	21.62	73.50			
Others	1.71	1.90	2.06	2.39	3.42	11.48			
Diminution in value of Inventory	0.00	0.00	0.00	0.00	0.00	0.00			
Stores and Spares	13.90	15.37	16.60	19.31	27.61	92.79			
Total RM expenses (D)	47.19	51.47	55.57	64.64	92.43	311.31			
In	surance (Cost							
Insurance Cost (E)	2.05	2.12	2.21	2.29	2.38	11.06			
Man	power ex	pense							
Manpower Outsourcing	23.23	24.74	29.59	35.60	38.86	152.02			
expenses (F)									
Other C	perating	expenses	S						
Fuel Farm Expenses	10.68	11.09	11.52	11.97	12.44	57.71			
Bus Hire Expenses	0.49	0.51	0.53	0.55	0.57	2.64			
Car Parking	0.65	0.68	0.71	0.73	0.76	3.54			
House Keeping	10.66	11.08	12.97	18.65	23.17	76.53			
O&M Expenses	1.97	2.05	2.13	2.21	2.30	10.67			
Total Other Operating expenses	24.46	25.41	27.86	34.11	39.25	151.08			
(G)									
	Land leas	1	T	T	T				
Land Lease (H)	3.28	3.44	3.61	3.79	3.98	18.10			

Concession Fee							
Concession Fee (I)	44.97	44.72	34.91	39.21	44.16	207.98	
Total Operating Expense	295.50	305.68	327.38	388.83	450.88	1768.27	
(A+B+C+D+E+F+G+H+I)							

Allocation of Operating Expenses

- **7.98.** The Authority notes HIAL's submission stating that operating expenses have been allocated using the allocation methodology in the concept note dated 14.10.2015; provided in Annexure 3 of HIAL's MYTP Submission dated 05.12.2016. HIAL has submitted an auditor's certificate certifying the split of aeronautical, non-aeronautical, common and non-airport operating expenses since its inception on 23.03.2008 to 31.12.2015. Subsequently, HIAL submitted an updated financial model on 28.01.2017 along with an auditor's certificate allocating operating expenses based on the abovementioned concept note for the complete financial year of FY 2015-16.
- **7.99.** The Authority has already outlined the principles of RAB boundary in paras 5.36 and 5.37 above. The adjustments made by the Authority in the context of operating expenses have been summarized below.
- **7.100.** The Authority has proposed to transfer cargo, ground-handling and fuel farm services from non-aeronautical to aeronautical services for reasons discussed in para 5.62 to para 5.64 above. Similarly, expenses pertaining to the same would now be treated as aeronautical.
- **7.101.** The Authority has proposed to reallocate vehicle fuelling activity and to consider the same as aeronautical for reasons discussed in para 5.65 above. However, as there are no expenses in HIAL's financial statements with respect to vehicle fuelling services, no adjustment would have to be made for the purpose of this chapter.
- **7.102.** Further, the Authority has disagreed with HIAL's proposal of treating CUTE, CUSS and BRS (IT) from the 2nd Control Period as non-aeronautical since these are considered as part of the overall ground handling activity, which in turn has been treated as an aeronautical service by the Authority, as discussed in para 5.44. In the 1st Control Period, CUTE, CUSS & BRS (IT) has been treated as an aeronautical service under a

- composite service charge of Common Infrastructure Charges (CIC). Accordingly, this would not have to be reallocated for the purpose of this chapter.
- 7.103. The Authority observed that since the Cargo Satellite Building (CSB) was being used to undertake cargo related operations, it needs to be treated as an aeronautical asset (as cargo services are treated as aeronautical as explained in para 5.41). Accordingly, expenses pertaining to the CSB need to be relocated from non-airport expenses to aeronautical expenses for the purpose of this chapter. Till FY 2014-15 the entire non-airport expenditure in the books of HIAL pertained to the CSB. In the auditor certificate for FY 2015-16 submitted by HIAL on 28.01.2017, the Authority noted non-airport expenditures aggregating to Rs. 1.28 crores. The certificate also mentioned that HIAL "had not maintained separate cost center for expenses relating to fixed electricity ground power (FEGP) and cargo satellite building (CSB) from April 1, 2015 to March 31, 2016 and that these expenses have been separately confirmed by the management in letter dated September 19, 2016 for allocation purpose." As a result of the above, it is unclear whether HIAL's non-airport expenditure in the year FY 2015-16 pertains to the CSB. Accordingly, the Authority, vide its clarification dated 17.03.2017, requested HIAL to furnish a copy of the abovementioned management letter in addition to auditor certified expenses pertaining to Cargo Satellite Building (CSB) for FY 2015-16. In the absence of information being furnished by HIAL, the Authority proposes to treat select non-airport expenses (i.e. Repairs & Maintenance Expense of Rs. 0.22 crore and Outsourcing expenses of Rs. 0.21 crore) for FY 2015-16 as expenses pertaining to CSB to be included within the aeronautical expenses for tariff determination and reserves the right to alter the treatment based on information received from HIAL. In case HIAL is unable to clarify the cost center for the non-airport expense, the Authority would disallow the same assuming it to be non-airport in nature. Furthermore, the Authority is of the opinion that the nonairport rent of Rs. 0.85 crore incurred by HIAL in FY 2015-16 would not pertain to the CSB since HIAL would not pay rent for its own building. The Authority's treatment for the same has been documented in para 7.105 below.
- **7.104.** The Authority noted that HIAL in its submissions has recorded that FEGP services are a part of the overall ground handling activity and considered it as non-aeronautical.

As ground handling activity has been categorised by the Authority as an aeronautical service, the Authority has proposed to include FEGP also within the aeronautical category, as discussed in para 5.46. As the entire ground-handling expenditure is being relocated to aeronautical, no separate adjustment pertaining to FEGP expenses would have to be made in this building block.

- 7.105. In addition, it was also observed by the Authority that while a rental expense of Rs. 0.85 crore pertaining to non-airport operations had been incurred by HIAL. The Authority, vide its clarification email dated 17.03.2017, sought information from HIAL regarding the exact cost center under which this expense was incurred. In the absence of information received from HIAL, the Authority currently proposes to accept HIAL's treatment of not including it within the regulatory opex for tariff determination but may alter the treatment in the final tariff order for the 2nd Control Period depending on the nature of cost center as submitted by HIAL.
- **7.106.** Additionally, HIAL has submitted an auditor's certificate dated 13.02.2017 on the treatment of township, landscaping and facility management costs. The Authority's position on the treatment of the above costs is as given below,
- 7.107. Employee Township: While the Authority, in principle, is in agreement with the principle of including the cost of Employee Township (housing critical staff) within the aeronautical RAB; it is not clear if all the employees living in the township are engaged in airport critical operations and exactly how HIAL defines critical operations. Accordingly, the Authority has decided to allocate the expenses incurred on the employee township between aeronautical and non-aeronautical based on the ratio of the number of apartments allotted to airport critical staff to the total available units in the township. Through clarification emails dated 03.03.2017 and 17.03.2017, the Authority sought from HIAL details regarding the number of critical and non-critical staff residing at the township from FY 2008-09 to FY 2015-16. However, in the absence of any response received from HIAL till date, the Authority proposes to allocate the complete expenses pertaining to Employee Township as aeronautical and reserves the right to alter the treatment based on the response received from HIAL during the release of the Tariff Order for the 2nd Control Period. In the absence of a satisfactory response in this regard in the consultation process,

- the Authority may decide to consider the entire township expenditure as non-aeronautical.
- 7.108. Landscaping: The Authority notes that HIAL has considered landscaping expenses to be aeronautical in nature stating that it is used to enhance passenger experience. However, the Authority is of the view that while landscaping enhances passenger experience it is not integral to airport operations in general. Hence, treating landscaping costs entirely as aeronautical may not be appropriate. Accordingly, the Authority proposes to treat this expenditure as a common cost divided in the ratio of aeronautical and non-aeronautical expenses.
- 7.109. Facility management costs: HIAL has considered these costs to be aeronautical in nature since these pertain to the passenger terminal building. The Authority however is of the view that since the terminal building is a common asset; housekeeping costs pertaining to the common asset should also be treated as a common expense and divided between aeronautical and non-aeronautical expenditure. The Authority notes that HIAL has allocated the PTB based on the terminal area submitted by HIAL. The Authority proposes to use the same ratio of terminal area to allocate the expenditure on facility management. Subsequently, when the Authority conducts an independent study on the asset and expense allocation at the RGIA, the allocation of this expense shall be trued up.
- **7.110.** The Authority notes that the Auditor has certified HIAL's allocation of operating expenses based on concept note dated 14.10.2015. As per its revised financial model dated 28.01.2017, HIAL proposes to use the expense allocation ratio of FY 2015-16 to allocate projected operating expenses in the 2nd Control Period. While the Authority is in agreement with the principle of using the expense allocation ratio of latest completed financial year i.e. FY 2015-16 for the projections, it proposes to make adjustments to the allocation methodology submitted by HIAL as explained in paras 7.44 and 7.106 above. Accordingly, the final expense allocation used by HIAL is as given below,

Table 34: Allocation of operating expenses considered by the Authority in the 2nd Control Period

Operating Expenses (in INR crores)	2017	2018	2019	2020	2021	Aggregate 2nd CP
	Payrol	l Expense	:S	l .		1
Salaries and wages	59.66	63.84	79.24	98.35	105.23	406.32
Aero	19.63	21	26.07	32.36	34.62	133.68
Non-aero	3.82	4.09	5.08	6.31	6.75	26.05
Common	34.14	36.53	45.34	56.28	60.22	232.51
Staff Welfare	4.24	4.54	5.64	7	7.49	28.91
Aero	0.12	0.13	0.16	0.2	0.21	0.82
Non-aero	0.01	0.01	0.02	0.02	0.02	0.08
Common	4.11	4.4	5.46	6.78	7.25	28
Training	1	1.07	1.32	1.64	1.76	6.79
Aero	0.04	0.05	0.06	0.07	0.08	0.3
Non-aero	0	0	0	0	0	0
Common	0.95	1.01	1.26	1.56	1.67	6.45
Total Payroll Costs	64.9	69.45	86.2	106.99	114.48	442.02
						0
Utility Expenses						0
Aero	20.83	17.83	18.87	29.69	38.28	125.5
Non-aero	0	0	0	0	0	0
Common	0	0	0	0	0	0
Total Utility Costs	20.83	17.83	18.87	29.69	38.28	125.5
						0
General/Admin Expenses						0
Auditors Fee	0.57	0.59	0.62	0.64	0.67	3.09
Aero	0	0	0	0	0	0
Non-aero	0	0	0	0	0	0
Common	0.57	0.59	0.62	0.64	0.67	3.09
Directors Sitting Fee	0.21	0.22	0.22	0.23	0.24	1.12
Aero	0	0	0	0	0	0
Non-aero	0	0	0	0	0	0
Common	0.21	0.22	0.22	0.23	0.24	1.12
Communication Expenses	1.97	2.05	2.13	2.21	2.3	10.66
Aero	1.67	1.73	1.8	1.87	1.94	9.01
Non-aero	0.08	0.08	0.08	0.09	0.09	0.42
Common	0.23	0.24	0.25	0.26	0.27	1.25
Travelling Expenses	7.03	7.31	7.59	7.89	8.2	38.02
Aero	1.3	1.35	1.4	1.46	1.51	7.02
Non-aero	0.24	0.25	0.26	0.27	0.28	1.3

Common	5.5	5.71	5.93	6.16	6.41	29.71
Rent	1.48	1.53	1.59	1.65	1.72	7.97
Aero	0	0	0	0	0	0
Non-aero	0	0	0	0	0	0
Common	1.48	1.53	1.59	1.65	1.72	7.97
Rates and Taxes	5.92	6.15	6.39	6.64	6.9	32
Aero	-0.02	-0.02	-0.02	-0.02	-0.02	-0.1
Non-aero	0.02	0.02	0.02	0.02	0.02	0.1
Common	5.92	6.15	6.39	6.64	6.9	32
Advertisement	2.75	2.86	2.97	3.09	3.21	14.88
Aero	1.13	1.18	1.22	1.27	1.32	6.12
Non-aero	0.36	0.38	0.39	0.41	0.43	1.97
Common	1.26	1.31	1.36	1.41	1.47	6.81
Office Maintenance	2.45	2.55	2.65	2.75	2.86	13.26
Aero	0.43	0.45	0.46	0.48	0.5	2.32
Non-aero	0.06	0.06	0.06	0.07	0.07	0.32
Common	1.96	2.04	2.12	2.2	2.29	10.61
Printing and Stationery	0.28	0.29	0.3	0.31	0.33	1.51
Aero	0.1	0.11	0.11	0.12	0.12	0.56
Non-aero	0	0	0	0	0	0
Common	0.18	0.18	0.19	0.2	0.21	0.96
Event Management	0	0	0	0	0	0
Aero	0	0	0	0	0	0
Non-aero	0	0	0	0	0	0
Common	0	0	0	0	0	0
Recrutiment	0.06	0.06	0.07	0.07	0.07	0.33
Aero	0	0	0	0	0	0
Non-aero	0	0	0	0	0	0
Common	0.06	0.06	0.07	0.07	0.07	0.33
Miscellaneous	1.39	1.45	1.5	1.56	1.62	7.52
Aero	0.44	0.45	0.47	0.49	0.51	2.36
Non-aero	0.02	0.02	0.02	0.02	0.02	0.1
Common	0.94	0.97	1.01	1.05	1.09	5.06
Consultancy Costs	7.76	5.46	5.68	5.9	6.13	30.93
Aero	3.14	0.67	0.7	0.72	0.75	5.98
Non-aero	0.04	0.04	0.04	0.05	0.05	0.22
Common	4.57	4.75	4.94	5.13	5.33	24.72
Bank Charges	7.95	10.24	10.12	11.77	13.96	54.05
Aero	7.23	9.32	9.28	10.57	12.51	48.91
Non-aero	0.73	0.92	0.85	1.20	1.45	5.14
Common	0.00	0.00	0.00	0.00	0.00	0.00
Security Cost	8.71	9.05	9.4	9.77	10.15	47.08

Aero	0.19	0.19	0.2	0.21	0.22	1.01
Non-aero	0.31	0.32	0.34	0.35	0.36	1.68
Common	8.21	8.53	8.86	9.21	9.57	44.38
Total General/Admin Costs	64.60	66.50	68.57	72.50	77.06	349.22
Repair and Maintenance Cost						0
Buildings	5.16	5.75	6.21	7.22	10.33	34.67
Aero	1.23	1.37	1.48	1.72	2.47	8.27
Non-aero	0.3	0.33	0.36	0.42	0.59	2.00
Common	3.63	4.05	4.37	5.09	7.27	24.41
Plant & Machinery	14.71	16.40	17.71	20.60	29.45	98.86
Aero	14.35	16.00	17.28	20.10	28.74	96.47
Non-aero	0.02	0.02	0.02	0.02	0.03	0.11
Common	0.34	0.38	0.41	0.48	0.68	2.28
Electrical Installations	11.72	12.04	13.00	15.12	21.62	73.50
Aero	7.61	7.82	8.44	9.82	14.04	47.74
Non-aero	0.55	0.56	0.61	0.71	1.01	3.43
Common	3.56	3.66	3.95	4.59	6.57	22.32
Others	1.71	1.90	2.06	2.39	3.42	11.48
Aero	1.21	1.34	1.45	1.69	2.41	8.11
Non-aero	0.04	0.05	0.05	0.06	0.09	0.29
Common	0.46	0.51	0.55	0.64	0.92	3.09
Diminution in the value of Inventory	0	0	0	0	0	0
Aero	0	0	0	0	0	0
Non-aero	0	0	0	0	0	0
Common	0	0	0	0	0	0
Stores and Spares	13.90	15.37	16.60	19.31	27.61	92.79
Aero	12.84	14.20	15.33	17.83	25.50	85.70
Non-aero	0.72	0.79	0.85	0.99	1.42	4.78
Common	0.35	0.38	0.41	0.48	0.69	2.31
Total R&M Costs	47.19	51.47	55.57	64.64	92.43	311.31
Other Operating Expenses						0
Insurance Costs	2.05	2.12	2.21	2.29	2.38	11.05
Aero	1.86	1.93	2.02	2.06	2.14	10.01
Non-aero	0.19	0.19	0.18	0.23	0.25	1.04
Manpower Outsourcing Expenses	23.23	24.74	29.59	35.6	38.86	152.02
Aero	21.94	23.35	27.92	33.61	36.72	143.54

Non-aero	1.29	1.39	1.66	1.99	2.14	8.47
Fuel Farm expenses	10.68	11.09	11.52	11.97	12.44	57.7
Aero	10.68	11.09	11.52	11.97	12.44	57.7
Non-aero	0	0	0	0	0	0
Bus Hire Expenses	0.49	0.51	0.53	0.55	0.57	2.65
Aero	0	0	0	0	0	0
Non-aero	0	0	0	0	0	0
Common	0.49	0.51	0.53	0.55	0.57	2.65
Car Parking Expenses	0.65	0.68	0.71	0.73	0.76	3.53
Aero	0	0	0	0	0	0
Non-aero	0.65	0.68	0.71	0.73	0.76	3.53
Common	0	0	0	0	0	0
Housekeeping Costs	10.66	11.08	12.97	18.65	23.17	76.53
Aero	9.15	9.51	11.13	16	19.89	65.68
Non-aero	1.46	1.51	1.77	2.55	3.16	10.45
Common	0.06	0.06	0.07	0.1	0.12	0.41
Other O&M Expenses	1.97	2.05	2.13	2.21	2.3	10.66
Aero	0.2	0.2	0.21	0.22	0.23	1.06
Non-aero	1.76	1.83	1.9	1.97	2.05	9.51
Common	0.02	0.02	0.02	0.02	0.02	0.1
Total Other Operating expenses (G)	24.46	25.41	27.86	34.11	39.25	151.09
Total Other Costs	49.73	52.27	59.65	72.01	80.49	314.15
Concession Fee	44.97	44.72	34.91	39.21	44.16	207.98
Aero	33.94	32.41	21.14	23.70	26.68	137.87
Non-Aero	10.20	11.48	12.94	14.68	16.65	65.95
Non-Airport	0.89	0.94	0.99	1.04	1.09	4.94
Land Lease	3.28	3.44	3.61	3.79	3.98	18.1
Aero	2.38	2.5	2.63	2.76	2.89	13.16
Non-Aero	0.89	0.94	0.99	1.04	1.09	4.95
Total Expenses	295.50	305.68	327.38	388.83	450.88	1768.27

7.111. Additionally, the Authority has noted HIAL submission requesting for a true-up of all uncontrollable costs based on actual expenditure incurred. The Authority however believes that all expenses allowed to HIAL (including those which are controllable) should be trued-up. Accordingly, the Authority proposes that each of the above expense heads mentioned in Table 33 shall be examined at the end of the Control Period; and subject to HIAL providing both (i) adequate justification that the spend

was necessary and reasonable and (ii) conclusive proof that the amount was actually incurred, the expense shall be allowed by the Authority. This true-up shall however, be subject to a cap (if any) mentioned for the specific expense head in the Authority's analysis of this chapter.

Proposal No. 6. Regarding Operating Expenses

- 6.a. Based on the material before it and its analysis, the Authority proposes:
 - To consider the operational expenditures in respect of HIAL as a standalone entity as presented in Table 34.
 - ii. To allocate expenses between aeronautical and non-aeronautical categories as described in paras 7.44 and 7.45.
 - iii. To allow for true-up of all expenses incurred by HIAL during the 2nd Control Period while determining tariffs for the 3rd Control Period (except true-up of interest on working capital loan which is subject to a pre-defined cap). The true-up of operating expenses shall be subject to a justification and proof as mentioned in 7.111 above.

8. Taxation

a HIAL Submission on Taxation

8.1. As per its initial submission dated 25.03.2016 and its revised submission dated 05.12.2016, HIAL stated that it had separately computed corporate tax pertaining to aeronautical service, based on the provisions of the extant Income Tax laws, as a building block to be included in the calculation of the target revenue. In this regard HIAL submitted,

"In line with the MoCA directive regarding adoption of Shared Till for GHIAL, corporate tax pertaining to aeronautical services is separately calculated and added as a building block to compute the final target revenue.

The computation of income tax on aeronautical income is made according to the prevailing Income Tax laws and rules. Further, the assumptions are as under:

- The Aeronautical segment has been treated as a standalone entity with its own tax computations. This may not necessarily reflect the overall tax computation of GHIAL as a whole.
- In line with this, all items excluded from the calculations of the regulatory building blocks have been excluded from the regulatory tax computation except 30% of non-aeronautical revenue share. The cross subsidy amount allocated from non aero revenue to the extent of 30% is considered for determination of ARR. Hence it is considered in the reguted P&L for the purpose of tax computation.

The items not taken into account include:

- o 70% of non-aeronautical revenues
- Non-aeronautical operating costs and depreciation (for accounting and tax purposes)
- Non-aeronautical revenue share
- Interest on loan attributable to non-aeronautical assets
- Tax due to non-aeronautical income

For the purpose of tariff determination of GHIAL, the higher of:

- Tax Payable based on the Book Profit computed under section 115JB of the Income Tax Act, 1961 based on the profit declared in the statement of Profit and Loss presented to the Shareholders, and
- Tax Payable based on the Taxable Income computed as per the normal provisions of the Income Tax Act, 1961 after taking into deducting the depreciation as per the Income Tax Act, brought forward losses and other adjustments / deductions allowed under the said Act."
- **8.2.** The tax projections for the 2nd Control Period submitted by HIAL as per its revised submission dated 05.12.2016 is as under,

"...

Particulars (Amts in Rs crores)	FY2017	FY2018	FY2019	FY2020	FY2021
Tax on Aeronautical Segment	149.66	166.05	206.48	256.89	274.10
Tax on P&L	179.57	294.69	353.76	308.68	329.61

..."

b Authority's examination of HIAL's Submissions on Taxation

8.3. Subsequent to its revised submission dated 05.12.2016, HIAL had submitted an updated financial model dated 28.01.2017. On reviewing the taxation calculation methodology followed by HIAL in the abovementioned model, the Authority notes that the financial model contains two profit and loss accounts. An aggregate profit and loss account, which computes taxes for HIAL as a standalone entity, while the other aeronautical profit and loss account, which computes taxes pertaining only to its aeronautical operations. Both the above taxes computed by HIAL are as presented below,

Table 35: Corporate Tax considered by the HIAL for the 2nd Control Period

Particulars (Rs. in crores)	2017	2018	2019	2020	2021
Tax on P&L for the entity	180.33	312.17	358.79	313.84	333.57
Tax on Aeronautical Segment	150.94	166.55	228.13	262.00	278.14

- 8.4. The Authority understands that under the 30% shared till mechanism, HIAL will have to incur taxes based on its profits as an entity however, for determination of tariffs HIAL should consider taxes incurred pertaining only to its aeronautical operations. Therefore, the allocation of the total taxes incurred by HIAL into aeronautical and non-aeronautical components becomes essential. HIAL has allocated its taxation between aeronautical and non-aeronautical by preparing a separate aeronautical profit & loss account that computes taxes for its aeronautical operations. However, the Authority is of the view that it will be prudent to allocate taxes after considering a non-aeronautical profit and loss account in addition to the aeronautical profit & loss account used by HIAL. The Authority proposes to allocate HIAL's taxes (as per the aggregate profit & loss account) between aeronautical and non-aeronautical components based on the ratio of taxes as per both aeronautical and non-aeronautical profit & loss accounts.
- **8.5.** The Authority has computed revised taxes (for the standalone entity of HIAL & aeronautical services) by capturing the Authority's analysis and tentative proposals mentioned in the respective sections of the consultation paper. The Authority then prepared a profit and loss account pertaining to non-aeronautical services and computed non-aeronautical taxes. Based on the methodology explained in para 8.3 above, the Authority's computation is as presented below,

Table 36: Detailed computation of the Corporate Tax considered by the Authority for the 2nd Control Period

Computation of Tax 2 nd Control Period (Rs. In crore)	2017	2018	2019	2020	2021	Aggregate 2nd CP
Aeronautical PBT	351.68	326.71	54.95	17.98	-20.33	730.98
Aeronautical tax (A)	73.71	68.48	11.52	3.77	0.00	157.48
Non-Aeronautical PBT	188.37	219.21	262.48	288.84	322.51	1281.40
Non-Aeronautical Tax (B)	67.78	79.03	90.39	94.35	108.36	439.92
PBT for HIAL as a standalone entity	478.03	476.15	237.48	214.66	196.32	1602.64
Tax for HIAL as a standalone entity (C)	100.20	99.80	49.78	44.99	41.15	335.91
Ratio for allocation of taxes to be incurred by HIAL as a standalone entity {A/ (A+B)} = D	52%	46%	11%	4%	0%	NA

Aeronautical portion of the						
total tax to be considered for	52.20	46.33	5.63	1.73	0.00	
tariff determination { D*C}						105.88

Proposal No. 7.

Regarding Taxation

- 7.a. Based on the material before it and its analysis, the Authority proposes:
 - To allocate HIAL's total tax between aeronautical and nonaeronautical based on the ratio of aeronautical and non-aeronautical taxes as per the respective P&Ls.
 - ii. To consider only aeronautical portion of HIAL's total taxes for the purpose of tariff determination.
 - iii. To true up the (aeronautical) corporate taxes paid for the 2nd Control Period at the time of tariff determination for the 3rd Control Period.

9. Non-Aeronautical revenue

a HIAL Submission on Non-aeronautical revenue

- 9.1. As per the Authority's Order No. 38/2013-14 for the 1st Control Period for HIAL was based on single-till methodology where the entire amount of non-aeronautical revenues were considered to cross-subsidize aeronautical operations. Also, HIAL was allowed to recover in the form of tariffs, the expenditure incurred by the airport operator to earn these non-aeronautical revenues. However, due to the change in the regulatory mechanism to 30% shared-till as mentioned in para 5.2, only 30% of the non-aeronautical revenues shall now be used to cross-subsidize aeronautical operations. Also, HIAL submitted that it would not be entitled to recover any expenditure which is being incurred for the provision of such non-aeronautical services.
- 9.2. HIAL, in its MYTP submission dated 25.03.2016 and revised submission dated 05.12.2016 has provided a breakup of the non-aeronautical revenue. The difference between these MYTP submissions was the addition of Rs. 0.34 crores for FY 2018-19 on account of amortization of non-refundable premium as discussed in para 9.35 below. However, the Authority has quoted HIAL's revised MYTP submission dated 05.12.2016 for the purpose of this section.
- **9.3.** The submissions of HIAL in respect of non-aero revenues are presented in the following paragraphs. HIAL has submitted that non-aeronautical revenues have been projected based on the following revenue drivers,

"The base for FY 2016 is performance up to December 2015 duly extrapolated for remaining 1 quarter of FY 16. Based on projection of FY 16 revenue, appropriate growth rate has been applied to the individual revenue streams to arrive at projections for FY 2017 – FY 2021.

Non-Aeronautical Revenues are forecasted based on the growth drivers identified below:

- ATM growth rate (ICF/SH&E report)
- Total passenger traffic growth rate (ICF/SH&E report)
- International passenger traffic growth rate (ICF/SH&E report)
- Cargo throughput growth rate (ICF/SH&E report)

- Contractual (Rentals, Minimum Guarantees, Common Area Maintenance etc), and
- Others (which cannot be forecasted based on specific growth factors)
- **9.4.** An extract of HIAL's MYTP submission on the principal drivers and basis of projections for their non-aeronautical revenue streams and classifications for Non-aeronautical revenues is as given below,

"...

Classification of Revenue Streams based on Growth Drivers

- ATM growth linked revenue streams
 - Fuel Farm Revenues
 - Revenue Share from Ground Handling
- Passenger traffic growth linked revenue streams
 - o Revenue Share from In-flight kitchen
 - o Retail concession fee
 - o Revenue from lounge share
 - F&B revenues
 - o Radio taxi revenue share
 - Car parking revenues
 - Advertising revenue share
- International passenger traffic growth linked revenue streams
 - Duty Free Revenue Share
 - Forex services Revenue Share
 - o Public Admission fees
- Cargo throughput growth linked revenue streams
 - o Revenue Share from Cargo
- Contractual revenue streams
 - Retail MAG revenues
 - Lease Rentals from In-flight kitchen
 - Ground Handling Rentals
 - Duty Free Rentals
 - Cargo Rentals
 - Other Rentals
- Others
 - Miscellaneous income.

..."

9.5. The Authority is in receipt of an Auditor's Certificate from HIAL dated 25.03.2016 stating HIAL's decision to consider the cargo, ground handling and fuel farms assets as non- aeronautical assets and revenue from these assets as non-aeronautical revenues; based on HIAL's interpretation of the concession agreement. An extract of the Auditor's certificate is presented below,

"...

Airports Economic Regulatory Authority of India vid their order no 38/2013-14 has stated to consider Cargo, Ground Handling and Fuel Farm as Aero but The company has filed a petition before Honourable High Court at Hyderabad that Cargo, Ground Handling and Fuel Farm services should be treated as Non-Aero as per the provisions of Concession Agreement dated December 20, 2004 between Ministry of Civil Aviation, Government of India and Hyderabad International Airport Limited. Pending the decision of Honourable High Court, above mentioned assets are considered non – aero and revenues from those assets are considered Non-Aero and revenues from those assets are considered as Non-Aero Revenue

....//

HIAL Submission on ATM Growth Linked Revenue Streams

9.6. The Authority notes the HIAL's submission regarding Fuel Farm Revenue. HIAL has submitted it receives two revenue streams from the Fuel Farm at RGIA including: (1) Capital Cost Recovery and (2) Throughput Royalty. HIAL also submitted the trends affecting fuel off-take at RGIA as given below,

"…

- There is a trend among airlines to opt for more fuel-efficient aircraft such as A320 or A320 Neo, Q400, etc. This trend is expected to accelerate going forward.
- Four domestic airlines viz., Indigo, Spicejet, Go Air and Air India have received permission from DGFT (Ministry of Commerce & Industry) to directly import 10.5 lakh kl of ATF. Indigo has already started importing ATF under this scheme and other airlines are expected to follow suit.

- Due to the higher VAT rate in Telangana (VAT on Aviation Turbine Fuel is 16%) vis-à-vis neighbouring states, several airlines are opting to only top-up at RGIA and off-take the bulk of their fuel requirement from other states with more favourable tax regimes.
- In FY 2015, there was a negligible increase in off-take as compared to FY
 2014 in spite of 7% ATM growth recorded over the same period.

... "

9.7. Consequently, HIAL has projected a negative impact of 10% on fuel throughput revenues at RGIA compared to the projected ATM growth. An extract of HIAL's MYTP submission on the projection of fuel farm revenues has been reproduced below,

".

In Rs. Crores	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Fuel Farm revenue	71.67	71.70	71.35	70.58	69.55	68.06

..."

9.8. With respect to the Ground handling revenue, HIAL submitted that revenues up to Q3 FY2015-16 is taken on actuals which is extrapolated for remaining 1 quarter of FY2015-16 and then escalated by ATM growth rate. Based on the abovementioned assumptions, HIAL's revenue share from ground handling is projected as stated below,

"...

In Rs. Crores	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Revenue Share	9.55	10.51	11.51	12.54	13.61	14.68
-						

..

Power revenue ("FEGP"). HIAL submitted that FEGP revenues up to Q3 of FY2015-16 is taken at actuals which is extrapolated for remaining 1 quarter of FY2015-16. From FY2015-16, FEGP projections are escalated based on ATM growth rate. An extract of these projections has been reproduced below,

"...

In Rs. Crores	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
FEGP Revenue	0.95	1.05	1.15	1.25	1.36	1.46

..."

HIAL Submission on Passenger Growth Linked Revenue Streams

- **9.10.** An extract of HIAL's submission on the historical trend of revenues linked to passenger growth is as presented below,
 - "... The Non Aero revenue linked with pax growth has experienced a CAGR of 13.70% over last 5 years (FY10-FY15) however, considering the pax growth of 10% and Consumer Price Index (CPI) of 8%¹ during the said period, the real growth works out in the negative territory. Hence, the pax growth related revenues do not call for any real growth over passenger growth during the Control Period 2. Accordingly, the pax growth related revenues streams are projected either at pax growth rate without considering any real growth as explained in the subsequent paras..."
- 9.11. The Authority notes HIAL's submission that at RGIA, in-flight catering service is presently provided by two concessionaires namely: (1) LSG Sky Chef, and (2) SkyGourmet. HIAL has further submitted that revenues from in-flight kitchen service providers up to Q3 FY2015-16 is taken on actuals which is subsequently extrapolated for remaining 1 quarter of the financial year. Revenue projections from FY 2016-17 to FY 2020-21 are based on growth rates applied on those FY2015-16 figures. With respect to the trends in the revenue share from in-flight catering, HAIL submitted as below,
 - "... **Revenue Share** It has been noticed that over the last 5 years, revenue share from In-Flight Kitchen has grown by 6% yoy as against pax traffic CAGR of 10%. The following factors have contributed to this negative impact on growth rate:
 - ✓ Over 50% of ATM and Passenger traffic at RGIA comes from Low Cost
 Carriers
 - ✓ There is a trend in domestic airlines to move from 'Full Meal' to 'Buy on Board' concept. Revenue per unit under BOB is lower than revenue per unit under Full Meal. Stocking pattern of food items on aircraft has also undergone a change due to this.
 - ✓ Competitive environment in IFK business has resulted in reduction in per meal prices.

- ✓ Major international carriers operating from RGIA e.g. Emirates and Etihad are doing back-catering and therefore the caterers do not get any business from them..."
- **9.12.** Based on the trends discussed in 9.11 above and the historical trend of this revenue stream, HIAL has considered the growth rate at 5% below passenger traffic growth and projected the revenues as stated below,

"

In Rs. Crores	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Revenue Share	5.49	5.82	6.13	6.42	6.70	6.94

..."

9.13. The Authority notes HIAL's submission regarding the CUTE, CUSS & BRS IT charges. HIAL submitted that it proposes to be discontinue Common Infrastructure Charges ("CIC") from the later of 01.04.2016 and the date of implementation of the tariff order for 2nd Control Period and merge the same with the UDF. HIAL also proposes to charge CUTE, CUSS and BRS IT services, separately in line with the practices prevailing in other airports. HIAL has also submitted to the Authority that the same should be considered non-aeronautical in nature and has projected the same as given below,

"...

	In Rs. Crores	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
9.14.	Revenue Share	-	20.06	22.14	24.29	26.55	28.85

he Authority notes HIAL's submission regarding the Plaza lounge / Airport Lodge charges. HIAL has concessioned out the lounge facilities and collects a revenue share on the same. HIAL submitted that revenues up to Q3 FY 2015-16 is taken at actuals which and extrapolated for remaining 1 quarter of FY 2015-16. This amount is used as the basis of the projections for the 2nd Control Period. From FY 2016-17 onwards, revenues are escalated based on passenger traffic growth rate. An extract of the HIAL's submission regarding the revenue share is as presented below,

"...

- From FY 2017, revenue share from the plaza lounge and airport lodge are projected at passenger traffic growth rate. A higher growth rate cannot be used for projections, as:
 - o RGIA is primarily an O&D airport with very few transit passengers
 - the lounge attracts a specific niche from the travelling passengers
 (i.e. long stopovers, late flights, travelling professionals and
 business travellers), and
 - There is increased competition from boutique hotels coming up around the airport area.

Amounts in Rs. crores	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Revenue Share from Plaza/Airport Lodge	2.41	2.67	2.95	3.23	3.54	3.84

..."

9.15. HIAL further submitted that it receives revenues from several concessionaires operating at the RGIA, Hyderabad. An extract of the HIAL submission regarding the segregation of retail revenue is as below,

"...

We may split retail revenues into two parts with different growth rates:

o Concession Fee - Concession Fee comes from fixed percentage share of revenues of retail concessionaires at the Airport. As retail performance may be linked to passenger numbers, the concession fee is projected based on passenger traffic growth. Concession Fee upto Q3FY 2016 is taken at actuals which is extrapolated for remaining 1quarter of FY16, and is the basis of the projections. From FY 2017, concession fee revenue is escalated by passenger traffic growth rate.

" In Rs. Crores	FY	FY	FY	FY	FY	FY
	2016	2017	2018	2019	2020	2021
Roncession Fee	2.93	3.25	3.59	3.94	4.31	4.68

egarding Food and Beverages ("F&B") concessions at the RGIA, HIAL has submitted to

9.16.

the Authority that revenues from F&B concessionaires' up to Q3FY 2015-16 has been taken at actuals, extrapolated for the reminding 1 quarter of FY 2015-16, and used as the basis of projections for the 2nd Control Period. From FY 2016-17 onwards, F&B revenues have been escalated by the passenger traffic growth rate. HIAL submits that it does not envisage any additional growth for the following reasons:

- "The increasing competition within the terminal leading to pricing adjustments, and
- RGIA is primarily an Origin & Destination ("O&D") airport with less transit passenger traffic. Consequently average passenger stopover times at the terminal are low compared to other airports with such traffic."
- **9.17.** Based on the above assumptions, HIAL submitted the following projections,

"...

In Rs. Crores	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
F&B revenue	18.56	20.62	22.75	24.96	27.29	29.65

,,

9.18. HAIL submitted that the car park at RGIA is operated by Tenaga Parking (India) Pvt Ltd ("Tenaga Parking") through a Management Services Agreement. Revenues from collection of parking charges accrues to HIAL, and HIAL pays an Operator Fee/Management Fee to Tenaga Parking. Regarding the projection of car park revenues, HAIL further submitted that revenues up to Q3FY 2015-16 is taken at actuals and extrapolated for remaining 1 quarter of FY 2015-16. This amount for FY 2015-16 is the base for projections for the 2nd Control Period. Revenues from FY 2016-17 onwards is extrapolated by passenger traffic growth rate. Based on this, HAIL submitted the following projections,

•••

·tn Rs. Crores	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
" Car Park	28.26	31.38	34.63	37.99	41.54	45.13
Revenue						

9.19.

he Authority notes HIAL's submission regarding the Radio Taxi revenues. HAIL has

submitted that revenues up to Q3 FY 2015-16 is taken on actuals and extrapolated for remaining one quarter of FY 2015-16. From FY 2016-17 onwards, revenue share to HIAL has been assumed to increase based on passenger traffic. According to HIAL's submission, no additional growth rate has been considered due to increasing competition from other prominent taxi operators such as Uber, Ola, etc. who operate from outside the airport and have not entered revenue sharing agreements with HIAL. Based on the above justification, HAIL submitted revenue projections as presented below,

In Rs. Crores	FY	FY	FY	FY	FY	FY	"
	2016	2017	2018	2019	2020	2021	
Revenue Share	8.82	9.79	10.81	11.86	12.97	14.09	

..."

- 9.20. The Authority notes HIAL's submission with respect to advertisement and promotions revenues. HIAL submitted that it has concessioned out rights for the advertising space at RGIA to Laqshya Hyderabad Airport Media Pvt Ltd ("LHAMPL"). LHAMPL provides advertising space within the terminal and outside the terminal in the airport area. HIAL's submission regarding the nature of advertising has been reproduced below,
 - "... Within the Airport, the advertisements usually provided in the form of ambient lit banners, front lit static sites, backlit totems, digital media, wall and pillar wraps, promotional stalls, strollers, giant banners and light boxes. Advertising outside the terminal building are in the form of banners and front/back-lit hoardings on the approach roads to the terminal..."
- **9.21.** HIAL further submitted that advertisement revenue is generally linked with passenger traffic growth as advertisement business depends on "eye contacts within and outside terminal from where the passengers are passing through." The projections submitted by HIAL is as under,

"...

The revenues in FY 16 are considered the base and escalated at the passenger growth rate for each year of the second control period...

Promotions – Revenues from other promotions upto Q3FY 2016 is taken at actuals which is extrapolated for remaining 1quarter of FY16, and is the basis of the projections..."

9.22. Based on the rationale given above, HIAL's projection of revenues from Advertisement and Promotions were as given below,

"...

Amounts in Rs. crores	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Revenue Share from	26.85	29.82	32.91	36.11	39.47	42.89
Advertising						

..."

HIAL Submission on revenue streams linked to International Passenger Growth

- 9.23. The Authority notes that regarding the Duty Free revenues, HAIL has submitted that these operations have been concessioned out to Hyderabad Duty Free Retail Ltd. ("HDFRL"). HDFRL is engaged in setting up, developing, operating, maintaining and managing the duty free outlet at RGIA. The contract with HDFRL specifies a percentage share of duty free revenues to be shared with HIAL; along with a minimum guaranteed amount. If the revenue share falls below the minimum guarantee amount then HDFRL has to pay at least the minimum amount to HIAL.
- 9.24. HIAL further submitted that Duty Free revenues for HIAL up to Q3 FY 2015-16 is taken on actuals and is extrapolated for remaining 1 quarter of FY 2015-16. HIAL also submitted that from FY 2016-17 onwards, the concession fee is escalated by international passenger traffic growth rate as Duty Free revenues "are primarily in foreign currency". The projections submitted by HIAL is as under,

"...

"Amounts in Rs.	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
" crores						
Revenue Share	18.76	21.65	24.68	27.83	31.17	34.60
from Duty Free						

9.25.

he Authority notes HAIL's submission regarding the revenue from Forex Services. HIAL

submitted that as RGIA is an international airport, there is a need for availability of forex-related services for both inbound and outbound passengers. HIAL added that forex services at the RGIA are concessioned out to Weizmann Forex Ltd. ("Weizmann"). HIAL further submitted that revenues up to Q3 FY 2015-16 is taken on actuals and extrapolated for remaining 1 quarter of FY 2015-16. This is subsequently used as the base for future projections. Revenue streams from forex services has been projected from FY 2016-17 to FY 2020-21 at the international passenger growth rate and is presented below,

"...

In Rs. Crores	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Revenue Share	9.20	10.20	11.25	12.35	13.51	14.70

"

9.26. Regarding the public admission fee, HAIL submitted to the Authority that these fees are charged to "meeters and greeters who require greater access in the terminal while picking up or dropping passengers." Regarding the revenues from public admission fees, HIAL submitted that up to Q3 FY 2015-16 the revenue is taken at actuals which is extrapolated for remaining 1 quarter of FY 2015-16, and is the basis of projections for the 2nd Control Period. Further, HIAL explained that the revenues from FY 2016-17 onwards are projected on the basis of international passenger growth rate as a major portion of this revenue stream comes from the meeters and greeters of international passengers. HIAL's revenues projections from Public Admission based on the above justification is as presented below,

"...

In Rs. Crores	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Public Admission Fees	9.74	10.81	11.92	13.07	14.30	15.56

HIAL Submission on Cargo Volume Growth Linked Revenue Stream

9.27. With respect to the cargo revenues, HIAL submitted to the Authority that Hyderabad Menzies Air Cargo Pvt Ltd ("HMACPL") has been concesssioned to operate a cargo terminal at RGIA. HIAL earns both revenue share and space rentals from HMACPL. HIAL further submitted that the cargo revenues up to Q3 FY 2015-16 is taken on actuals;

which is extrapolated for remaining 1 quarter of FY 2015-16, and considered as the basis of projections for the 2nd Control Period. An extract of HIAL's submission on cargo revenues has been reproduced below,

- "... **Revenue Share** GHIAL receives 18% revenue share on the gross revenues. HMACPL revenues are projected separately for cargo volume-linked income and demurrage income:
 - ✓ . Our submission on Cargo revenue shall undergo a change should there be any changes in Cargo rates in future and accordingly we reserve our right to change the tariff filing.
 - ✓ Cargo tonnage growth rates as per SH&E report have been applied to project revenues from domestic and international volume-linked revenue.
 - ✓ Demurrage income is expected to fall due to process improvement initiatives taken by the Customs Department. The Air Cargo Logistics Promotion Board (ACLPB) has been constituted to promote growth in air cargo by way of cost reduction, efficiency improvement and better inter-ministerial coordination with the objective of reducing dwell time of air cargo from 'aircraft to truck' to below 24 hours. Hence de-growth of 60% is projected on Demurrage income in FY17 after which demurrage revenue is considered flat from FY18-21 due to similar process improvements being undertaken by airlines.

"

Based on the above-mentioned rationale, HIAL has submitted the following revenues from cargo facilities,

"...

In Rs. Crores	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Revenue Share						
Tonnage-based	10.29	11.26	12.27	13.32	14.45	15.60
Demurrage	4.25	1.70	1.70	1.70	1.70	1.70
Total	14.54	12.96	13.97	15.02	16.15	17.30
In Rs. Crores	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Revenue Share						
Tonnage-based	10.29	11.26	12.27	13.32	14.45	15.60
Demurrage	4.25	1.70	1.70	1.70	1.70	1.70
Total	14.54	12.96	13.97	15.02	16.15	17.30

..."

HIAL Submission on Contractual Revenue Streams

- 9.28. HIAL submitted that rental income includes rent from airline offices, airline ticketing counters, ground handlers, government agencies, promotional counters, PTC, blue dart building, airline lounges, telecom, canteens, new office building and old site office, fuel station, common area maintenance (CAM) etc. HIAL explained that these revenues are contractual in nature and are therefore projected based on existing arrangements.
- **9.29.** HIAL further explained that rental income upto Q3 FY 2015-16 is taken on actuals and extrapolated for the remaining 1 quarter of FY 2015-16. This amount for FY 2015-16 forms the base for projections over the 2nd Control Period. HIAL also acknowledged that additional rentals of Rs. 3 crores are expected from FY 2017-18 onwards for the additional commercial area resulting from HIAL's terminal expansion.
- **9.30.** Based on the above, HIAL's projection of rental revenues is presented below,

Amounts in Rs. crores	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Rentals from existing	42.87	45.01	47.26	49.63	52.11	54.71
lessees						
Rentals/MAG from new	-	-	3.00	3.15	3.31	3.47
occupants						
In-flight kitchen	1.02	1.07	1.12	1.18	1.24	1.30
Total	43.89	46.08	51.39	53.96	56.65	59.49

"

9.31. The Authority also notes HIAL's submission with respect to a fixed rental from the cargo concessionaire operating at the airport. HIAL submitted that HMACPL (the cargo concessionaire) pays HIAL a fixed amount of Rs. 5.78 crores for each year. HIAL justified that it has not applied any growth rate on the rental as it is a contractual revenue stream. Based on the above, HIAL submitted its projections for the revenue stream as below,

"...

In Rs. Crores	FY	FY	FY	FY	FY	FY
	2016	2017	2018	2019	2020	2021
Fixed Rental	5.78	5.78	5.78	5.78	5.78	5.78

,,

9.32. Regarding the Minimum Guarantee Amount from Retail Concessionaires, HIAL submitted that if the contracted revenue share for a retailer falls below the contracted minimum guarantee amount, the concessionaire has to pay the minimum guarantee amount. HIAL further submitted that the base for concession fee and minimum guarantee payments up to Q3 FY 2015-16 is taken on actuals, extrapolated for the remaining one quarter of FY 2015-16; and is thereafter used as the basis of projections for the 2nd Control Period. HIAL also submitted that it does not envisage any further change in space allocation in the existing area. Based on these assumptions, revenue projections for Retail MAG submitted by HIAL are as follows,

"...

Amounts in Rs.	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
crores						
MAG from Retail	23.22	24.38	25.60	26.88	28.22	29.63
Concessionaires						

..."

9.33. With respect to revenues from license fee for airport lounges, HIAL submitted that from FY 2016-17, the license fee for the Premium Plaza lounge is escalated by 15% every 3 years. HIAL further submitted that this escalation is fixed in contractual terms of the agreement between HIAL and Premium Plaza. An extract of HIAL's MYTP containing the projections are reproduced below,

"...

In Rs. Crores	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Lićense Fee	2.08	2.39	2.39	2.39	2.75	2.75

9.34. The Authority notes HIAL's submission regarding the basis for projection of license fees from duty free. HIAL vide its MYTP submission explained that HDFRL pays rentals for storage and office areas occupied by HDFRL at the airport. HIAL added that from FY 2016-17 onwards, rental revenues are escalated by 5% p.a. based on contractual terms. An extract of the submission on the projection of revenues are as under,

"...

Amounts in Rs. Crores	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
License Fee from Duty Free	0.33	0.35	0.36	0.38	0.40	0.42

..."

9.35. HIAL submitted that in FY 2010-11, Weizmann paid HIAL a non-refundable premium of Rs. 13.74 crores. Regarding amortization of this premium, HIAL further explained that this amount is being amortized and recognized as revenue over a period of 7 years. HIAL also called this is a contractual revenue stream, the impact of which shall end in FY 2018-19. HIAL's projection in this regard is as given below,

"

In Rs. Crores	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Amortization of Non-	1.96	1.96	1.96	0.34	=	=
Refundable Premium						

..."

9.36. HIAL's submission regarding revenues from Other Revenue Streams (Miscellaneous Income) explains that this comprises revenues from airport entry passes (AEP), I.T., permits, airline security, filming and paid porters. HIAL submitted that revenues up to Q3 FY 2015-16 is taken on actuals and extrapolated for remaining 1 quarter of FY 2015-16. This amount for FY 2015-16 is the basis of the projections for the 2nd Control Period. HIAL stated that since Miscellaneous Income is not directly linked to any growth driver HIAL has projected this as a constant revenue stream. HIAL's projections in this regard has been reproduced below,

"...

In Rs. Crores	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Miscellaneous	8.97	8.97	8.97	8.97	8.97	8.97

..."

- **9.37.** Regarding the other adjustments to non-aero revenues, HIAL stated in its MYTP submission dated 25.03.2016 and revised submission dated 05.12.20156 that in line with the Authority's Order No. 38/2013-14, interest and dividend income have been excluded from tariff calculations. HIAL also stated that it has excluded revenues from non-airport land and non-airport activities for the purpose of tariff determination.
- **9.38.** HIAL further submitted with respect to the ATC rentals that these are being classified as aeronautical revenues and are hence not being included in their projections for rentals. Based on the above assumptions, the projections for rentals from ATC facilities is presented below,

"...

Amounts in Rs. crores	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Rentals from ATC	2.59	2.59	2.85	2.85	2.85	3.14
facilities						

..."

9.39. The Authority also notes HIAL's submission regarding incidental revenues in the form of rentals; which HIAL has adjusted against off against total operating expenses. HIAL has explained that it earns rentals from its office facilities leased to other entities. HIAL further explained that such space is rented out by HIAL pending its utilization for common airport activities due to airport expansion. HIAL has excluded this income from non-aeronautical revenues and netted them off against total operating expenses, in line with the Concept Note attached to their MYTP submission for the 2nd Control Period. Based on these assumptions, projections for the revenue stream is as under,

"...

Amounts in Rs. crores	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Incidental income	2.18	2.29	2.41	2.53	2.65	2.79
deducted from						
Common Operating						

Expenses			

..."

9.40. Based on the above components of non-aeronautical revenues, HAIL's submission concludes that the total projected non-aeronautical revenues for FY2016-17 to FY 2020-21 is as presented below,

"...

Amounts in Rs. crores	2017	2018	2019	2020	2021
Revenues from Unregulated Chgs	352.25	378.27	400.20	424.84	449.52

..."

9.41. The summary of non-aeronautical revenues thus requested by HIAL via the MYTP submission, for tariff determination for 2nd Control Period is as under:

Table 37: Projections for non-aeronautical revenue for the 2nd Control Period as per HIAL's MYTP submission dated 05.12.2016

Revenue From Other Sources (Rs. In crore)	2016	2017	2018	2019	2020	2021	Aggregate 2 nd CP
In-flight Kitchen							
Revenue Share	5.49	5.82	6.13	6.42	6.7	6.94	32.01
Lease Rentals	1.02	1.07	1.12	1.18	1.24	1.3	5.91
IFK Revenues	6.51	6.89	7.25	7.6	7.94	8.24	37.92
Ground Handling							
% additional growth over ATM growth rate	0%	0%	0%	0%	0%	0%	
Concession Fee	9.55	10.51	11.51	12.54	13.61	14.68	62.85
Revenue Share to GHIAL	0	20.06	22.14	24.29	26.55	28.85	121.89
Ground Power Unit	0.95	1.05	1.15	1.25	1.36	1.46	6.27
Ground Handling Revenue	10.5	31.62	34.8	38.08	41.52	44.99	191.01
Fuel Farm							
Fuel Farm Revenue	71.67	71.7	71.35	70.58	69.55	68.06	351.24
Cargo							
Cargo Revenue	10.29	11.26	12.27	13.32	14.45	15.6	66.9
Demurrage Revenue	4.25	1.7	1.7	1.7	1.7	1.7	8.5
Cargo - Concession Fee	14.54	12.96	13.97	15.02	16.15	17.3	75.4
% revenue share	0	0.18	0.18	0.18	0.18	0.18	0.9

Cargo - Rentals	5.78	5.78	5.78	5.78	5.78	5.78	28.9
Cargo Revenue	20.32	18.74	19.75	20.8	21.93	23.08	104.3
Duty Free Revenue Share (Rs. crores)	18.76	21.65	24.68	27.83	31.17	34.6	139.93
Duty free Rental (Rs. crores)	0.33	0.35	0.36	0.38	0.4	0.42	1.91
Duty Free	19.09	22	25.04	28.21	31.57	35.02	141.84
Retail MAG Income	23.22	24.38	25.6	26.88	28.22	29.63	134.71
Retail Revenue Share	2.93	3.25	3.59	3.94	4.31	4.68	19.77
Retail	26.15	27.63	29.19	30.82	32.53	34.31	154.48
Forex							
Revenue Share	9.2	10.2	11.25	12.35	13.51	14.7	62.01
Upfront Non-Refundable Premium	1.96	1.96	1.96	0.34	0	0	4.26
Forex services	11.16	12.16	13.21	12.69	13.51	14.7	66.27
Plaza Lounge							
License Fee	2.08	2.39	2.39	2.39	2.75	2.75	12.67
Revenue Share - Plaza & Airport Lodge	2.41	2.67	2.95	3.23	3.54	3.84	16.23
Plaza Lounge	4.49	5.06	5.34	5.62	6.29	6.59	28.9
Food & Beverage							
Food & Beverage	18.56	20.62	22.75	24.96	27.29	29.65	125.27
Rentals							
From Others	42.87	45.01	47.26	49.63	52.11	54.71	248.72
Rentals from additional space post-expansion	0	0	3	3.15	3.31	3.47	12.93
Rentals	42.87	45.01	50.26	52.78	55.42	58.18	261.65
Advertisement & Promotions							
Advertisement	26.85	29.82	32.91	36.11	39.47	42.89	181.2
Radio Taxi							
Radio Taxi	8.82	9.79	10.81	11.86	12.97	14.09	59.52
Car Parking charges							
Car Parking charges	28.26	31.38	34.63	37.99	41.54	45.13	190.67
Public Admission Fee							
Public Admission Fee	9.74	10.8	11.91	13.07	14.3	15.56	65.64
Miscellaneous Income							
Miscellaneous Income	8.97	8.97	8.97	8.97	8.97	8.97	44.85
Total non-aero revenues		352.25	378.27	400.2	424.84	449.52	2005.08

9.42. Subsequent to the MYTP submission dated 05.12.2016, HIAL submitted a revised tariff determination model via its response e-mail dated 28.01.2017. In the revised financial model projections were based on HIAL's audited financial results of FY 2015-16. Summary of non-aeronautical revenues submitted by HIAL for the tariff determination of the 2nd Control Period is as under,

Table 38: Projections for non-aeronautical revenue for the 2nd Control Period as per HIAL's revised tariff financial model dated 28.01.2017

Revenue From Other Sources	2016	2017	2018	2019	2020	2021	Aggregate 2 nd CP
In-flight Kitchen							
Revenue Share	6.23	6.61	6.97	7.29	7.61	7.88	36.36
Lease Rentals	1.01	1.06	1.11	1.17	1.23	1.29	5.86
IFK Revenues	7.24	7.67	8.08	8.46	8.84	9.17	42.22
Ground Handling							
% additional growth over ATM growth rate	0%	0%	0%	0%	0%	0%	
Concession Fee	9.02	9.93	10.87	11.84	12.85	13.86	59.35
CUTE, CUSS & BRS (IT charges)		56.19	62.02	68.04	74.38	80.82	341.45
% Revenue Share		0.36	0.36	0.36	0.36	0.36	1.8
Revenue Share to GHIAL	0	20.23	22.33	24.49	26.78	29.09	122.92
Ground Power Unit	1.06	1.17	1.28	1.39	1.51	1.63	6.98
Ground Handling Revenue	10.08	31.32	34.48	37.72	41.14	44.58	189.24
Fuel Farm							
Fuel Throughput	320865	320973	319424	315969	311343	304660	1572369
Throughput Royalty	0	21.51	21.4	21.17	20.86	20.41	105.35
Capital Cost Recovery	0	48.15	47.91	47.4	46.7	45.7	235.86
Fuel Farm Revenue	69.63	69.65	69.32	68.57	67.56	66.11	341.21
Cargo							
Cargo Revenue	58.89	64.44	70.22	76.23	82.65	89.28	382.82
Demurrage Revenue	28.26	11.3	11.3	11.3	11.3	11.3	56.5
Cargo Revenue	87.15	75.74	81.52	87.53	93.95	100.58	439.32
% revenue share	0	0.18	0.18	0.18	0.18	0.18	0.9
Cargo - Concession Fee	15.51	13.63	14.67	15.76	16.91	18.1	79.07
Cargo - Rentals	5.78	5.78	5.78	5.78	5.78	5.78	28.9
Cargo Revenue	21.29	19.41	20.45	21.54	22.69	23.88	107.97
Minimum Annual Guarantee (USD / Intl. Pax)	0	0.75	0.75	0.75	0.75	0.75	3.75

MAG (Rs. crores)	0	17.2	18.97	20.81	22.77	24.77	104.52
Sales per Pax (USD / Intl. Pax)	3.62	3.62	3.62	3.62	3.62	3.62	18.1
Duty Free Sales (USD mn)	11.24	12.43	13.71	15.03	16.45	17.9	75.52
Revenue Share (Rs. crores)	21.36	21.36	24.35	27.46	30.76	34.14	138.07
Rental (Rs. crores)	0.33	0.35	0.36	0.38	0.4	0.42	1.91
Duty Free	21.69	21.71	24.71	27.84	31.16	34.56	139.98
Retail MAG Income	18.25	19.16	20.12	21.13	22.18	23.29	105.88
Retail Revenue Share	8.91	9.89	10.92	11.98	13.1	14.23	60.12
Retail	27.16	29.06	31.04	33.11	35.28	37.52	166.01
Forex							
Revenue Share	8.34	9.25	10.2	11.19	12.24	13.32	56.2
Upfront Non-Refundable Premium	1.96	1.96	1.96	0.34	0	0	4.26
Common Area Maintenance	0.04	0.05	0.05	0.05	0.05	0.06	0.26
Forex services	10.34	11.26	12.21	11.58	12.29	13.37	60.71
Plaza Lounge							
License Fee	3.8	4.37	4.37	4.37	5.03	5.03	23.17
Escalation Year	2	3	4	5	6	7	25
Revenue Share - Plaza & Airport Lodge	1.57	1.74	1.92	2.11	2.31	2.51	10.59
Plaza Lounge	5.37	6.11	6.29	6.48	7.33	7.53	33.74
Food & Beverage							
Food & Beverage	19.59	21.75	24.01	26.34	28.8	31.29	132.19
Rentals							
From non-Airport land	4.7	4.94	5.18	5.44	5.71	6	27.27
From Others	42.07	44.17	46.38	48.7	51.14	53.69	244.08
Rentals from additional space post-expansion	0	0	3	3.15	3.31	3.47	12.93
Rentals	46.77	49.11	54.56	57.29	60.16	63.16	284.28
Advertisement & Promotions							
Revenue Share	25.42	28.23	31.16	34.18	37.37	40.6	171.54
Promotions	0.1	0.11	0.12	0.13	0.15	0.16	0.67
Advertisement	25.52	28.34	31.28	34.31	37.51	40.76	172.2
Radio Taxi							
Radio Taxi	7.55	8.38	9.25	10.15	11.1	12.06	50.94
Car Parking charges							
Car Parking charges	30.98	34.4	37.97	41.66	45.54	49.48	209.05
Public Admission Fee							

Public Admission Fee	9.74	10.8	11.91	13.07	14.3	15.56	65.64
Miscellaneous Income							
Miscellaneous Income	9.11	9.11	9.11	9.11	9.11	9.11	45.55
CGF	101	120.39	124.24	127.83	131.39	134.58	638.43
Total (excluding CGF)	221.06	237.71	260.45	279.41	301.42	323.58	1402.57
Total	322.06	358.09	384.69	407.23	432.81	458.16	2040.98
Less: Rentals from non- airport land	4.7	4.94	5.18	5.44	5.71	6.00	27.27
Revenue other than regulated charges	317.36	353.15	379.51	401.79	427.1	452.16	2013.71

b Authority's Examination of HIAL Submissions on Non-Aeronautical Revenue

- **9.43.** The Authority takes note of HIAL's submission regarding the adoption of 30% shared till by virtue of which only 30% of non-aeronautical revenues will be used to cross-subsidise aeronautical charges. The Authority proposes to accept HIAL's submission in this regard as discussed in para 5.35 above.
- 9.44. The Authority has noted from the above submissions that the differences in the projections for non-aeronautical revenues between the two MYTP submissions and the financial model are on account of the tariff determination model being updated with the audited financial results of FY 2015-16. This update has resulted in a change in base revenues (FY 2015-16) which are used for projections over the 2nd Control Period. Accordingly, the Authority proposes to evaluate HIAL's submissions considering this revised base of FY 2015-16.
- 9.45. Contrary to the Authority's decision in Order No. 38/2013-14; the Authority is in receipt of an auditor's certificate from HIAL dated 25.03.2016 stating that in HIAL's MYTP submissions cargo, ground handling and fuel farm assets have been treated as non-aeronautical assets and revenues from these assets as non-aeronautical revenue. The Authority proposes to maintain its stance and consider revenues from services of cargo, ground handling and fuel farm assets as aeronautical revenue in the hands of the Airport Operator, irrespective of whether these services are provided by the Airport Operator itself or concessioned out to third parties. The Authority's stand has been further elucidated in paras 5.62 above and 5.63 above. Accordingly, these charges are to

be determined by the Authority under Section 13(1)(a) of the AERA Act as part of the 'Revenue from Regulated Charges'.

- 9.46. Further, as noted by the Authority in para 5.65 above, HIAL in its concept note on allocation methodology submitted as Annexure 3 to HIAL's MYTP submissions dated 25.03.2016 and 05.12.2016 respectively had included vehicle fuelling services in the list of non-aeronautical services. In addition, HIAL, in response to a query dated 16.01.2017 had submitted on 14.02.2017 that the vehicle fuelling services had been concessioned to BPCL and also provided an auditor certificate for the revenues earned by HIAL from BPCL. Based on the rationale discussed by the Authority in para 5.65 above, the Authority proposes to include these as aeronautical revenues within the regulatory purview for tariff determination purposes.
- 9.47. The Authority also notes that HIAL proposes to discontinue Common Infrastructure Charges ("CIC") and merge the same with UDF. The Authority also notes that HIAL intends to separate CUTE, CUSS and BRS IT services from CIC and treat the same as non-aeronautical revenues. The Authority is of the view that while HIAL may separate the three abovementioned charges, treating them as non-aeronautical revenues would not be appropriate (Ref. para 9.13 above). Accordingly, the Authority proposes to consider revenues from CUTE, CUSS and BRS IT services as aeronautical.
- increase in its MYTP submissions while projecting non-aeronautical revenues. However, the Authority proposes to consider inflation (change in WPI) in the projections over and above the increase in real terms projected by HIAL. A WPI of 3.9% has been proposed by the Authority based on the Results of Round 44 of Survey of Professional Forecasters on Macroeconomic Indicators conducted by the RBI (Ref para 11.6). However, such a treatment has not been applied on contractual non-aero revenue streams which have already been projected by HIAL on a nominal basis.
- **9.49.** The Authority also is of the view that many projects such as terminal expansion etc. will be taken up during the 2nd Control Period, which has led to higher uncertainties in projecting non-aeronautical revenues. Hence, the Authority proposes to true-up the non-aeronautical revenues based on actual financial results of HIAL.

9.50. The Authority's examination of the HIAL's submission for non-aeronautical revenues for the 2nd Control Period has been presented below.

Passenger traffic growth linked revenue streams

In-Flight Kitchen ("IFK") Revenue

- 9.51. The Authority understands that airport operators may earn additional revenue from the airlines on account of inflight kitchen services. However, the Authority noted from HIAL's submission that no such revenue has been reported by HIAL and hence a clarification was sought on the same, vide query dated 02.03.2017. In its response dated 05.04.2017, HIAL submitted that apart from the revenues earned from the two concessionaires, it does not recover any additional revenue from airlines through IFK.
- 9.52. The Authority noted HIAL's rationale for projecting revenue share from inflight catering services at 5% below the domestic passenger traffic growth. However, the Authority proposes to project the revenue share from in-flight kitchen services based on the growth rate of domestic passenger traffic along with inflation. Further, in case HIAL is not able to generate the projected revenues, the Authority proposes to true-up the cross subsidy on account of IFK at the time of tariff determination of the 3rd Control Period.

Retail concession fee

- **9.53.** The Authority notes from HIAL's submission that the retail concession fee earned in the form of a fixed percentage share of revenues of the retail concessionaires operating at the Airport. As retail performance may be linked to passenger traffic, HIAL has projected retail concession fee for the 2nd Control Period based on growth rate of passenger traffic and the growth in spending per passenger (which however is projected to be 0% by HIAL for 2nd Control Period).
- **9.54.** The Authority proposes to accept the approach submitted by HIAL with the exception that spending per passenger (which is projected to be 0% by HIAL for 2nd Control Period) shall change at the projected inflation rate of 3.9% p.a.

Revenue from lounge share

- 9.55. The Authority notes that HIAL has projected revenue share from the plaza lounge and airport lodge at total passenger traffic growth rate. The Authority further notes HIAL's rationale explaining that a higher growth rate cannot be used for projections as RGIA is primarily an O&D airport with very few transit passengers; while the lounge attracts passengers with "long stopovers, late flights, travelling professionals and business travellers". Further the Authority notes HIAL's submission that there is increased competition from boutique hotels coming up around the airport area.
- **9.56.** The Authority has proposed to accept the total passenger traffic as the growth driver for the revenue share from the plaza lounge and airport lodge, yet, proposes to add an inflationary increase to project the revenue share per passenger earned by HIAL for the 2nd Control Period.

F&B revenues

- 9.57. The Authority notes that HIAL has entered into several concession agreements in order to facilitate the establishment, development, operations, maintenance and management of outlets serving food and beverages for the comfort and benefit of passengers. The Authority notes HIAL's rationale for projecting lower growth in F&B revenues which includes increasing competition within the terminal leading to pricing adjustments; and that RGIA is primarily an O&D airport with less transit passenger traffic and hence, the average passenger stopover times at the terminal are low compared to other airports with such traffic. HIAL has accordingly projected F&B revenues to grow in line with the growth in passengers. HIAL (implicitly) expects spending per passenger to remain unchanged over the 2nd Control Period.
- **9.58.** The Authority accepts HIAL's submission of linking F&B revenues to passenger traffic. However, the Authority proposes to add an inflationary increase to F&B revenues in addition to the increase due to passenger traffic for projecting F&B revenues for the 2nd Control Period.

Radio taxi revenue share

9.59. The Authority notes HIAL's submission regarding the revenue share from radio taxi. The revenue share to HIAL has been projected to increase at the growth rate of total passenger traffic. The Authority further notes HIAL's justification that no additional growth rate has been considered due to increasing competition from other

prominent radio taxi operators such as Uber, Ola, among others, who operate from outside the Airport and have not entered into any revenue sharing agreements with HIAL. The Authority proposes to accept HIAL's submission of linking radio taxi revenues to passenger traffic. However, the Authority proposes to add an inflationary increase in addition to the increase due to passenger traffic.

Car parking revenues

- **9.60.** The Authority notes from HIAL's submission that the car park at RGIA is operated by Tenaga Parking as a Management Services Agreement. Car parking revenue share to HIAL has been projected to increase based on passenger traffic and the growth in spending per passenger (which is expected to remain unchanged over the 2nd Control Period).
- **9.61.** The Authority proposes to accept HIAL's submission of linking car parking revenues to passenger traffic but also proposes to consider an inflationary increase over the projections submitted by HIAL for tariff determination for 2nd Control Period.

Advertising revenue share

- 9.62. The Authority notes from HAIL's submission that HIAL has concessioned out rights to the advertising space at RGIA to Laqshya Hyderabad Airport Media Pvt Ltd ("LHAMPL"). LHAMPL provides advertising space within the terminal and outside the terminal in the airport area. As per HIAL, advertisement revenue is generally linked with passenger traffic growth as advertisement business depends on eye contacts within and outside terminal from where the passengers are passing through. Thus, HIAL has considered the revenues in FY 2015-16 as the base and projected the revenues at the passenger growth rate for each year of the 2nd Control Period.
- **9.63.** The Authority accepts HIAL's basis of projection regarding advertisement revenue share. However, the Authority additionally proposes to consider an inflationary increase over and above the projections submitted by HIAL for the 2nd Control Period.

International passenger traffic growth linked revenue streams

Duty Free revenue share

9.64. The Authority notes that HIAL has concessioned out the Duty Free operations to Hyderabad Duty Free Retail Ltd. ("HDFRL"). HDFRL is engaged in setting up,

developing, operating, maintaining and managing the duty free outlet at RGIA. The Authority further notes that HIAL has projected the duty free concession fee in line with the growth rate of international passenger traffic.

9.65. The Authority accepts HIAL's submission of linking Duty Free revenues to international passenger traffic for projecting revenues over the 2nd Control Period. However, the Authority proposes to consider an inflationary increase over and above the projections submitted by HIAL for the 2nd Control Period.

Forex services revenue share

- **9.66.** The Authority notes HIAL's submissions that Forex services at RGIA are concessioned out to Weizmann. The Authority also notes that the revenue streams from forex services have been projected from FY 2016-17 to FY 2020-21 at the growth rate of international passenger traffic since international passengers require this service.
- **9.67.** The Authority accepts HIAL's submission of linking forex service revenues to international passenger traffic. The Authority accordingly proposes to consider the projections submitted by HIAL for tariff determination for the 2nd Control Period.
- **9.68.** The Authority is also of the view that depreciation and appreciation of exchange rates take into account inflation in the economy. Thus, revenue share from forex services would not require an inflationary adjustment over and above the international passenger growth rate.

Public Admission fees

- 9.69. The Authority notes from HIAL's submission that public admission fee from FY 2016-17 have been projected based on the growth rate of international passenger traffic. As per HIAL's MYTP submissions dated 25.03.2016 and 05.12.2016, a major portion of this revenue stream comes from meeters and greeters of international passengers.
- **9.70.** The Authority accepts HIAL's submission of linking revenues from public admission fees to international passenger traffic, however, the Authority proposes to consider an inflationary increase over and above the projections submitted by HIAL for the 2nd Control Period.

Contractual revenue streams

Rental Income

- 9.71. The Authority notes the constituents of HIAL's rental revenues and that HIAL has projected the rental revenue streams based on contracts and existing arrangements. The Authority understands that these revenues are already projected on nominal basis and would not require a separate inflationary adjustment.
- 9.72. The Authority notes from HIAL's submission that rental income is the combination of rental income from non-Airport land, from others and rentals from additional space post-expansion. Rental revenues are contractual in nature and are projected based on existing arrangements. HIAL has projected it by assuming an annual escalation in rentals of 5%. The Authority further notes that an additional rental of Rs. 3 crores is expected from FY 2017-18 onwards from additional commercial area due to the proposed expansion.
- 9.73. The Authority accepts HIAL's submission of escalating the rentals by 5% and proposes to consider the projections towards tariff determination for the 2nd Control Period. The Authority is of the view that once the terminal expansion is completed, the Authority will consider the level of actual non-aeronautical revenue and will true it up in the review period.

Fixed Rental from Cargo Concessionaire

9.74. The Authority notes HIAL's submission that HIAL received a fixed rental of Rs.
5.78 crores p.a. from HMACPL. HIAL has submitted that this revenue stream is contractual, and hence the Authority proposes to accept HIAL's projection in this regard.

Retail MAG revenue:

9.75. The Authority notes that in order to calculate retail minimum annual guarantee ("MAG") revenues, HIAL has considered that if the contracted revenue share for a retailer falls below the contracted MAG amount, the concessionaire has to pay the MAG amount. The Authority further notes that HIAL has considered an annual escalation of 5% p.a. in MAG from the base year revenues in FY 2015-16. The Authority proposes to accept HIAL's projections and to consider the same towards determination of aeronautical tariffs for the RGIA for the 2nd Control Period.

Premium Plaza License Fee

9.76. The Authority notes from HIAL's submission that the license fee has been escalated by 15% every 3 years (fixed in the contractual terms of the agreement between HIAL and Premium Plaza). The Authority accepts HIAL's submission and proposes to consider HIAL's projections on the same towards tariff determination for the 2nd Control Period.

License Fee from Duty Free

9.77. The Authority notes HIAL's submission that HDFRL pays rentals for storage and office areas occupied by HDFRL at the Airport. HIAL has projected rental revenues from the same to escalate by 5% on an annual basis, based on contractual terms. The Authority accepts HIAL's submission and proposes to consider the projections towards tariff determination for the 2nd Control Period.

Lease Rentals from In-flight kitchen

9.78. The Authority notes from HIAL's submission that lease rentals from In-flight kitchen are contractually escalated by 5% throughout the 2nd Control Period. The Authority accepts HIAL's submission and proposes to consider HIAL's projections for the same towards tariff determination for the 2nd Control Period.

Amortization of Non-Refundable Premium from Forex Services

9.79. The Authority notes HIAL's submission that in FY 2010-11, Weizmann paid HIAL a non-refundable premium of Rs. 13.74 crores. This amount is being amortized over a period of 7 years and recognized as revenue. The Authority also notes that while HIAL's MYTP submission dated 05.12.2016 mentions that the revenue impact will end in FY 2017-18, HIAL's amortization table shows that an amount of Rs. 0.34 crores would continue till FY 2018-19. The Authority proposes to consider HIAL's amortization table towards tariff determination for the 2nd Control Period.

Miscellaneous income

9.80. The Authority notes from HIAL's submission that as miscellaneous income is not directly linked to any growth driver, it is considered as a constant revenue stream for the 2nd Control Period. The Authority proposes to accept HIAL's submission on the above.

Other adjustments to Non-aero revenues

9.81. It was also observed by the Authority that in HIAL's MYTP submissions dated 25.03.2016 and 05.12.2016 other adjustments to non-aeronautical revenues, including the interest and dividend income from HIAL's subsidiaries, had not been considered in the estimation of revenues from regulated charges and revenues from other than regulated charges. In this context, vide its clarification dated 26.12.2016, the Authority had sought auditor certificates for the overall income received by HIAL from its subsidiaries. According to the response received from HIAL dated 28.01.2017, the Authority notes that HIAL received dividend income from two of its subsidiaries – Hyderabad Duty Free Retail Limited, from whom it has earned Rs. 2.543 crore in FY 2015-16, and Hyderabad Menzies Air Cargo Pvt. Ltd, from whom it has earned Rs. 1.043 crore in FY 2011-12, Rs. 5.985 crore in FY 2012-13, Rs. 4.164 crore in FY 2013-14, Rs. 5.204 crore in FY 2014-15 and Rs. 6.401 crore in FY 2015-16. Further, the Authority noted that HIAL received the following interest incomes from these two subsidiaries:

Name of the subsidiary (in Rs. crore)	FY 2011- 12	FY 2012- 13	FY 2013- 14	FY 2014- 15	FY 2015- 16
Hyderabad Duty Free Retail Ltd	0.696	1.833	0.960	0.077	0.094
Hyderabad Menzies Air Cargo Pvt. Ltd	=	0.002	=	0.006	0.024

- 9.82. Given that the Authority has considered cargo as an aeronautical activity and the corresponding revenues from the cargo subsidiary have been considered as aeronautical revenues as proposed in para 9.43, the Authority proposes to reject HIAL's treatment and instead include the dividend and interest incomes received from Hyderabad Menzies Air Cargo Pvt. Ltd. as part of the aeronautical revenue under its regulatory purview. Similarly, as per the Authority's proposal in para 9.48.8, revenues from duty free services have been treated as non-aeronautical income and accordingly, the Authority proposes to include the dividend and interest incomes received from Hyderabad Duty Free Retail Ltd as non-aeronautical income.
- **9.83.** Further, the Authority observed that the interest income from subsidiaries did not reconcile with the interest income stated by HIAL in its revised tariff financial model dated 28.01.2017 for the period FY 2008-09 to FY 2015-16. In this context, the Authority, vide clarification dated 17.03.2017, sought from HIAL auditor certificates providing the break-up of the certified interest income into interest received from its subsidiaries, interest income received from other entities, other income received from

its subsidiaries (which are clubbed with interest in the certificate) and any other income from other entities (which is clubbed with interest in the certificate).

9.84. Through its reply dated 22.05.2017, HIAL provided the following break-up of other income certified by its auditor:

"...

Particulars	FY							
	2008-	2009-	2010-	2011-	2012-	2013-	2014-	2015-
	09	10	11	12	13	14	15	16
Interest Income:								
(a) On Bank deposits	2.57	0.61	0.40	0.72	0.50	0.55	2.43	1.60
(b) Others	3.03	3.09	10.24	3.98	4.97	15.43	7.91	7.73
(c) Delay payments	-	-	0.00	10:09	5.36	8.14	1.62	0.82
Profit on sale of current	1.74	2.83	3.43	3.67	6.99	6.37	6.14	7.14
investments								
Provisions no longer	0.76	1.38	1.46	1.15	4.89	4.81	0.75	1.43
required, written back								
Income from sale of SFIS	-	_	1.00	1.33	3.26	-	-	-
scrips								
Reversal of loss on	-	3.23	-	-	-	-	-	-
revaluation of inventory								
Gain on exchange	0.93	-	0.03	0.05	0.27	0.31	0.23	0.20
fluctuation								
Profit on sale /		0.06	-	-	-	0.00	0.04	0.10
discarding of assets								
Other Non-operating	0.19	1.39	3.58	3.60	3.44	3.63	1.79	2.12
income								
Total	9.22	12.60	20.14	24.58	29.70	39.24	20.91	21.13

..."

- 9.85. Based on HIAL's submission, the Authority takes note of the interest and other incomes that HIAL has considered as being outside the regulatory purview. The Authority is of the view that it would not want to interfere in managing HIAL's day-to-day operations and accordingly proposes to allow HIAL's treatment of considering interest income, profit on sale of current investments, write back of provisions no longer required, profit on sale of discarding assets, and other non-operating income outside the Authority's purview.
- **9.86.** Further, the Authority notes that HIAL has earned income from FY 2010-11 to FY 2012-13 through the sale of scrips under the Served From India Scheme (SFIS). The Authority further notes that the SFIS allows all Indian service providers, who have

earned free foreign exchange of at least Rs. 10 lakh in the preceding / current financial year, to earn duty credit scrips equivalent to 10% of free foreign exchange earned during the year. The Authority observed that HIAL would have earned such foreign income through airport operations based on which it was eligible for earning duty credit scrips that was sold eventually. Subsequently, the Authority vide its query email dated 13.06.2017, sought a clarification in the form of an auditor certificate from HIAL regarding the different airport operations that led to the generation of such foreign income. In its response dated 13.07.2017, HIAL submitted that "Under the Foreign Trade Policy 2009-14, GHIAL was eligible for SFIS scrips till December '10 only. Accordingly, GHIAL applied for and received SFIS scrips for Deemed Foreign Exchange Earnings till December 2010 only. As allowed under the Scheme, calculation of SFIS Scripts had been done based on deemed foreign exchange earnings and not on the actual foreign exchange earnings... GHIAL partially utilized and/or sold the available SFIS scrips in line with the provisions of the aforementioned policy. Out of total SFIS of Rs. 26.56 crores GHIAL utilised and/or sold Rs. 16.73 crores SFIS and balance have lapsed and cannot be utilized or sold any longer. GHIAL is not eligible under the SFIS policy for the subsequent periods after December 2010."

- 9.87. Based on the above, the Authority is of the opinion that this income from sale of SFIS scrips cannot be categorised as "Income outside the Regulatory Purview" as considered by HIAL in its MYTP submissions and in the revised tariff financial model submitted on 28.01.2017. The Authority proposes to allocate the realized income from SFIS scrips between aeronautical and non-aeronautical based on the allocation of income that resulted in earning these SFIS scrips.
- 9.88. The Authority also observed that HIAL has treated income arising out of reversal of loss on revaluation of inventory as income outside the regulatory purview. The Authority would like to point out that in the 1st Control Period, the loss due to revaluation of inventory was treated as an aeronautical expense and included in the determination of tariff. In such a situation, the Authority does not see a valid reason for keeping the income from reversal of this loss outside its purview in the 2nd Control Period. Accordingly, the Authority proposes to treat the income as aeronautical to be considered in the tariff determination for HIAL.

- 9.89. In the context of gains on exchange fluctuation, the Authority notes that while HIAL has requested for capitalisation of forex losses to be considered in the estimation of RAB, as per its MYTP submission dated 25.03.2016 and revised submission dated 05.12.2016, the gains on exchange fluctuation have been considered outside the regulatory purview. The Authority, however, based on its rationale provided in para 7.41.9, proposes to consider these gains as part of tariff determination and allow HIAL to recover forex losses to the extent that the effective cost of borrowing in foreign currency net of forex gains, is not higher than the cost of RTLs.
- **9.90.** Further, the Authority noted HIAL's submission of excluding revenues from non-airport land and non-airport activities for the purpose of tariff determination. The Authority agrees with HIAL's submission and accordingly proposes to allow the exclusion of such revenues for the purposes of tariff determination.
- **9.91.** In the context of rentals from ATC facilities, the Authority observed that these rentals had not been added to the other non-aeronautical rentals and instead classified as an aeronautical revenue stream, as per HIAL'S MYTP submission. The Authority accepts the treatment of ATC rentals being classified as an aeronautical income and proposes to include the rentals from ATC facilities within 'Revenues from regulated charges.'
- 9.92. Further, the Authority notes from the tariff determination model as submitted by HIAL on 28.01.2017 that the incidental revenue from project site office (PSO) and new office building (NOB) is being netted off from the operating expenditure. However, the Authority proposes to modify this treatment and allocate revenues between aeronautical and non-aeronautical categories in the allocation ratio of the gross block of these assets. Accordingly, the Authority proposes to consider the aeronautical portion of the rental revenues from PSO and NOB as part of the 'Revenue from regulated charges' and the non-aeronautical portion to be included in the 'Revenue from source other than regulated charges'.
- 9.93. The Authority also notes that HIAL has earned a rental of Rs. 0.84 crore from the employee township in FY 2015-16. As per HIAL's financial model, this has been netted off against aeronautical operating expenses. The Authority proposes to treat this as a revenue item instead of netting it with operating expenses. Also, the Authority

proposes to allocate this expenditure between aeronautical and non-aeronautical in the ratio of gross block of Employee Township.

- **9.94.** The Authority noted that HIAL has netted off the concession fee paid to the Government of India from the non-aeronautical revenues before computing the 30% cross-subsidy from non-aeronautical operations. The Authority understands that in a 30% shared till mechanism the entire non-aeronautical revenue needs to be considered for cross-subsidy. Hence, the Authority proposes not to net-off the concession fee while computing the amount of cross subsidy.
- **9.95.** Based on the above examination, the non-aeronautical revenues for the 2nd Control Period to be considered by the Authority are as below:

Table 39: Non-aeronautical revenues considered by the Authority for the 2nd Control Period

Revenue From Other Sources (in Rs. Crores)	2017	2018	2019	2020	2021	Aggregate 2nd CP
Ir	-flight Ki	tchen				
Revenue Share	8.23	9.60	11.20	13.07	15.24	57.34
Lease Rentals	1.06	1.11	1.17	1.23	1.29	5.86
IFK Revenues	9.29	10.71	12.37	14.29	16.53	63.20
Minimum Annual Guarantee (USD / Intl. Pax)	0.75	0.75	0.75	0.75	0.75	3.75
MAG (Rs. crores)	16.88	18.26	20.05	22.03	24.19	101.41
Sales per Pax (USD / Intl. Pax)	3.76	3.91	4.06	4.22	4.38	20.32
Duty Free Sales (USD mn)	12.67	14.24	16.25	18.55	21.16	82.87
Revenue Share (Rs. crores)	21.93	25.60	30.30	35.66	41.78	155.27
Rental (Rs. crores)	0.35	0.36	0.38	0.40	0.42	1.91
Duty free Revenue	22.27	25.96	30.68	36.06	42.20	157.18
	Forex	ζ				
Revenue Share	8.90	9.63	10.57	11.61	12.76	53.47
Upfront Non-Refundable Premium	1.96	1.96	0.34	0.00	0.00	4.27
Common Area Maintenance	0.04	0.05	0.05	0.05	0.05	0.24
Forex services Revenue	10.91	11.64	10.96	11.66	12.81	57.98
License Fee	4.37	4.37	4.37	5.03	5.03	23.16

Escalation year	3.00	4.00	5.00	6.00	7.00					
Revenue Share - Plaza & Airport Lodge	1.97	2.28	2.65	3.08	3.57	13.55				
Plaza Lounge Revenue	6.34	6.65	7.02	8.10	8.60	36.71				
	Retail Inc	ome								
Retail MAG Income	19.16	20.12	21.13	22.18	23.29	105.88				
Retail Revenue Share	11.19	12.95	15.04	17.46	20.28	76.92				
Retail Revenue	30.35	33.07	36.16	39.64	43.57	182.80				
Food & Beverage										
Food & Beverage Revenue	24.60	28.48	33.06	38.39	44.58	169.12				
Rentals										
From non-Airport land	0.00	0.00	0.00	0.00	0.00	0.00				
From Others	44.95	47.20	52.71	58.65	65.06	268.57				
Rentals from additional space post-expansion	0.00	3.00	3.15	3.31	3.47	12.93				
Revenue from Rentals	44.95	50.20	55.86	61.96	68.53	281.50				
Advertisement & Promotions										
Revenue Share	31.93	36.95	42.90	49.82	57.85	219.45				
Promotions	0.13	0.15	0.17	0.20	0.23	0.86				
Advertisement Revenue	32.05	37.10	43.07	50.01	58.07	220.31				
	Radio T	axi								
Radio Taxi	9.48	10.98	12.74	14.80	17.18	65.18				
Car	Parking (charges								
Car Parking charges	38.91	45.03	52.29	60.71	70.50	267.44				
Pub	lic Admis	sion Fee								
Public Admission Fee	10.80	12.14	13.85	15.81	18.04	70.65				
Misc	ellaneou	s Income								
Miscellaneous Income	9.11	9.11	9.11	9.11	9.11	45.55				
Inc	idental I	ncome								
Non-Revenue from NOB	1.47	1.54	1.62	1.70	1.79	8.12				
Revenue from project site	1.54	1.62	1.70	1.79	1.88	8.53				
Interest & Dividend from Duty FreeSubsidiary	2.64	2.64	2.64	2.64	2.64	13.19				
Employee Township	0.22	0.23	0.24	0.26	0.27	1.22				
Total Non-aeronautical Revenue	254.95	287.10	323.39	366.94	416.30	1648.67				

Proposal No. 8. Regarding non-aeronautical revenue

8.a. Based on the material before it and its analysis, the Authority proposes:

- i. To consider non-aeronautical revenues as per Authority's assumptions as summarized in Table 39.
- ii. To true-up the non-aeronautical revenue for HIAL for the 2nd Control Period during the review period.
- iii. To consider revenues from cargo, ground handling, fuel farm and vehicle fueling services as aeronautical to be included in the 'Revenue from regulated charges'.
- iv. To consider inflation in the projections over and above the increase in real terms (except for the contract-driven non-aeronautical revenues, the revenue from forex services, and miscellaneous revenues). The WPI of 3.9% will be considered by the Authority for calculations (as per latest RBI forecasts) for applicable non-aeronautical revenue streams.
- v. To consider incidental income from renting out of new office building and project site office building as non-aeronautical revenue.

10. Traffic Forecast

a HIAL submission on traffic forecast

10.1. As per its initial MYTP submission dated 25.03.2016 and revised submission dated 05.12.2016, HIAL stated that it has assumed the traffic growth rate for the 2nd Control Period based on an ICF (SH&E) study concluded in January 2015. The relevant extracts from the MYTP submission have been reproduced below,

"A traffic growth rates for FY 2016 has been considered as per the actual growth rate for YTD 31st December 2015, extrapolated for the remaining 1Q of FY16. For subsequent years of Control Period 2 i.e FY 2017 – FY 2021, we have taken the base case projections from the ICF (SH&E) study concluded in January 2015 (Attached as Annexure 10). We have considered the actual traffic of 3 quarters of FY 2016 and prorated the numbers to arrive at the base for our projections, and have applied ATM and PAX traffic growth rates from the ICF study for the period from FY 2017 to FY 2021."

10.2. However, on 28.01.2017, HIAL submitted a revised tariff financial model with the actual traffic, ATMs and cargo volumes for FY 2015-16. Accordingly, these actual traffic numbers have been used as the base upon which growth rates estimated in the ICF (SH&E) study have been applied to make projections for the 2nd Control Period. The projections made by HIAL have been provided below:

"...

Passenger Traffic	2017	2018	2019	2020	2021					
Domestic										
Base Case Growth (%)	11.10%	10.40%	9.70%	9.30%	8.60%					
Passengers (MPPA)	10.44	11.53	12.64	13.82	15.01					
International										
Base Case Growth (%)	10.90%	10.30%	9.70%	9.40%	8.80%					
Passengers (MPPA)	3.43	3.79	4.16	4.55	4.95					

Air Traffic Movements	2017	2018	2019	2020	2021
Domestic					
Base Case Growth (%)	9.90%	9.40%	8.80%	8.40%	7.70%
ATMs ('000s)	97.3	106.4	115.8	125.6	135.2
International					

Base Case Growth (%)	10.70%	10.10%	9.50%	9.20%	8.60%
ATMs ('000s)	19.6	21.6	23.7	25.8	28.1

Cargo Traffic	2017	2018	2019	2020	2021
Overall Volume Growth	9.40%	9.00%	8.60%	8.40%	8.00%
(%)					
Overall throughput (in	124	135	146	159	171
'000 metric tonnes)					

..."

- 10.3. Regarding the detailed approach and methodology followed for traffic forecast, the Authority notes HIAL's submission of the Traffic Study conducted by ICF. The study has projected independent traffic forecasts for the Hyderabad Airport for the period 2015-2038, which have been conducted based on multiple approaches explained below,
 - 10.3.1 The short-term forecasts were based on immediate trends in traffic drivers identified, such as known fleet and network plans of the airlines serving the airport, regional development expectations, the current global economic environment and ICF's expectations of future recovery. Further, ICF undertook an analysis on how air traffic markets recover from shocks (economic or otherwise). This analysis was used to estimate the extent of short-term passenger declines and the length, timing, and magnitude of the anticipated recovery.
 - 10.3.2 Further, the ICF study makes long-term forecasts using econometric analysis of the historical relationship between domestic and international passengers at Hyderabad and the country's GDP. The study revealed the existence of a strong correlation between these variables, with an R² of 0.83 for domestic and 0.95 for international traffic when measured during the period from 2004 to 2014. However, the study also mentions that an econometric approach is useful for quantifying the importance of the underlying econometric factors influencing aviation demand, however it has its own limitations. As per the study, the limitations of the approach include "the lack of historical data, inability to quantify all of the factors influencing air traffic levels and the unavailability of objective forecasts for certain explanatory factors." Also, the study acknowledges that an econometric relationship between historical passenger volumes and

- various explanatory factors cannot remain constant over the forecast period. For instance, often in the case of rapidly growing air travel markets, income elasticities reduce over time.
- 10.3.3 In addition, ICF has also applied a judgmental approach to modify the output of the econometric models. According to the study, the use of judgment becomes important when the forecast is to be made over a long duration and a constant elasticity model, which is solely calibrated to historical data, is likely to overestimate the level of traffic growth in the future. Hence, ICF in the study has tapered the elasticity values estimated by regression analysis to values representing a mature market as the 30-year forecast period progresses. The study, based on observations at numerous markets across the world, assumes that both domestic and international multipliers will trend towards mature levels in the 2020s.
- 10.3.4 Finally, ICF has stated that it has once again used an econometric approach to make the cargo forecasts, similar to that for passengers, after establishing a strong correlation between Indian GDP and the total and segment cargo volumes. Additionally, the study also made use of the latest available data from HIAL, as well as guidance from HIAL's management regarding the near term and medium term outlook.
- **10.4.** An extract from the IFC (SH&E) Traffic Study regarding the results of passengers, cargo and ATM forecast as submitted by HIAL is presented below,

"Passenger Forecasts

ICF Base Case forecasts for Hyderabad airport reach 43m total passengers by 2038, a CAGR of 6.9% from 2014...

... The bulk of the volume growth is driven by domestic passengers, reflecting the substantial future scope for the Indian market to develop further. International traffic is forecast to grow at a rate which maintains a nearly constant 28% share of the total market. It is expected that the international market will grow below the rate of growth seen in the domestic market over the short-term as Indian's propensity to fly

gradually reaches a level more commonplace in a country of India's size and GDP...

... ATM Forecasts

The air traffic movement forecasts are closely linked to the passenger forecasts and reflect expected trends in average aircraft sizes and load factors, both of which are trending upwards globally, and have also been observed at Hyderabad.

Average passengers per ATM are forecast to gradually increase from 95 to 119 on domestic services by 2038. This is a weighted average based on the future mix of regional jets and narrow bodies likely to serve the future markets and an achievable load factor.

Freighter ATMs are forecast to remain a small minority of movements at Hyderabad, with the bulk of cargo tonnage continuing to be carried in the belly hold of passenger aircraft. The share of total movements is forecast to remain around 1.5%, although this still results in an almost four-fold increase from 1,300 a year in 2014 to 4,400 by the end of the forecast period, equivalent to 12 dedicated freighter movements a day...

... By 2038, it is expected that Hyderabad will handle over 300,000 movements a year, over three-times the volumes seen in 2014. ...

... Cargo Forecasts

Hyderabad is well situated to develop its cargo business and the forecasts reflect the significant potential for growth, reaching 400k tonnes by 2038, from its current level of 90,000 tonnes. This is equivalent to a CAGR 6.4%, which comprises 5.6% on domestic and 6.9% on international volume growth. ...

... ICF have compared these forecasts with actual cargo traffic at some major airports around the world. By 2026, Hyderabad will handle approximately 240k tonnes, well over double today's volumes. This is higher than present day Bangalore. Volumes will then further increase by 2036, reaching approximately 400k tonnes comparable to present day."

10.5. The Authority further notes that HIAL has also submitted the sensitivity analysis for capturing the uncertainties inherent in any forecast studies which may result in a lower than or higher than projected rate of traffic growth. Accordingly, HIAL has also submitted as part of the study the low and high case passenger traffic forecasts.

b Authority's Examination of HIAL submissions on traffic forecast

- **10.6.** The Authority has examined HIAL's submission regarding traffic projections for the 2nd Control Period for the determination of aeronautical tariffs. The Authority's examination is presented below.
- 10.7. The Authority observed that forecasts for the passenger, ATM and cargo numbers submitted by HIAL in its tariff financial model dated 28.01.2017 have been made based on the auditor certified volumes for FY 2015-16. Projections have been made by applying growth rates estimated in the ICF study on the abovementioned base volumes.
- 10.8. However, the Authority noted that the traffic, ATM and cargo volumes for the period from FY 2008-09 to FY 2015-16 provided in HIAL's auditor certificates did not reconcile with the traffic data released by the Airports Authority of India. The Authority also notes that traffic at the Hyderabad Airport has grown at a rate faster than that projected in the study submitted by HIAL.
- **10.9.** The Authority has compared the traffic projections at Hyderabad Airport in different periods, as presented in the Table below:

Table 40: Passenger traffic at Hyderabad Airport

Passenger volumes (MPPA) 1.57 1.72 1.87 1.90 2.09 2.37 2.73 3.10 3.37 3.6 al Passenger volumes 1.57 1.72 1.87 1.90 2.09 2.37 2.73 3.10 3.37 3.6	Passenger Traffic	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 *
al Passenger volumes	Passenger volumes	4.65	4.80	5.75	6.70	6.29	6.36	7.78	9.40	11.73	13.18
	al Passenger	1.57	1.72	1.87	1.90	2.09	2.37	2.73	3.10	3.37	3.65

Table 41: ATMs at Hyderabad Airport

Air Traffic Movement s ('000s)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018*
Domestic ATMs ('000s)	68.74	66.45	68.83	84.89	74.79	70.92	75.70	85.08	108.4 5	116.6 4
Internation al ATMs ('000s)	12.14	13.57	13.83	14.12	15.36	16.82	18.36	20.69	22.26	23.34
* Traffic for 5	* Traffic for 5 months ending August 2017 (Annualized)									

Table 42: Cargo volumes at Hyderabad Airport

Cargo Traffic (in '000 metric tonnes)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018*
Overall throughput 54 66 78 78 79.2 87 99 110 122 133										
* Traffic for 5 months ending August 2017 (Annualized)										

10.10. The Authority observes the CAGR since 2009 till 2018 for different categories of traffic has been as follows:

Table 43: CAGR of traffic at Hyderabad Airport

Particulars	5 year CAGR (2013 to 2018)	9 year CAGR (2009 to 2018)
Domestic Passenger CAGR	16.45%	12.27%
International Passenger CAGR	11.17%	9.84%
Domestic ATMs CAGR	8.72%	5.88%
International ATMs CAGR	9.30%	8.20%
Cargo Traffic CAGR	10.84%	9.78%

10.11. The Authority, having looked at both numbers, is of the view that a longer term horizon would be more realistic to consider as 5 year CAGR numbers are more influenced by recent spurt in traffic, which may not be sustainable. It thus proposes to use the 9 year CAGR value to project traffic over the 2nd Control Period. The Authority notes that actual traffic of FY 2016-17 and that for 5 months ending 31.08.2017 is available on the website of AAI. The Authority proposes to compute the projected traffic of FY 2017-18 by annualizing the actual traffic during the first five months of the financial year. The projected traffic considered for the purpose of tariff determination is as given below,

Table 44: The projected passenger traffic to be considered by the Authority for tariff determination for 2nd Control Period

Passenger Traffic	2017	2018	2019	2020	2021
Domestic Passenger volumes					
(MPPA)	11.73	13.18	14.79	16.61	18.65
International Passenger					
volumes (MPPA)	3.37	3.65	4.00	4.40	4.83

Table 45: The projected ATMs to be considered by the Authority for tariff determination for 2nd Control Period

Air Traffic Movements ('000s)	2017	2018	2019	2020	2021
Domestic ATMs					
('000s)	108.45	116.64	123.50	130.76	138.44
International ATMs					
('000s)	22.26	23.34	25.25	27.32	29.56

Table 46: The projected Cargo volumes to be considered by the Authority for tariff determination for 2nd Control Period

Cargo Traffic (in '000 metric tonnes)	2017	2018	2019	2020	2021
Overall throughput	122	133	146	160	175

Proposal No. 9. Regarding Traffic Forecast

- 9.a. Based on the material before it and its analysis, the Authority tentatively proposes:
 - To consider the traffic numbers as compiled by Airports Authority of India in respect of five months ending 31.08.2017 (annualized) as the base to make projections for the 2nd Control Period.
 - ii. To consider the CAGR from FY 2008-09 to FY 2017-18(annualized) of the AAI compiled traffic data to project traffic for the 2nd Control Period.

11. Inflation

a HIAL Submission on Inflation

11.1. HIAL vide its original MYTP submission dated 25.03.2016 and revised MYTP submission dated 05.12.2016, has requested the Authority to provide for an allowance towards WPI inflation to be considered over and above the target revenues submitted by HIAL for the 2nd Control Period. As per HIAL's submission,

"...

• WPI – Inflation

It is understood that the Authority will give an allowance towards inflation (WPI growth) over and above the target revenue being submitted herewith based on actual WPI numbers. Accordingly, projections in this filing are made on a real basis i.e. excluding the inflationary impact of WPI.

..."

11.2. The Authority further notes that HIAL has requested the Authority for an inflationary allowance of 6.12% over the YPP in its MYTP submissions. In this context, HIAL has submitted a historical trend in the WPI index as a part of their MYTP submissions and the relevant extracts have been reproduced below,

"...

Historically, India has seen stable WPI growth at 6.1%-6.7% over an extended period of time. This holds true over various time horizons, as can be surmised from the table below:

Evolution of WPI from FY 2004-05

FY	WPI
2014-15	181.19
2013-14	177.64
2012-13	167.62
2011-12	156.13
2010-11	143.32
2009-10	130.81
2008-09	126.02
2007-08	116.63

2006-07	111.35
2005-06	104.47
2004-05	100.00
5-year CAGR	6.73%
10-year CAGR	6.12%

...."

b. Authority's Examination of HIAL Submissions on Inflation

- 11.3. The Authority notes HIAL's submissions including HIAL's request for allowances towards inflation over and above the target revenue for the 2nd Control Period. The Authority however, has constructed HIAL's tariff determination financial model on a nominal basis; i.e. all projections have been adjusted for inflation. Hence, the Authority proposes not to consider any separate adjustment / allowance to the target revenues as the same would result in double counting of inflation. Also, the use of inflation for projecting Yield per Passenger over the 2nd Control Period has been discussed in paras 13.9 belowto 13.10 below.
- 11.4. The Authority proposes to consider inflation forecasts as per the quarterly survey conducted by the RBI in January 2017. As per the "Results of the Survey of Professional Forecasters on Macroeconomic Indicators Round 44", the median percentage change in WPI over the succeeding five years is projected at 3.9% p.a. An extract of the results of RBI's forecast has been reproduced below,

"...

	Annual average percentage change over the next five years					
	Mean Median Max Min					
Real GVA	7.5 7.5 8.4		8.4	6.5		
CPI Combined	4.8 4.7 5.4		5.4	4.2		
WPI	3.8 3.9 4.6 3					
Source: https://rbi.org.in/Scripts/PublicationsView.aspx?id=17433						

..."

11.5. In view of the abovementioned report, the Authority proposes to consider the forecast of WPI inflation at 3.9% p.a. for determination of aeronautical tariffs for the 2nd Control Period of HIAL.

Proposal No. 10. Regarding Inflation

- 10.a. The Authority decides to adopt the following approach for consideration of inflation towards determination of tariffs for aeronautical services provided by HIAL at RGI Airport, Hyderabad:
 - i. To consider WPI at 3.9% for all the years of the 2nd Control Period based on the results of the latest survey by RBI. The Authority would update this inflation rate at the Order stage based on the latest forecasts.

12. Quality of Service

a HIAL Submission on Quality of Service

12.1. HIAL has not made any submissions related to Quality of Service as part of its MYTP submission dated 25.03.2016 and its revised submission dated 05.12.2016.

b Authority's Examination of HIAL's submission on Quality of Service

- 12.2. The Authority had vide its Order No. 38/2013-14, decided that HIAL shall ensure that service quality at RGI Airport, Hyderabad conforms to the performance standards indicated in the Concession Agreement. The Authority notes that the provisions of the Concession Agreement also indicate the consequences of not conforming to the prescribed level of performance standards as stated below,
 - "... GOI shall have right to impose liquidity damages and/or to give directives to the Relevant Authorities participating in the joint coordination committee referred to in Article 8.2 to assist HIAL in improving the rating..."
- 12.3. The Authority had decided that due to the presence of service quality related provisions in the concession agreement, that there was no need for a separate rebate mechanism as stated in the AERA Guidelines. The scheme of performance standards as indicated in the Concession Agreement would be adequate to keep a check on the performance levels.
- 12.4. The Authority notes that Section 9 of the Concession Agreement for RGI Airport, Hyderabad lays down the performance standards to be followed in respect of the airport. The criteria used to measure the Airport's performance are the IATA Global Airport Monitor service standards set out in Schedule 9, Part 2 or such criteria as may be mutually agreed upon from time to time. In this connection, the relevant provisions of the concession agreement are reproduced below,

"...

9.2.2. HIAL shall participate in IATA surveys and shall ensure that a survey is conducted each year in accordance with IATA's requirements to determine the airport's performance. The first such survey shall be conducted during the third (3rd) year after the airport opening.

...

9.2.3. If three (3) consecutive surveys show that the Airport is consistently rated as lower than IATA rating of thee and a half (3.5) (in the current IATA scale of 1 to 5) for the service standards under HIAL's direct control, HIAL will produce an action plan in order to improve the Airport's performance which must be implemented within one (1) year.

..."

- **12.5.** As regards the compliance status of HIAL with respect to the above provisions, the Authority's examination is presented in the following paragraphs.
- **12.6.** As per the ACI website, the Authority notes that in 2004, the new AETRA customer satisfaction survey was launched by Airports Council International (ACI) and the International Air Transport Association (IATA), replacing the eleven year old Global Airport Monitor³. The AETRA consumer satisfaction survey was further replaced by the ACI Airport Service Quality (ASQ) program in 2006.
- above, it was incumbent upon HIAL to conduct passenger survey with effect from 2010 (3rd year from the Airport opening), but HIAL proactively became part of ACI-ASQ Passenger Satisfaction Survey Program since FY 2008-09 itself. HIAL was declared as the world's best airport among the 5 to 15 million passenger capacity airports by Airport Council International (ACI) in 2009⁴. HIAL has also featured among the world's Top 3 Airports for 7th year in a row in ACI-ASQ ranking in Airport Service Quality (ASQ) Award, 2015⁵. Hence, the Authority is of the view that HIAL is meeting the required performance standards and there is no need for any penal provisions to be applied on HIAL.

³ http://www.aci.aero/New<u>s/Releases/Archives/2004/2004/05/17/AETRA-Customer-Satisfaction-Survey.</u>

⁴ http://www.aci.aero/Airport-Service-Quality/ASQ-Awards/Past-Winners/2009

⁵ http://www.aci.aero/Airport-Service-Quality/ASQ-Awards/Current-Winners/Best-Airport-By-Size/5-15million

12.8. Similarly, for the 2nd Control period, the Authority proposes that HIAL shall ensure that service quality at RGI Airport, Hyderabad conforms to the performance standards as indicated in the Concession Agreement.

Proposal No. 11. Regarding Quality of Service

- 11.a. The Authority proposes that HIAL shall ensure that service quality at RGI Airport, Hyderabad conforms to the performance standards as indicated in the Concession Agreement over the 2nd Control Period.
- 11.b. The Authority proposes not to levy any penalties / rebates against HIAL for the 1st Control Period as HIAL has managed to ensure prescribed levels of service quality during the review period.

13. YPP Calculations

a HIAL's submission on YPP Calculations

13.1. In its revised MYTP submission dated 05.12.2016, HIAL submitted that the ARR calculated in the MYTP under shared till submitted is presented below,

"...

REGULATORY BUILDING BLOCKS	2017	2018	2019	2020	2021
Return on RAB	266.75	<i>275.53</i>	324.88	451.96	512.84
Operating Expense	247.87	292.40	350.08	457.80	555.31
Concession Fee	50.62	55.87	61.28	66.98	72.78
Depreciation	158.73	169.54	166.21	209.43	249.69
Taxes	149.66	166.05	206.48	256.89	274.10
Gross Target Revenue (A)	873.63	959.38	1108.92	1443.06	1664.71
Cross-Subsidization (B)	101.45	108.94	115.26	122.35	129.46
Aero Revenue Eligibility (C=A-B)	772.18	850.44	993.67	1320.70	1535.24

..."

13.2. HIAL further submitted that the yield per passenger, for the 2nd Control Period, is as under,

"...

REVENUE DEFICIT FOR TARIFF	2017	2018	2019	2020	2021
DETERMINATION					
Aero Revenue Eligibility (C)	772.18	850.44	993.67	1320.70	1535.24
True-Ups	1588.90				
PV of Aero Revenue Eligibility (D)	2302.09	669.75	667.26	757.19	749.21
Actual/Projected Revenue	1265.48	1396.76	1531.97	1674.56	1819.45
PV of Actual/Projected Revenue (E)	1168.80	1099.99	1028.73	960.07	887.91
Yield per Passenger (including	924.01				
arriving, departing and transfer					
passenger)					

..."

- **13.3.** Accordingly, HIAL has requested the Authority to allow a yield of Rs. 924.47 per passenger to be recovered through aeronautical charges for the 2nd Control Period.
- 13.4. Subsequent to the MYTP submission dated 05.12.2016, HIAL submitted the revised tariff determination model via response e-mail dated 28.01.2017. In the revised tariff determination financial model the projections were based on the

audited financial results of FY 2015-16. The revised YPP thus submitted by HIAL for the tariff determination for the 2nd Control Period is Rs. 912.11.

13.5. HIAL has submitted in its original MYTP submission dated 25.03.2016 and revised MYTP submission dated 05.12.2016 that it has computed the Aggregate Revenue Requirement ("ARR") in line with the "AERA guidelines" for Tariff Determination and the Concession Agreement; after taking into account the capital expenditure on major expansion projects and general capex items. HIAL has also submitted that the projections for the 2nd Control Period have been made on a real basis i.e. excluding the effect of inflation (CPI and WPI). Accordingly, HIAL has requested the Authority to allow for a WPI adjustment of 6.12% over the proposed YPP.

b Authority's Examination of HIAL's submission on YPP Calculations

- **13.6.** The Authority notes from HIAL's submission dated 05.12.2016 that ARR has been calculated according to the formula given in the AERA Guidelines.
- **13.7.** The Authority notes that a Yield Per Passenger is to be computed using the following method.

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

Where:

- Present value (PV) of ARR_t for a Tariff Year t is being determined at the beginning of the Control Period and the discounting rate for calculating PV is equal to the Fair Rate of Return determined by the Authority according to Clause 5.1;
- \circ VE_t is the Volume in a Tariff Year t as estimated by the Authority in the Multi Year Tariff Order;
- o ARR_t is the Aggregate Revenue Requirement for Tariff Year t.

$$\text{Yield per passenger (Y)} = \frac{\sum_{t=1}^{5} PV(VE_{t} \times Y_{t})}{\sum_{t=1}^{5} VE_{t}}$$

Where,

- \circ VE_t is the volume as estimated by the Authority in a Tariff year t in the Multi Year Tariff Order
- \circ Y_t is the yield per passenger for Tariff Year t calculated according to Para;
- \circ Present value (PV) of $(VE_t \times Y_t)$ for a Tariff Year t is being determined at the beginning of the Control period and the discounting rate for calculating PV is equal to the Fair Rate of Return determined by the Authority
- **13.8.** The Authority has further provided for the determination of Yield per passenger for the 2nd Tariff Year onwards using the following formula:

Yield per passenger $(Y_t) = Y_{t-1} \times (1 + WPI_t)$ Where.

- \circ Y_t is the yield per passenger for the Tariff Year t with forecasted change in WPI:
- \circ Y_{t-1} is the yield per passenger for the Tariff Year preceding Tariff Year t determined by the Authority
- WPI_t is the forecast of change in WPI for Tariff Year t as determined by the Authority;
- **13.9.** According to the Authority guidelines, this formula for determination of yield for a tariff year includes an inflationary increase to be applied over the yield in the preceding tariff year.
- projecting yield per passenger (YPP) over the 2nd Control Period. HIAL on the other hand has requested for a WPI adjustment of 6.12% over the proposed YPP. However, the Authority proposes to consider an inflationary increase on the Yield per Passenger computed for the first year of the 2nd Control Period while projecting the Yield Per Passenger for subsequent years of the Control Period (as per the formula reproduced above). The Authority proposes to consider the WPI of 3.9% as discussed in para 12.6 above for this purpose.
- **13.11.** The Authority notes that the YPP proposed by HIAL is Rs. 912.11 (per passenger). This YPP was subsequently revised to Rs. 1212 (per passenger) vide HIAL's submission dated 31.08.2017. The Authority has analysed HIAL submissions on each of the regulatory building blocks and presented its analysis and proposals in the

respective sections above. Consequently, the Authority calculated the aggregate revenue requirement under the 30% shared till mechanism, which has been presented below,

Table 47: Aggregate Revenue Requirement Calculation under Shared Till

Yield Per Passenger	2017	2018	2019	2020	2021	Aggregate 2 nd CP
Regulatory Building Blocks						
Return on Capital Employed	157.42	155.47	163.07	222.85	270.96	969.76
Operating Expense	229.49	238.29	266.88	319.62	373.77	1428.04
Concession Fee	33.94	32.41	21.14	23.70	26.68	137.87
Depreciation & Amortization	159.48	168.84	149.64	177.14	220.34	875.43
Taxes	52.20	46.33	5.63	1.73	0.00	105.88
Gross Target Revenue	632.53	641.34	606.35	745.03	891.74	3516.98
Cross-Subsidization	76.48	86.13	97.02	110.08	124.89	494.60
Aero Revenue Eligibility	556.04	555.21	509.33	634.95	766.86	3022.38
True-Ups	501.37					
Present Value of Aero Revenue Eligibility	1133.79	569.91	471.85	530.88	578.66	3285.08
Actual/Projected Revenue	848.62	810.20	528.53	592.38	667.00	3446.74
Present Value of Actual/Projected Revenue	965.19	831.66	489.64	495.29	503.31	3285.08
Deficit	0.00	0.00	0.00	0.00	0.00	0.00
Yield per Passenger, as on 01-01-2018	186.04	193.30	200.84	208.67	216.81	

Proposal No. 12. Regarding calculation of Yield Per Passenger (YPP)

12.a. The Authority proposes:

- i. Consider an inflationary increase of 3.9% p.a. on the Yield per Passenger computed for the first year of the 2nd Control Period while projecting the Yield Per Passenger for subsequent years of the Control Period.
- ii. To calculate the YPP at Rs. 186.04 under 30% shared till in respect of the 2nd Control Period for RGI Airport, Hyderabad. The abovementioned YPP is for FY 2016-17 and would be increased as given in Table 47 above. Further, 01.01.2018 is considered as the tariff implementation date.

- iii. To true-up the above YPP based on truing-up of various building blocks impacting the calculation of the said YPP at the end of the current Control Period and to consider its effect in the next Control Period.
- iv. To request HIAL to submit tariff card for the remaining years of the Second Control Period complying with the YPP calculated in (i) above within one (1) week of issuance of this Consultation Paper.

14. Matters regarding Error Correction and Annual Compliance Statement

a Authority's Examination on Matters regarding Error Correction and Annual Compliance Statement

- 14.1. The Authority had in its Airport Guidelines laid down the error correction mechanism with reference to the adjustment to the Estimated Maximum Allowed Yield per passenger, calculated using the error correction term of Tariff Year t-2 and the compounding factor. The error correction calculated as per the Airport Guidelines indicated the quantum of over-recovery or under-recovery due to increase or decrease respectively of the Actual Yield per passenger with respect to Actual Maximum Allowed Yield per passenger in the Tariff Year.
- 14.2. In the case of HIAL, the Authority has proposed to make appropriate adjustments to the RAB at the beginning of the next Control period in respect of actual investments. The Authority has also proposed to consider the depreciation calculated in accordance thereof and Roll Forward RAB during the Control Period for the purpose of determination of tariffs for aeronautical services at HIAL. The Authority has also proposed to true up the traffic projection based on actual growth. The Authority has proposed that the non-aeronautical revenue would be trued up, in the interest of the passengers as well as that of the airport operator. Hence, the truing up for non-aeronautical is also proposed after the completion of the current control period.
- 14.3. Further, the Authority also proposes that in view of all the corrections/truing up to be carried out at the end of the control period there may not be any requirement for HIAL to submit Annual Compliance Statements etc., as per the timelines indicated in the Airport Guidelines. Instead, HIAL should submit the Annual Compliance Statements along with the MYTP for the next Control Period.

Proposal No. 13. Matters regarding Error Correction and Annual Compliance Statement

13.a. Based on the material before it and its analysis, the Authority proposes:

i.	That HIAL should submit the Annual Compliance Statements for the
	individual tariff years of the 2 nd control period along with the MYTP
	for the next Control Period.

15. Stakeholders' Consultation Timeline

15.1. In accordance with the provision of Section 13(4) of the AERA Act, 2008, the

proposals contained in this consultation paper read with the relevant discussion in the

other sections of the paper is hereby put forth for Stakeholders' Consultation. For

removal of doubts, it is clarified that the contents of this consultation paper may not be

construed as any Order or Direction by the Authority. The Authority shall pass an order,

in the matter, only after considering the submissions of the stakeholders' in response

hereto and by making such decisions fully documented and explained in terms of the

provisions of the Act.

15.2. The Authority welcomes written evidence based feedback, comments and

suggestions from stakeholders on the proposals made in this consultation paper, latest

by 29.01.2018 at the following address.

Secretary

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(S. Machendranathan)
Chairperson

16. List of Annexures

Annexure Number	Particulars
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Annexure – 2	Evaluation report on Capital Expenditure by RITES.

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