Order No. 23/2017-18



Airports Economic Regulatory Authority of India

In the matter of determination of aeronautical tariffs in respect of Netaji Subhash Chandra Bose International Airport (NSCBIA), Kolkata for the second Control Period (01.04.2016 – 31.03.2021).

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27th November, 2017

AERA Building
Administrative Complex
Safdarjung Airport
New Delhi – 110 003



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1. Introduction

- 1.1. Kolkata is the capital city of the state of West Bengal. Port of Kolkata, situated on the banks of Hooghly River, is the oldest operating port in India. With its population of approximately 1.4 cr. as per 2011 census, it is the administrative, cultural, educational and business centre of east India. Many industrial companies operational in heavy engineering, steel, mining, minerals, cement, food processing, electronics and textiles sectors have set-up their manufacturing plants in Kolkata. Kolkata is also known for its festive celebration of Durga Puja.
- 1.2. Kolkata airport (NSCBIA), located at Dum Dum near the city of Kolkata is the fifth busiest airport in India and primary international airport in eastern India.
- 1.3. The traffic handled by NSCBIA during the 1st control period is given in table below:

Table 1 - Passenger and ATM traffic during the 1st control period at NSCBIA

Year	Dom. Pax (mn)	Int. Pax (mn)	Total Pax (mn)	Dom. ATMs	Int. ATMs	Total ATMs
2012	8.7	1.6	10.3	84,316	15,527	99,843
2013	8.5	1.7	HCH 10.2	79,597	13,733	93,330
2014	8.3	1.8	10.1	76,909	15,962	92,871
2015	9.0	1.9	10.9	80,859	16,269	97,128
2016	10.2	2.2	12.4	82,800	19,685	102,485

- 1.4. NSCBIA, with a traffic of more than 1.5 mppa, is a major airport as defined in Section 2(i) of AERA Act. Accordingly, tariff determination of aeronautical services at the airport is undertaken by AERA.
- 1.5. Technical and Terminal building details of NSCBIA are provided in the table below:

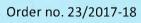
Table 2 – Technical and Terminal building details of NSCBIA

Technical Details of NSCBIA					
Particulars	Details				
Total airport area	1641 acres				
Runway orientation and length	19L-01R and 3627 meter				
	19R-01L				
No. of Taxi Tracks	15				
No. of Apron Bays	51				
Aerodrome Category	4E				
Navigational Aids	19L-CAT II, 01R- CAT IIIB;				



	19R- CAT I, 01L – SALS
Operational hours	24 hours
Terminal	building Details
Particulars	Integrated Terminal
Terminal Building Area	2,24,162 Sq.m
Immigration Counters	42 (Operational); 14 (Not in operation)
Customs Counters	12
Security Counters	36
Departure Conveyor	08
Arrival Conveyor	16
Peak hour passenger capacity	3725
No. of Check-in Counters (CUTE)	133
Total Area of Car Parking	45,715 Sq.m

- 1.6. AAI has submitted Multi Year Tariff Proposal (MYTP) for revising aeronautical charges for 2nd control period on 06.03.2017. The Authority's consideration of this proposal and its tentative views in respect of relevant issues were placed for stakeholder consultations vide Consultation Paper Number 19/2017-18 on 01.09.2017. The last date for receipt of comments was 29.09.2017.
- 1.7. A meeting with stakeholders for inviting responses on proposed decisions of the Authority was held on 18.09.2017.
- 1.8. This order of the Authority takes into account proposals of AAI, views expressed by stakeholders in the meeting, written submissions received from stakeholders and examination by the Authority with reference to its guidelines for airport operators.
- 1.9. The Authority, vide its Order No. 35/2012-13 dated 23.01.2013 had decided to determine the Aggregate Revenue Requirement (ARR) for NSCBIA, Kolkata taking into account the investments and costs for both the airport services as well as cargo services. Accordingly, the Authority determined the tariffs for aeronautical services provided at NSCBIA with tariffs effective from 16.02.2013. Major decisions of the Authority in its Order No. 09/2014-15 are provided below:
 - 1.9.1. To consider the Initial RAB at INR 246.47 crores, as furnished by AAI.
 - 1.9.2. Depending on the capex incurred and timing thereof (i.e. the date of capitalisation of the underlying assets in a given year) the Authority will make





- appropriate adjustments to the RAB at the beginning of the next Control Period, taking into account, the accounting policies of AAI regarding depreciation as well as actual expenditure incurred and capitalized.
- 1.9.3. To true up the traffic volume based on actual growth.
- 1.9.4. To true up the non-aeronautical revenue based on the actual non-aeronautical revenue at NSCBIA during the current Control Period while determining the tariffs for the next Control Period.
- 1.9.5. To consider WACC at 14% for NSCBIA for the first Control Period.
- 1.9.6. Expects AAI to take steps to move towards more efficient means of finance (i.e. not financing the project with overwhelming proportion of equity). As and when, this happens the Authority would take into account any change in the value of WACC giving effect to the same in the next Control Period.
- 1.9.7. Determines the tariffs for the Tariff Years 2012-13 to 2015-16 for aeronautical services in respect of NSCBIA. The tariffs for FY2012-13 would be effective from 16.02.2013. The tariffs for the Tariff Years 2013-14, 2014-15 and 2015-16 will be effective from 1st April of the respective Tariff Years.
- 1.9.8. To merge the passenger facilitation component (Rs. 77 per departing passenger) of the Passenger Service Fee (PSF), in the UDF. Thus, the PSF would be limited only to the security component.
- 1.9.9. To calculate shortfall (presently estimated at around Rs. Rs. 800 crores approximately) in ARR on account of charging of lesser UDF by AAI. Depending on the calculations and stakeholders' consultation, the Authority will consider, if and to what extent, the calculated shortfall will be reckoned as additional revenue requirement during the next Control Period (over and above what would be required on the basis of calculations only for the next Control Period).



2. Summary of stakeholders' comments on Consultation Paper No. 19/2017-18

2.1. In response to Consultation Paper No. 19/2017-18, the Authority received several responses from stakeholders. The list of stakeholders, who have commented on the Consultation Paper, is presented below.

Table 3 – Summary of stakeholders' comments

Sr. No.	Stakeholder	Issues Commented
1.	International Air Transport Association (IATA)	 Methodology of Tariff Determination True-up for 1st control period Allocation of assets (Aeronautical and Non-aeronautical) Capital expenditure for 2nd control period Fair Rate of Return (FROR) Operation and Maintenance Expenditure Annual Tariff Proposal
2.	Business Aircraft Operators Association (BAOA)	 Revenue from services other than aeronautical services Annual Tariff Proposal
3.	Air Travellers Association (ATA)	 Fair Rate of Return (FRoR) Revenue from services other than aeronautical services Operation and Maintenance Expenditure Annual Tariff Proposal
4.	Indian Oil Corporation Limited (IOCL)	Annual Tariff Proposal
5.	Hindustan Petroleum Corporation Limited (HPCL)	Annual Tariff Proposal

2.2. The Authority has carefully considered comments made by stakeholders and has obtained response from AAI on these comments. The position of the Authority in its Consultation Paper No. 19/2017-18, issue-wise comments of the stakeholders on the Consultation Paper, response from AAI thereon, Authority's examination, and its decision are given in the relevant sections of this order.



3. Methodology for Tariff determination

- 3.1. The Authority, vide its Order No. 13/2010-11 dated 12.01.2011 ("Airport Order") and Direction No. 5/2010/11 dated 28.02.2011 ("Airport Guidelines"), had issued guidelines to determine tariffs at major airports based on Single Till mechanism. Subsequently, the Authority has amended guidelines vide its Order No. 14, 2016-17 dated 12.1.2017 to determine future tariffs using Hybrid Till.
- 3.2. The tariff determination process consists of true-up for 1st control period and determination of building blocks for 2nd control period. The Authority decides to undertake true-up of 1st control period based on actual financials and traffic data under Single Till (as was applicable during 1st control period) and determination of building blocks for 2nd control period under Hybrid Till.
- 3.3. The Aggregate Revenue Requirement (ARR) under regulatory framework of Authority is calculated as under

$$\begin{aligned} \mathsf{ARR} &= \sum_{t=1}^{5} (ARRt) \mathsf{and} \\ \mathsf{ARR}_t &= (\mathsf{FROR} \times \mathsf{RAB}_t) + \mathsf{D}_t + \mathsf{O}_t + \mathsf{T}_t - \alpha \times \mathsf{NAR}_t \end{aligned}$$

Where

- 3.3.1. t is the Tariff Year in the control period;
- 3.3.2. ARRt is the Aggregate Revenue Requirement for year t;
- 3.3.3. FRoR is the Fair Rate of Return for the control period;
- 3.3.4. RAB_t is the Aeronautical Regulatory Asset Base for year t;
- 3.3.5. D_t is the Depreciation corresponding to the Aeronautical RAB for year t;
- 3.3.6. Ot is the Aeronautical Operation and Maintenance Expenditure for year t, which include all expenditures incurred by the Airport Operator(s) towards aeronautical activities including expenditure incurred on statutory operating costs and other mandatory operating costs;
- 3.3.7. T_t is the Tax in year t, which includes payments by Airport Operator in respect of corporate tax on income from assets/ amenities/facilities/services taken into consideration for determination of ARR for year t;
- 3.3.8. α is 30% cross subsidy factor for revenue from services other than Order no. 23/2017-18

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- aeronautical services under Hybrid Till for 2^{nd} control period. α is 100% cross subsidy factor under Single Till for 1^{st} control period; and
- 3.3.9. NAR_t is the revenue from services other than aeronautical services (Non-Aeronautical Revenues or NAR) for year t.
- 3.4. Based on ARR, Yield per Passenger is calculated as per formula given below:

Yield per Passenger (Y) =
$$\frac{\sum_{t=1}^{5} PV(ARRt)}{\sum_{t=1}^{5} (VEt)}$$

Where,

- 3.4.1. Present value (PV) of ARRt for a tariff year t is calculated 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.
- 3.4.2. VE_t is the Traffic volume in a tariff year t as estimated by the Authority
- 3.4.3. ARRt is the Aggregate Revenue Requirement for tariff year t.
- 3.5. While determining building blocks and ARR for NSCBIA, Authority decides to-
 - 3.5.1. Allocate CHQ/ RHQ overhead expenses on revenue basis as per the approach followed by the Authority while determining tariffs for Guwahati and Lucknow airports during 1st control period
 - 3.5.2. Adopt depreciation rates consistent with Companies Act and for assets not defined in the Companies Act at 3.33% from FY 2011-12 onwards.
- 3.6. The Authority caps airport tariffs at a level where revenue generated through approved tariffs is equal to the permissible ARR for the Airport Operator. The Authority's approach on the above is detailed in subsequent sections.
- 3.7. The true-up for 1st control period and determination of building blocks for 2nd control period are detailed in subsequent sections.
- 3.8. It is to be noted that some of the numbers in the order are rounded off for ease in representation.

Stakeholders' comments and Authority's observations
Comments from IATA

3.9. We see that once again AERA has adopted the hybrid till approach for setting charges.



This approach not only increase costs to consumers, but also goes against the well-reasoned position that AERA took when defining its regulatory philosophy. AERA has adopted the usage of the hybrid till approach solely because the NCAP said so, without discussing the merits of such a change. We urge AERA to revisit this issue, as the latest chosen path causes harm to consumers.

Authority's examination of IATA's comments and AAI's submission to IATA's comments

3.10. The Authority has noted comments from IATA related to the regulatory Till applicable for NSCBIA. The Authority has decided to adopt Hybrid Till as per the revised guidelines issued vide its Order No. 14, 2016-17 dated 12.01.2017.

Authority's general views on adoption of Hybrid Till

- 3.11. The Authority has provided detailed reasoning and adequately responded to the stakeholders' comments on the adoption of Hybrid Till in its Order No. 14, 2016-17 and passed the following order:
 - "(i) 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 guideline of the Authority shall be amended. The provisions of the Guidelines issued by the Authority, other than regulatory Till, shall remain the same.
 - (ii) In case of Delhi and Mumbai airports, tariff will continue to be determined as per the SSA entered into between Government of India and the respective airport operators at Delhi and Mumbai."
- 3.12. In view of the above, the Authority decides to determine aeronautical tariffs at NSCBIA for the first control period on Single Till basis and for the second control period on Hybrid Till basis.

Decision No. 1. Methodology for tariff determination

1.a. The Authority decides to determine aeronautical tariffs at NSCBIA for the first control period on Single Till basis and for the second control period on Hybrid Till basis.



4. Multi Year Tariff Proposal of NSCBIA

- 4.1. In the 1st control period, the Authority, vide its Order No. 35/2012-13 dated 23.01.2013 had decided to determine the Aggregate Revenue Requirement (ARR) for NSCBIA, Kolkata taking into account the investments and costs for both the airport services as well as cargo services. Accordingly, the Authority determined the tariffs for aeronautical services provided at NSCBIA with tariffs effective from 16.02.2013.
- 4.2. AAI made submissions dated 15.01.2016 to the Authority for determination of tariffs for 2nd control period. Subsequent to the announcement of National Civil Aviation Policy, AAI made revised submissions under Hybrid Till on 06.03.2017. AAI has further revised their submission under Hybrid Till on 09.05,2017, 12.05.2017 and on 29.05.2017 as part of clarifications submitted in line with the comments provided by AAI for Trivandrum airport consultation paper for the 2nd control period. AAI has not considered cargo related revenues, expenses and assets in the MYTP for 2nd control period and submitted that AAI Cargo Logistics and Allied Services Company Limited (AAICLAS) would file proposal for cargo tariffs for 2nd control period. The Authority has adopted the model proposed by AAI based on AERA methodology as on 06.03.2017 and considered subsequent submissions for this order.
- 4.3. AAI provides Air Navigation Services (ANS) services in addition to landing, parking and other aeronautical services at NSCBIA. AAI has submitted that the tariff proposal does not consider revenues, expenditure and assets on account of ANS services. This order discusses the determination of tariffs for aeronautical services at the airport excluding ANS services.
- 4.4. AAI has informed that accounts of AAI are audited by C&AG of India as mandated by the AAI Act. The C&AG's resident audit party audits the financial records and statements of AAI airports, regional/ field offices. However, the C&AG issues the final audit certificate for the AAI as a whole and only trial balance is available for NSCBIA. The Authority has utilized these documents as submitted by AAI for determination of tariffs.



5. True-up for First control period

- 5.1. True-up for 1st control period is calculated as difference between
 - 5.1.1. Permissible aeronautical revenue calculated based on actual traffic and financials
 - 5.1.2. Actual aeronautical revenue received by AAI for 1st control period
- 5.2. AAI has submitted opening RAB for the 1st control period under Single Till at ₹ 246.5 crores.

Table 4 – Opening RAB for the 1st control period as per AAI – Single Till

S. No.	S. No. Particulars		
1	Original Cost of Airport Assets excluding ANS related assets as on 01.04.2011	575.7	
2	Accumulated Depreciation as on 01.04.2011	329.2	
3	Opening RAB[(1)-(2)] as on 01.04.2011	246.5	

Permissible aeronautical revenues

5.3. AAI has calculated Aggregate Revenue Requirement of ₹ 3,229.5 crores (PV of ARR is ₹ 2,369.9 crores as on 1st April 2012) for 1st control period.



Table 5 - ARR as per AAI for the 1st control period – Single Till

Details (₹ crore)	2011-12	2012-13	2013-14	2014-15	2015-16
Opening RAB	246.5	299.9	2,455.6	2,265.2	2,019.4
Assets capitalized during the year	114.3	2,433.6	92.3	36.1	51.4
Disposals/ Transfer	0.01	0.01	0.00	0.00	0.00
Depreciation	60.9	277.9	282.7	281.9	279.8
Closing RAB	299.9	2,455.6	2,265.2	2,019.4	1,791.0
Average RAB	273.2	1,377.7	2,360.4	2,142.3	1,905.2
Return on Average RAB@14%	38.2	192.9	330.5	299.9	266.7
Operating Expenditure	180.9	230.6	330.3	392.7	394.8
Depreciation	60.9	277.9	282.7	281.9	279.8
Corporate Tax	18.5	0.0	0.0	0.0	49.2
Less- Revenue from services other than Regulated services	109.6	115.7	120.1	157.8	175.7
ARR as per AAI	189.0	585.7	823.3	816.8	814.8
Total ARR as per AAI	10 May 1				
Discounted ARR	189.0	513.8	633.5	551.3	482.4
PV of ARR for the control period as on 01.04.2012	2,369.9				

Actual aeronautical revenues

5.4. AAI has submitted that it has earned aeronautical revenues of ₹ 1,883.8 crores during the 1st control period. Correspondingly, AAI has submitted that it has a shortfall of ₹ 2,225.4 crores (future value as on 01.04.2017) during the 1st control period. The aeronautical revenues for the 1st control period is shown below:

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Table 6 - Aeronautical revenue earned for the $\mathbf{1}^{\text{st}}$ control period as per AAI Submission – Single Till

No.	Particulars (₹ crore)	2011-12	2012-13	2013-14	2014-15	2015-16
А	Revenues from Regulated S	ervices				
1	Landing Charges:					
1.1	Domestic	46.2	55.7	83.8	92.9	102.3
1.2	International	22.1	19.3	48.9	47.7	68.4
1.3	Total Landing Charges	68.3	75.0	132.6	140.5	170.7
2	Parking and Housing Charges:	2.4	3.0	7.4	7.3	3.9
3	PSF(Facilitation Charges(FC)):	1000			
3.1	Domestic	31.9	33.8	0.3	0.0	0.0
3.2	International	4.4	4.6	0.0	0.0	0.0
3.3	Total PSF (FC)	36.3	38.3	0.3	0.0	0.0
4	User Development Fees (UE	OF):				
4.1	Domestic #	0.0	3.7	143.7	173.6	208.9
4.2	International	0.0	0.7	70.1	86.8	106.9
4.3	TOTAL UDF	HC4 0.0	जयतं 4.4	213.7	260.5	315.7
5	Fuel Throughput Charges	25.8	23.8	27.5	27.5	37.8
6	Ground Handling Charges	6.6	4.9	7.8	10.5	22.4
7	Cargo revenues	36.5	32.5	33.8	35.9	44.1
8	CUTE services	0.0	0.4	8.0	7.9	10.0
9	Total Aeronautical Revenues	175.9	182.1	431.0	490.0	604.7
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Table 7 - ARR and its resultant shortfall as per AAI for 1st control period – Single Till

No.	Components (₹ crore)	2011-12	2012-13	2013-14	2014-15	2015-16	Total
1	ARR for year	189.0	585.7	823.3	816.8	814.8	3,229.5
2	Aeronautical Revenue	175.9	182.1	431.0	490.0	604.7	1,883.8
3	Shortfall (+)	13.1	403.6	392.3	326.8	210.0	1,345.7
4	Future Value of shortfall (+) as on 01.04.2017	28.7	777.0	662.6	484.1	273.0	2,225.4



Authority's Examination

- 5.5. The Authority had proposed adjustments on the following building blocks for calculating true-up of $\mathbf{1}^{\text{st}}$ control period
 - 5.5.1. Adjustment of depreciation
 - 5.5.2. Adjustment of non-aeronautical revenues
 - 5.5.3. Apportionment of CHQ/RHQ costs and change in tax calculation
 - 5.5.4. Correction of present value factor for shortfall calculation

Adjustment for Depreciation

5.6. AAI has used depreciation rates as per the accounting policy approved by AAI board.

The depreciation rates used by AAI for key assets are —

Table 8 - Depreciation rates as submitted by AAI

No.	Asset Class	As per AAI
1	Free hold land	0%
2	Runways, Taxiways & Aprons	13%
3	Roads bridges & culvert	13%
4	Terminal building	8%
5	Cargo complex	8%
6	Temporary building	100%
7	Residential building	5%
8	Security fencing – temporary	100%
9	Security fencing wall	8%
10	Security fencing	8%
11	Ancillary building	8%
12	Computer IT & hardware	20%
13	Software & intangible	20%
14	Plant & machinery	11%
15	Tools	20%
16	Equipment	20%
17	Vehicle	14%
18	Heavy vehicles	14%
19	Vehicle car & jeep	14%
20	Electrical installations	11%
21	Air conditioning equipment	11%
22	Electronics installation	11%
23	Typewriter & other office equipment	18%
24	Furniture & fixture	20%



No.	Asset Class	As per AAI
25	X ray baggage machine	11%
26	CFT & fire fighting	13%

- 5.7. The Authority had proposed the following depreciation rates
 - 5.7.1. For asset types not defined under Companies Act (runway, taxiway and aprons): 3.33% based on useful life of 30 years from FY 2011-12 onwards
 - 5.7.2. For asset types defined under Companies Act: rates prevalent under the Companies Act 1956 till FY 2013-14 and as per the Companies Act 2013 from FY 2014-15 onwards as the effective date of implementation of the Companies Act 2013 is 01.04.2014. The depreciation rates as submitted by AAI and as considered by the Authority are given in Table 30.
- 5.8. Depreciation for the 1st control period has been calculated on the basis of actual date of capitalization of assets.
- 5.9. The revised depreciation for the 1st control period under Single Till is given below:

Table 9 – The Authority's consideration of depreciation for 1st control period – Single Till

N	ο.	Details (₹ crore)	2011-12	2012-13	2013-14	2014-15	2015-16	Total
	1	As per AAI	60.9	277.9	282.7	281.9	279.8	1,183.2
	2	As per Authority	18.4	80.5	83.5	154.0	156.6	492.9

- 5.10. AAI has taken the cost of land in to RAB. In respect of cost of land, the Authority notes that land is not a depreciable asset and if taken into RAB, the return over it has to be paid perpetually. Besides, if the principle of FRoR based on cost of capital is applied on cost of land, the aeronautical charges may have to be fixed at exorbitantly high rates. However, the Authority realizes that unless some kind of return is given on land, future land acquisitions for airport purposes could become a major hurdle for airport development. Therefore, it is proposed to conduct a study based on which the treatment to be given to cost of land can be determined.
- 5.11. It is therefore proposed to exclude the existing cost of land (₹ 1.6 crores in FY 2011-12) from the RAB till a final decision is taken on the Issue.
- 5.12. The change in depreciation rates and exclusion of land from RAB results in a change in Order no. 23/2017-18

average RAB of the 1st control period as shown below -

Table 10 – The Authority's consideration of average RAB for 1st control period – Single Till

No	Details (₹ crore)	2011-12	2012-13	2013-14	2014-15	2015-16		
1	As per AAI							
	Opening RAB	246.5	299.9	2,455.6	2,265.2	2,019.4		
	Additions	114.3	2,433.6	92.3	36.1	51.4		
	Disposals	0.01	0.01	0.00	0.00	0.00		
	Depreciation	60.9	277.9	282.7	281.9	279.8		
	Closing RAB	299.9	2,455.6	2,265.2	2,019.4	1,791.0		
	Average RAB	273.2	1,377.7	2,360.4	2,142.3	1,905.2		
2		4.87	As per Autho	rity				
	Opening RAB	244.9	340.9	2,693.9	2,702.7	2,584.9		
	Additions	114.3	2,433.6	92.3	36.1	51.4		
	Disposals	0	0	0	0	0		
	Depreciation	18.4	80.5	83.5	154.0	156.6		
	Closing RAB	340.9	2,693.9	2,702.7	2,584.9	2,479.7		
	Average RAB	292.9	1,517.4	2,698.3	2,643.8	2,532.3		

Adjustment for Non-Aeronautical revenues

- 5.13. The Authority noted that AAI has considered lease rental and rent revenues from cargo, ground handling agencies and oil companies as non-aeronautical revenues during the 1st control period. As per the provisions of the AERA Act, the services rendered in respect of ground handling, oil companies and cargo are aeronautical services.
- 5.14. The Authority had proposed to consider the revenues from Ground Handling Services and Supply of fuel to aircraft including land lease rentals as aeronautical revenue.

Table 11 – Comparison of NAR as considered by AAI and the Authority for $1^{\rm st}$ control period

NAR (₹ crore)	2011-12	2012-13	2013-14	2014-15	2015-16
NAR as submitted by AAI (1)	109.6	115.7	120.1	157.8	175.7
Adjustment					
Revenue from Cargo, Ground handling and fuel services treated as aeronautical (2)	10.3	11.6	11.4	23.7	38.9
NAR as per Authority (3 = 1 - 2)	99.4	104.1	108.7	134.1	136.8



Adjustment for operating expenditure (CHQ/ RHQ expenditure apportionment)

- 5.15. Total CHQ/ RHQ expenses for AAI is as shown in table below. AAI has requested the apportionment of CHQ/ RHQ expenses while determining tariffs of major airports. CHQ/ RHQ expenses allocation for NSCBIA consist of two components Expenditure for NSCBIA employee's retirement benefit allocated at CHQ and overheads at CHQ. The CHQ expense considered for apportionment have been netted off against the income received by CHQ. For NSCBIA, RHQ overheads of eastern region has not been apportioned to Kolkata airport as it directly reports to CHQ and not to RHQ.
- 5.16. The retirement benefit is allocated on the basis of number of employees at NSCBIA. The Authority had proposed to allocate the CHQ overhead expenses for the airport services after excluding the ANS expenses on revenue basis which is consistent with the approach adopted by the Authority in MYTP of 1st Control Period for Guwahati and Lucknow airports. The Authority observes that as per the above methodology the CHQ overhead expenses are allocated in proportion to the capacity of the airport to absorb higher cost of CHQ. Under this methodology, a portion of CHQ expenses are allocated to Delhi and Mumbai airports based on revenue received by AAI from these airports.

Table 12 - Summary of CHQ/ RHQ Overheads as submitted by AAI for 1st control period

No.	in ₹ cr.	2012	2013	2014	2015	2016
	Apportionment of CHQ/ RHQ overheads					
1	CHQ Expenses	259.3	331.2	303.8	397.3	404.6
2	Less - CHQ Revenue	93.8	152.6	183.5	236.8	227.7
3	Net CHQ Expenses (1-2)	165.6	178.7	120.3	160.5	176.9
	CHQ/ RHQ Overheads allocated to NSCBIA	15.2	14.0	13.1	17.8	19.8
	AND PRODUCE AND AND					
	Apportionment of Retirement Benefits at CHQ	A				
	Total provision of retirement benefits at CHQ	159.7	289.4	160.0	275.2	182.9
	Provision of Retirement Benefits at CHQ for NSCBIA	17.7	39.3	20.5	35.3	22.5

5.17. The Authority also noted that AAI has included financing charges as part of O&M expenses for the 1st control period. The Authority had proposed not to include interest payments on long term debt as a component of O&M expenses for true-up calculation since the financing charges would be recovered as part of the return on the RAB.



5.18. In view of the above, the O&M expenditure for 1st control period is given in table below.

Table 13 - Summary of O&M expenditure as per the Authority for 1^{st} control period -Single Till

No.	Particulars (₹ crore)	2011-12	2012-13	2013-14	2014-15	2015-16
1	Pay roll Expenditure of NSCBIA	91.3	100.0	116.1	123.3	125.9
2	Expenditure for NSCBIA employees' retirement benefits allocated at CHQ	17.7	39.3	20.5	35.3	22.5
Α	Total Pay roll Expenditure (1+2)	108.9	139.3	136.5	158.7	148.4
3	Administrative and General Expenditure	6.3	5.5	3.9	7.2	9.6
4	Apportionment of administration & General expenditure of CHQ	15.2	14.0	13.1	17.8	19.8
В	Total Administration & General Expenditure(3+4)	21.5	19.6	17.0	24.9	29.3
С	Repairs and Maintenance Expenditure	29.4	24.1	25.7	41.0	43.3
5	Power Charges	13.4	28.4	43.8	53.1	61.9
6	Other Charges	2.2	2.3	5.6	8.7	12.4
D	Utility and Outsourcing Expenditure	15.6	30.7	49.3	61.8	74.3
Ε	Other Outflows	0.8	1.0	0.8	0.9	1.0
	Total (A+B+C+D+E)	176.3	214.7	229.3	287.4	296.3

Adjustment in base year for calculating present value of shortfall

5.19. The Authority noted that the present value factor considered by AAI for the shortfall in aggregate revenue collection in comparison to allowable aggregate revenue for the 1st control period (refer to Table 7) is calculated as on 01.04.2017 instead of 01.04.2016.
The Authority had proposed to consider the present value of shortfall as on 01.04.2016.

Tax calculation for 1st control period

- 5.20. The tax calculation as submitted by AAI for 1st control period apportions actual tax liability of AAI based on the profit before tax of NSCBIA and profit before tax of AAI.
- 5.21. The Authority noted that the tax liability of AAI would include tax as a result of income from Delhi and Mumbai airports. Therefore, the Authority had proposed to determine tax for NSCBIA by applying provisional tax rate on the standalone profit before tax of the airport. In addition, for calculation of tax, the Authority had proposed to determine depreciation considering the depreciation rates applicable under Income Tax laws.



5.22. AAI has submitted revised tax calculations based on standalone financials of NSCBIA.

The Authority had proposed to consider the tax calculation as given below.

Table 14 – Revised amount of Tax as considered by Authority for the 1st control period

Particular (₹ crore)	2011-12	2012-13	2013-14	2014-15	2015-16
Aeronautical Revenues	186.2	193.7	442.4	513.7	647.1
Non-Aeronautical Revenues	99.4	104.1	108.7	134.1	133.3
O&M (excluding retirement benefits and CHQ/ RHQ Overheads)	143.4	161.4	195.8	234.2	254.0
Retirement benefits and CHQ/ RHQ Overheads	32.9	53.3	33.5	53.1	42.3
Depreciation as per IT Act	50.4	327.5	295.2	261.9	236.3
PBT	58.9	-244.4	26.6	98.5	247.7
Тах	19.1	0.0	9.0	33.5	85.7

Revised Aggregate Revenue Requirement

- 5.23. The ARR for the 1st control period has been revised based on adjustments detailed above.
 - 5.23.1. Change in depreciation rates as per Table 30
 - 5.23.2. Apportionment of CHQ/RHQ costs and change in tax calculation
 - 5.23.3. Lease rentals/rents from ground handling agencies and oil companies to be treated as aeronautical revenues
 - 5.23.4. Correction of present value factor for shortfall calculation

Table 15 - ARR as per Authority for the 1st control period – Single Till

Details (₹ crore)	2011-12	2012-13	2013-14	2014-15	2015-16
Average RAB	292.9	1,517.4	2,698.3	2,643.8	2,532.3
Return on Average RAB@14%	41.0	212.4	377.8	370.1	354.5
Operating Expenditure	176.3	214.7	229.3	287.4	296.3
Depreciation	18.4	80.5	83.5	154.0	156.6
Corporate Tax	19.1	0.0	9.0	33.5	85.7
Less- Revenue from services other than Regulated services	99.4	104.1	108.7	134.1	136.8
ARR as per Authority	155.4	403.6	590.9	710.8	756.3
Total ARR as per Authority			J. J.		2,617.0
Discounted ARR	155.4	354.0	454.7	479.8	447.8
PV of ARR for the control					1,891.7



Details (₹ crore)	2011-12	2012-13	2013-14	2014-15	2015-16
Period as on 01.04.2012					

5.24. Correspondingly, the shortfall during the 1st control period between permissible aeronautical revenues and actual aeronautical revenues is calculated as below:

Table 16 - ARR, yield and shortfall as per Authority for 1st control period – Single Till

No.	Components (₹ crore)	2011-12	2012-13	2013-14	2014-15	2015-16	Total
1	ARR for year (refer Table 15)	155.4	403.6	590.9	710.8	759.8	2,617.0
2	Aeronautical Revenue	186.2	193.7	442.4	513.7	643.6	1,979.6
3	Shortfall (+)/ Excess (-)	-30.8	209.9	148.4	197.1	112.8	637.4
	Future Value of shortfall (+)/ Excess (-) as on 01.04.2016	-59.2	354.5	219.9	256.2	128.5	899.9

- 5.25. Based on the material before it and its analysis, the Authority proposed the following:
 - 5.25.1. To true-up the 1st control period on the basis of Single Till
 - 5.25.2. To apportion CHQ/RHQ overheads on revenue basis.
 - 5.25.3. To consider the revenues from Cargo facility, Ground Handling Services and Supply of fuel to aircraft including land lease rentals as aeronautical revenue.
 - 5.25.4. To apply following depreciation rates:
 - 5.25.5. For asset types not defined under Companies Act (runway, taxiway and aprons): 3.33% based on useful life of 30 years from FY 2011-12 onwards
 - 5.25.6. For asset types defined under Companies Act: rates prevalent under the Companies Act 1956 till FY 2013-14 and as per the Companies Act 2013 from FY 2014-15 onwards as the effective date of implementation of the Companies Act 2013 is 01.04.2014. The depreciation rates as submitted by AAI and as considered by the Authority are given in Table 30.
 - 5.25.7. To consider shortfall of ₹ 899.9 crores in the 1st control period to be added to ARR for the 2nd control period.

Stakeholders' comments and Authority's observations Comments from IATA

5.26. We observe that in its true up calculations, AERA has used lower non-aeronautical



contributions than it originally envisaged for the period. This is a matter of concern, since adopting lower figures gives very little incentives to meet such targets. We have also noted that for the second control period AERA does mention that it would need proper justifications from the airport if non-aeronautical revenues are lower than expected. However, we do believe that some action would need to be taken for the first control period as well.

AAI's submission to IATA's comments

5.27. AAI stated that AERA in its CP has mentioned that "The Authority proposes that non-aeronautical revenues will be trued up if it is higher than the projected revenues. In case there is a shortfall, true-up would be undertaken only if the Authority is satisfied that there are reasonably sufficient grounds for not realizing the projected revenues" Further, AAI stated that in the first control period the Non-Aeronautical Revenue in most of the cases are more than initial projections.

Authority's examination of IATA's comments and AAI's submission to IATA's comments

5.28. The Authority has noted comments from IATA related to true-up of non-aeronautical revenues for the first control period of NSCBIA and the response of AAI to IATA's comments. The Authority in its Order No. 35/ 2012-13 for Kolkata Airport has provided detailed reasoning and passed the below order on true-up of non-aeronautical revenues:

"The Authority decides to true up the non-aeronautical revenue based on the actual non-aeronautical revenue at NSCBIA during the current Control Period while determining the tariffs for the next Control Period."

Accordingly, the Authority has trued-up the non-aeronautical revenues of the 1st control period based on actuals.

Decision No. 2. True-up for the 1st control period

- 2.a The Authority decides to true-up the 1st control period on the basis of Single Till
- 2.b The Authority decides to apportion CHQ/RHQ overheads on revenue basis.



- 2.c The Authority decides to consider the revenues from Cargo facility, Ground Handling Services and Supply of fuel to aircraft including land lease rentals as aeronautical revenue.
- 2.d The Authority decides to apply the following depreciation rates.
 - i) For asset types not defined under Companies Act (runway, taxiway and aprons):
 3.33% based on useful life of 30 years from FY 2011-12 onwards
 - ii) For asset types defined under Companies Act: rates prevalent under the Companies Act 1956 till FY 2013-14 and as per the Companies Act 2013 from FY 2014-15 onwards as the effective date of implementation of the Companies Act 2013 is 01.04.2014. The depreciation rates as submitted by AAI and as considered by the Authority are given in Table 30.
- 2.e The Authority decides to consider shortfall of ₹ 899.9 crores in the 1st control period to be added to ARR for the 2nd control period.

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6. Traffic forecast

6.1. The traffic growth rates as submitted by AAI for 2nd control period are as follows:

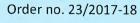
Table 17 - Traffic Growth rates assumed by AAI for the 2nd control period

		Passenger		Air Traffic Movements (ATM)			
YEAR	Domestic	International	Combined	Domestic	International	Combined	
2016-17	16%	3%	14%	12%	2%	10%	
2017-18	10%	7%	10%	6%	5%	6%	
2018-19	10%	7%	10%	6%	5%	6%	
2019-20	10%	7%	10%	6%	5%	6%	
2020-21	10%	7%	10%	6%	5%	6%	

- 6.2. AAI submitted that traffic growth rate for FY 2016-17 is based on extrapolation of actual traffic data from April, 2016 to February, 2017.
- 6.3. As part of clarifications provided by AAI dated 09.05.2017, AAI has revised the traffic growth rates for FY 2016-17 as per actuals for the year.
- 6.4. AAI submitted that the international ATM traffic in FY 2015-16 has increased by 18% which is higher than the 10-year CAGR due to flights diverted to Kolkata Airport from Nepal because of fuel shortage caused by blockade at Nepal border in FY 2015-16.
- 6.5. AAI submitted that the negative growth in FY 2016-17 for international ATM traffic of 5% is due to shift to larger aircrafts from smaller aircrafts operated by airlines at NSCBIA.
- 6.6. AAI submitted that the low growth in FY 2016-17 of international passenger traffic of 4% compared to 10-year CAGR is due to the withdrawal of operations by United Bangla airline at the Kolkata Airport.

Authority's Examination

- 6.7. The Authority observed that the actual traffic data is available for FY 2016-17 for NSCBIA. Accordingly, AAI submitted that traffic growth rate for FY 2016-17 can be revised by the Authority based on actual traffic during FY 2016-17. The Authority had proposed to revise traffic growth rates for FY 2016-17 as per Table 19.
- 6.8. The Authority calculated CAGR (Compounded Annual Growth Rate) for ATM and passenger traffic from FY 2010-11 to FY 2015-16 (5 year CAGR) and from FY 2005-06 to





FY 2015-16 (10 year CAGR) for NSCBIA. The details have been provided in table below:

Table 18 - CAGR for Traffic at NSCBIA

-	Growth rates as per AAI (FY18 to FY21)	10 Year CAGR (FY06 to FY16)	5 Year CAGR (FY11 to FY16)					
Passenger								
Domestic	10%	11%	5%					
International	7%	11%	9%					
		ATM						
Domestic	6%	7%	1%					
International	5%	8%	7%					

- 6.9. After evaluation of 5 and 10 year CAGR of traffic, the Authority is of the view that 10 years CAGR provides more realistic traffic growth rates for future projections of domestic passenger and ATM traffic given the introduction of RCS by the government and recent growth in passenger traffic in India. Hence, the Authority had proposed to adopt growth rates for domestic passenger and ATM traffic from FY 2017-18 to FY 2020-21 based on 10 years CAGR.
- 6.10. The Authority had proposed to consider the growth rate as submitted by AAI for international passenger and ATM traffic due to volatility of international traffic in last few years.

Table 19 - Traffic growth rates and Traffic as considered by Authority for the 2nd control period

		Passenger	1.011	14,7	ATM		
YEAR	Domestic	International	Combined	Domestic	International	Combined	
ie	Growth Rates						
2016-17	28%	4%	24%	24%	-5%	19%	
2017-18	11%	7%	11%	7%	5%	7%	
2018-19	11%	7%	11%	7%	5%	7%	
2019-20	11%	7%	11%	7%	5%	7%	
2020-21	11%	7%	11%	7%	5%	7%	
		1 3 0	Traffic				
2016-17	13,589,468	2,230,071	15,819,539	105,783	18,371	124,154	
2017-18	15,113,297	2,386,176	17,499,473	113,431	19,290	132,720	
2018-19	16,807,997	2,553,208	19,361,205	121,631	20,254	141,885	
2019-20	18,692,729	2,731,933	21,424,662	130,424	21,267	151,691	



	Passenger			ATM			
2020-21	20,788,801	2,923,168	23,711,970	139,853	22,330	162,183	

- 6.11. The Authority had proposed to true-up traffic as per actual growth achieved during the current control period at the time of determination of tariff for 3rd control period as explained in earlier orders of the Authority.
- 6.12. Based on the material before it and its analysis, the Authority proposed the following:
 - 6.12.1. To consider the ATM and passenger traffic as per Table 19.
 - 6.12.2. To true up the traffic volume (ATM and Passengers) based on actual traffic.

Stakeholders' comments and Authority's observations

Comments from IATA

- 6.13. To more accurately predict future growth trends and ensure a comprehensive approach to forecasting is taken, we recommend the following in addition to taking account of historical trends over 10 years:
 - 6.13.1. Consultation with airlines currently operating at the airport to understand and their plans over the next 5 years, including route development and aircraft acquisitions. This should be an integral part of the consultation process to inform the airports and AERA's thinking from an early stage in the process and a pre-requisite to forecasts being agreed i.e. when forecasts are initially being revised or formed for the net 5 year period. The airport authority can then aggregate the information from multiple airlines and consider its impact on forecasts.
 - 6.13.2. We also request AAI consults on its traffic forecast assumption in more detail than the high level information provided. For instance:
 - 6.13.3. Are any demand shocks built into the baseline?
 - 6.13.4. A more detailed explanation of why a shift to larger aircraft has resulted in negative INT carrier growth, as we would usually expect this to increase capacity unless there is a reduction in frequency
 - 6.13.5. Will the loss of United Bangla airlines from Kolkata be an ongoing trend, or will this demand be replaced.



- 6.13.6. Macroeconomic forecasts should also be considered in addition to historical growth trends to take broader economic factors into account, such as GDP and living standards, and airport demographics. While these factors are more relevant to longer term forecasting, some consideration and weightage should be considered in-line with industry best practices.
- 6.13.7. At larger airports we would generally recommend a Baseline, High and Low forecast is plotted to account for any depressions or shocks in the market, or account for any unforeseen elements. Similarly, what if traffic forecast growth materialises at a faster rate of growth than the agreed base?
- 6.14. We suggest this information is provided and consulted upon before any final decision is taken by AERA on traffic forecasts for the second control period.

AAI's submission to IATA's comments

- 6.15. AAI stated that the traffic growth projected by AAI for the FY 2017-18 to FY 2020-21 are as follows: Domestic Passenger 10%; Domestic ATM 6%; International Passenger 7% and International ATM 5%.
- 6.16. Further, AAI stated that the traffic growth projected by AERA on the basis of last 10 years CAGR for the FY 2017-18 to FY 2020-21 are as follows: Domestic Passenger 11%; Domestic ATM 7%; International Passenger 11% and International ATM 8%.
- 6.17. The traffic growth rate would be trued up based on actual traffic in 2nd control period while determining tariffs for the 3rd control period. The negative growth in FY 2016-17 for international ATM traffic of -5% is due to shift to larger aircrafts from smaller aircrafts operated by airlines at Kolkata Airport. The basis for traffic projection of Passenger and Aircraft Traffic of AAI are as under:
 - 6.17.1. Past trends
 - 6.17.2. Econometric analysis & regression analysis
 - 6.17.3. Considering various economic factors & policy framework etc.

Authority's examination of IATA's comments and AAI's submission to IATA's comments

6.18. The Authority has noted comments from IATA related to traffic forecast and the response of AAI to IATA's comments.



- 6.19. The Authority has noted IATA's comment on the consultation with airlines. The Authority releases the consultation paper for stakeholder consultations in which airlines are also invited. The Authority would appreciate inputs from airlines in such a consultative process. Further, in case airlines submits a marketing study, the Authority would consider it in its traffic forecast.
- 6.20. The Authority has given careful consideration to IATA's comments on the estimation of baseline, high and low traffic forecast. Since, the Authority decides to true-up traffic forecasts based on actuals, the impact due to change in traffic projections would be adjusted in the subsequent control period.

Decision No. 3. Traffic Forecast

- 3.a The Authority decides to consider the ATM and passenger traffic as per Table 19.
- 3.b The Authority decides to true up the traffic volume (ATM and Passengers) based on actual traffic in 2nd control period while determining tariffs for the 3rd control period.

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7. Allocation of Assets (Aeronautical and Non-Aeronautical)

- 7.1. Under Hybrid Till, only aeronautical assets are included as part of the Regulatory Asset Base. As a result of the shift from Single Till to Hybrid Till at the end of 1st control period, the assets need to be segregated and opening RAB for 2nd control period needs to be recalculated.
- 7.2. For the allocation of assets between aeronautical and non-aeronautical services, AAI had divided assets into aeronautical, non-aeronautical and common components. Common components have been further segregated into aeronautical and non-aeronautical assets by applying one of the following ratios:
 - a) Terminal Area Ratio ratio of aeronautical area to non-aeronautical area (applied for Terminal related assets)
 - b) Employee Ratio ratio of staff providing commercial services (17 employees) to total staff (1,013 employees) and ratio of staff providing aeronautical services (921 employees) to total staff (1,013 employees). The operational expenditure of cargo and manpower (75 employees) has not been considered.
 - c) Operational Building ratio ratio based on area utilization for 60.35% Aeronautical,
 3.46% Non-Aeronautical and 36.19% for Eastern Region usage
 - d) Quarter ratio for residential building Based on employees allotted quarters (2.56%, 3.21% and 94.23% for cargo, non-aero and aeronautical components respectively)
- 7.3. The allocation of gross block of assets as on 01.04.2016 as submitted by AAI is given in the table below:



Table 20 – Allocation of gross block of assets as on 01.04.2016 between aeronautical and non-aeronautical services as submitted by AAI

Sr. No.	Assets	Aero Assets	Total Assets	% Aero
		(₹ crore)	(₹ crore)	
1	Free hold land	1.6	1.6	100%
2	Runways, Taxiways & Aprons	265.7	265.7	100%
3	Roads bridges & culvert	77.0	78.0	99%
4	Terminal building	1,770.9	1,891.0	94%
5	Cargo complex	0.0	42.1	0%
6	Temporary building	1.6	1.6	100%
7	Residential building	14.4	14.8	97%
8	Security fencing – temporary	2.0	2.0	100%
9	Security fencing wall	10.4	10.4	100%
10	Security fencing	2.3	2.3	100%
11	Ancillary building	23.5	26.5	89%
12	Computer IT & hardware	20.1	21.0	96%
13	Software & intangible	1.0	1.2	84%
14	Plant & machinery	99.1	99.1	100%
15	Tools	23.9	23.9	100%
16	Equipment	2.0	2.0	100%
17	Vehicle	0.9	0.9	100%
18	Heavy vehicles	0.8	0.8	100%
19	Vehicle car & jeep	2.4	2.4	100%
20	Electrical installations	593.2	595.9	100%
21	Air conditioning equipment	11.0	11.1	99%
22	Electronics installation	51.5	51.5	100%
23	Typewriter & other office equipment	0.9	0.9	100%
24	Furniture & fixture	18.9	19.0	99%
25	X ray baggage machine	86.0	86.0	100%
26	CFT & fire fighting	51.6	51.6	100%
	Total	3,132.7	3,303.4	95%

Authority's Examination

Allocation based on Terminal Area Ratio

7.4. AAI submitted the workings for the calculation of aeronautical area to non-aeronautical area ratio vide letter dated 06.03.2017.

Table 21 – Workings of Terminal Area Ratio calculation as submitted by AAI for FY 2015-16

S. No.	Category	Integrated Terminal Building (Sq.m)
1	Ground Handling	44.6
2	Airlines 1	2,583.1
3	Airlines 2	2,608.8
4	Regulatory Bodies	2,182.3
5	Commercial Agencies	7,281.8
6	Transit passenger accommodation	391.2
	Total Non-aeronautical area	15,091.8
	Total Terminal area	224,162.0
	TB Ratio	6.73%

- 7.5. The Authority observed that the percentage of non-aeronautical area is lower compared to similar airports. The Authority had proposed to adopt 92.5% as aeronautical area for asset allocation of Terminal related assets to encourage growth of NAR which would cross-subsidize aeronautical charges.
- 7.6. Specific assets under Furniture & Fixtures, Plant & Machinery, Tools, Equipment and type writer & other office equipment inside Terminal Building have been considered as aeronautical by AAI. The Authority had proposed to allocate these assets in the ratio of 92.5% to 7.5%.
- 7.7. The Authority noted that the costs of hangars have been excluded from aeronautical RAB.
- 7.8. The Authority had proposed to consider car park related assets as 100% non-aeronautical assets.
- 7.9. Specific assets under Electrical installations, Air conditioning equipment and Electronics installation related to the Terminal Building have been considered as aeronautical by AAI. The Authority had proposed to allocate these assets in the ratio of 92.5% to 7.5%.
- 7.10. Assets related to vehicles have been considered as aeronautical assets by AAI. The Authority had proposed to use the employee ratio of 91% (ratio of employees for aeronautical activities to total employees) for allocation of specific assets related to vehicles (Vehicle Cars & Jeep).
- 7.11. The Authority requested AAI to clarify the use of old terminal building at Kolkata

 Order no. 23/2017-18

Airport after the commissioning of New Integrated Terminal Building. AAI in their clarification dated 29.06.2017 submitted that the old terminal building is being used as Cargo Terminal and assets for old terminal building have been excluded from RAB of 2nd control period.

7.12. The Authority had noted that only few cargo related assets have been excluded by AAI from RAB (remaining cargo assets have been included as part of RAB) while all expenses and revenues from cargo have been excluded completely while preparing the MYTP for 2nd control period. As part of the clarifications provided dated 09.05.2017 and 29.05.2017, AAI submitted that cargo assets, expenses and income have not been considered in the 2nd control period. As per AAI clarifications, AAI cargo logistics and allied services company limited (AAICLAS) is managing cargo activities at Kolkata Airport, which is 100% subsidiary of AAI. AAICLAS would file cargo MYTP of Kolkata separately. As per AAI's submission dated 12.10.2017, the Authority notes that the accounts for cargo operations are now booked (FY 2017-18) under AAICLAS for NSCBIA. Hence, the Authority decides to include Cargo assets, revenues and operational expenditure from 01.04.2016 till 31.03.2017 and decides to exclude them from 01.04.2017 till 31.03.2021 while determination of tariff in the second control period. Further, the Authority notes that there is no clarity on the transfer of cargo assets to AAICLAS as of now. The Authority will take a view on this while truing up in the 3rd control period based on the decisions taken by the AAI.

7.13. The asset allocation proposed by Authority is tabulated below:

Table 22 – Change in allocation of gross block of assets existing as on 01.04.2016 between aeronautical and non-aeronautical services excluding cargo assets proposed by the Authority

Sr. No.	Particulars	Aero Assets	Justification		
1	Roads bridges & culvert	90.1%	Total assets are ₹ 78.0 crores out of which ₹ 70.3 crores are purely aeronautical assets. Cargo and car park related assets have been excluded from aeronautical RAB.		
2	Terminal building	92.1%	Total assets are ₹ 1,891.0 crores out of which ₹ 54.1 crores are aeronautical assets and common		



Sr. No.	Particulars	Aero Assets	Justification			
			assets are ₹ 1,831.1 crores which have been allocated based on 92.5% ratio towards aeronautical component based on terminal building area for terminal related assets and 60.35% ratio towards aeronautical component based on operational building area.			
3	Residential building	95.8%	Total assets are ₹ 14.8 crores out of which ₹ 4.0 crores are purely aeronautical assets and common assets are ₹ 10.8 crores which have been allocated based on 94.23% ratio towards aeronautical component based on quarters' ratio.			
4	Ancillary building	88. 1 % सत्या	Total assets are ₹ 26.5 crores out of which ₹ 17.1 crores are purely aeronautical assets and common assets are ₹ 6.7 crores which have been allocated based on 92.5% ratio towards aeronautical component based on terminal building area for terminal related assets. Cargo related assets have been excluded from aeronautical RAB. Car park related assets have been considered as non-aeronautical.			
5	Computer IT & hardware	84.2%	Total assets are ₹ 21.0 crores out of which ₹ 4.8 crores are purely aeronautical assets and common assets are ₹ 14.0 crores which have been allocated based on 92.5% ratio towards aeronautical component based on terminal building area for terminal related assets and direct allocation of computers for aero, cargo and non-aeronautical activities. Cargo related assets have been excluded from aeronautical RAB.			
6	Software &intangible	6.1%	Total assets are ₹ 1.2 crores out of which common assets are ₹ 0.1 crores which have been allocated based on direct allocation of computers for aero, cargo and non-aeronautical activities. Cargo related assets have been excluded from aeronautical RAB.			
7	Plant & machinery	77.0%	Total assets are ₹ 99.1 crores out of which ₹ 29.0 crores are purely aeronautical assets and common assets are ₹ 51.2 crores which have been allocated based on 92.5% ratio towards aeronautical component based on terminal			



Sr. No.	Particulars	Aero Assets	Justification			
	0		building area for terminal related assets. Cargo related assets have been excluded from aeronautical RAB.			
8	Tools	95.9%	Total assets are ₹ 23.9 crores out of which ₹ 12.7 crores are purely aeronautical assets and common assets are ₹ 11.1 crores which have been allocated based on 92.5% ratio towards aeronautical component based on terminal building area for terminal related assets. Cargo related assets have been excluded from aeronautical RAB.			
9	Equipment	70.5%	Total assets are ₹ 2.0 crores out of which ₹ 1.4 crores are purely aeronautical assets. Cargo related assets have been excluded from aeronautical RAB.			
10	Vehicle Car & Jeep	90.9%	Total assets are ₹ 2.4 crores which have been allocated based on 90.919% ratio towards aeronautical component based on employees' ratio. Cargo related assets have been excluded from aeronautical RAB.			
11	Electrical installations	92.3%	Total assets are ₹ 595.9 crores out of which ₹ 86.7 crores are purely aeronautical assets and common assets are ₹ 503.3 crores which have been allocated based on 92.5% ratio towards aeronautical component based on terminal building area for terminal related assets. Cargo related assets have been excluded from aeronautical RAB.			
12	Air conditioning equip	92.1%	Total assets are ₹ 11.1 crores out of which ₹ 8.8 crores are purely aeronautical assets and common assets are ₹ 1.5 crores which have been allocated based on 92.5% ratio towards aeronautical component based on terminal building area for terminal related assets. Cargo related assets have been excluded from aeronautical RAB.			
13	Electronics installation	95.9%	Total assets are ₹ 51.5 crores out of which ₹ 42.6 crores are purely aeronautical assets and common assets are ₹ 7.4 crores which have been allocated based on 92.5% ratio towards aeronautical component based on terminal building area for terminal related assets. Cargo			



Sr. No.	Particulars	Aero Assets	Justification
			related assets have been excluded from aeronautical RAB.
14	Furniture & fixture	83.0%	Total assets are ₹ 19.0 crores out of which ₹ 8.0 crores are purely aeronautical assets and common assets are ₹ 10.4 crores which have been allocated based on 92.5% ratio towards aeronautical component based on terminal building area for terminal related assets and 60.35% ratio towards aeronautical component based on operational building area. Cargo related assets have been excluded from aeronautical RAB.
15	CFT & Firefighting	98.8%	Total assets are ₹ 51.6 crores out of which ₹ 51.0 crores are purely airport related aeronautical assets. Cargo related assets have been excluded from aeronautical RAB.

- 7.14. The cost of land has been excluded from the RAB of 2nd control period as in Para 5.11.
- 7.15. The allocation of gross block of assets as on 01.04.2016 as considered by the Authority based on revised asset allocation is given in the table below. As per para 7.12, for the year FY 2016-17, the RAB includes the cargo assets (column % aero including cargo). For the remainder of second control period, cargo assets have been excluded (column % aero excluding cargo).

Table 23 – Allocation of gross block of assets as on 01.04.2016 between aeronautical and non-aeronautical services as considered by the Authority

Sr. No.	Assets	Total Assets (₹ crore)	Aero Assets including cargo (₹ crore)	% Aero including cargo	Aero Assets excluding cargo (₹ crore)	% Aero excluding cargo
1	Free hold land				14	-
2	Runways, Taxiways & Aprons	265.7	265.7	100%	265.7	100%
3	Roads bridges & culvert	78.0	71.7	92%	70.3	90%
4	Terminal building	1,891.0	1,741.4	92%	1,741.4	92%
5	Cargo complex	42.1	42.1	100%	0.0	0%
6	Temporary building	1.6	1.6	100%	1.6	100%
7	Residential building	14.8	14.5	98%	14.2	96%
8	Security fencing –	2.0	2.0	100%	2.0	100%



Sr. No.	Assets	Total Assets (₹ crore)	Aero Assets including cargo (₹ crore)	% Aero including cargo	Aero Assets excluding cargo (₹ crore)	% Aero excluding cargo
	temporary					
9	Security fencing wall	10.4	10.4	100%	10.4	100%
10	Security fencing	2.3	2.3	100%	2.3	100%
11	Ancillary building	26.5	24.0	91%	23.3	88%
12	Computer IT & hardware	21.0	19.8	94%	17.7	84%
13	Software & intangible	1.2	1.0	85%	0.1	6%
14	Plant & machinery	99.1	95.3	96%	76.4	77%
15	Tools	23.9	23.1	96%	22.9	96%
16	Equipment	2.0	2.0	100%	1.4	70%
17	Vehicle	0.9	0.9	100%	0.9	100%
18	Heavy vehicles	0.8	0.8	100%	0.8	100%
19	Vehicle car & jeep	2.4	2.4	98%	2.2	91%
20	Electrical installations	595.9	554.4	93%	550.1	92%
21	Air conditioning equipment	11.1	10.7	97%	10.2	92%
22	Electronics installation	51.5	50.9	99%	49.4	96%
23	Typewriter & other office equipment	0.9	0.9	100%	0.9	98%
24	Furniture & fixture	19.0	15.9	84%	15.8	83%
25	X ray baggage machine	86.0	86.0	100%	86.0	100%
26	CFT & fire fighting	51.6	51.6	100%	51.0	99%
	Total	3,301.9	3,091.4	94%	3,017.0	91%

7.16. Based on the material before it and its analysis, the Authority proposed to allocate assets as on 1st April 2016 between aeronautical and non-aeronautical assets as detailed in Table 23.

Stakeholders' comments and Authority's observations Comments from IATA

7.17. We have raised concerns about cost allocation throughout all our submissions to AERA, and this is no exception. While the proposed adjustment for the terminal building cost allocation is better than that proposed by AAI (92.1% to aeronautical vs 94% proposed by AAI), we still strongly believe that common assets should be allocated



in a more equitable way (i.e. 50:50) rather than the 92.5/7.5 ratio assumed by AERA. To put things into perspective, and based on the figures provided for 2015-16, and based on AERA's cost allocation we have calculated that the return on non-aeronautical activities (before tax) are higher than 40%..

AAI's submission to IATA's comments

7.18. AAI stated that the expenses and assets of non-aeronautical activities are not considered while calculating tariff of second control period (1/4/2016 to 31/3/2021). AAI has projected aero and non-aero Allocation taking into proposed non-aero activities as 6.56% as non-aero and 93.44% as aeronautical activities. Further, AAI stated that AERA has allocated aero vs non-aero activities as 92.5% and 7.5% respectively. The common assets have been allocated on suitable ratios such as terminal building ratio, employee ratio & quarter ratio etc.

Authority's examination of IATA's comments and AAI's submission to IATA's comments

7.19. The Authority has noted comments from IATA related to asset allocation between aeronautical and non-aeronautical assets for NSCBIA and the response of AAI to IATA's comments. The Authority has provided the rationale for allocating the assets and O&M expenditure into aeronautical and non-aeronautical components in the Consultation Paper. For example, employee costs have been allocated based on the normative ratio of 95% to 5% and terminal related assets have been allocated into aeronautical assets based on the normative terminal building ratio of 92.5% to 7.5%. The Concessionaires make a lot of investments in setting up their businesses in the space provided by the airport operator and IATA has not considered these investments while determining the return on the investments.

Decision No. 4. Allocation of assets between Aeronautical and Non-aeronautical services

4.a The Authority decides the allocation of assets as on 1st April 2016 between aeronautical and non-aeronautical assets as detailed in Table 23.



8. Opening Regulatory Asset Base for the Second control period

8.1. Opening RAB for the 2nd control period under Hybrid Till as per AAI submission dated 06.03.2017 is ₹ 1,694.2 crores

Table 24 - Calculation of opening RAB as on 1st April 2016 as per AAI submission – Hybrid Till

S.	Particulars	Amount
No.		(₹ crore)
1	Original Cost of Airport Aeronautical Assets excluding	
	ANS related assets as on 01.04.2011	532.5
2	Aeronautical asset addition during the 1 st control period	2,600.2
3	Cost of Aeronautical Assets [(1)+(2)] as on 01.04.2016	3,132.7
4	Accumulated Depreciation as on 01.04.2016	1,438.5
5	Opening RAB[(3)-(4)] as on 01.04.2016	1,694.2

- 8.2. The Authority had proposed to adopt depreciation rates as detailed earlier in Para 5.7 for calculating RAB for the 2nd control period.
- 8.3. The Authority had proposed the allocation of assets between aeronautical and non-aeronautical assets as detailed in Table 23.
- 8.4. Based on revised depreciation rates and revised asset allocation, the opening RAB for 2nd control period considered by the Authority under Hybrid Till is ₹ 2,311.0 crores.

Table 25 - Calculation of opening RAB as on 1st April 2016 as per the Authority – Hybrid Till

S. No.	Particulars	Amount (₹ crore)
1	Original Cost of Airport Aeronautical Assets excluding ANS related assets as on 01.04.2011	555.7
2	Aeronautical asset addition during the 1 st control period	2,535.7
3	Cost of Aeronautical Assets [(1)+(2)] as on 01.04.2016	3,091.4
4	Accumulated Depreciation as on 01.04.2016	780.4
5	Opening RAB[(3)-(4)] as on 01.04.2016	2,311.0

Decision No. 5. Opening Regulatory Asset Base for the 2nd control period

5.a. The Authority decides to consider the opening regulatory base for the 2nd control period under Hybrid Till as ₹ 2,311.0 crores.



9. Capital Expenditure for the Second control period

9.1. AAI has in their submissions dated 06.03.2017 submitted aeronautical capital expenditure of ₹ 980.5 crores for the 2nd control period which was revised to ₹ 787.6 crores during submissions dated 09.05.2017 and 29.06.2017 as shown below:

Table 26 – Aeronautical assets to be capitalized at NSCBIA for 2nd control period as per AAI

S.N.	Particulars (₹ crore)	2016-17	2017-18	2018-19	2019-20	2020-21
1	Runways taxiways & aprons	0.0	314.6	0.0	0.0	30.0
2	Roads bridges & culvert	0.0	97.7	0.0	80.0	50.0
3	Terminal building	0.0	39.6	0.0	0.0	175.0
4	Temporary building	0.0	0.3	0.0	0.0	0.0
5	Residential building	0.0	13.9	0.0	0.0	0.0
6	Ancillary building	0.0	5.2	0.0	0.0	0.0
7	Equipment	0.0	1.2	0.0	0.0	0.0
8	Electrical installations	1.0	172.1	0.0	0.0	0.0
	Total (₹ 980.5 crores)	1.0	644.5	0.0	80.0	255.0
	Revised capital expenditure su	ubmitted b	y AAI date	d 09.05.20	17 and 29.	06.2017
1	Runways taxiways & aprons	4.8	105.6	212.0	0.0	0.0
2	Roads bridges & culvert	11.4	5.0	0.0	104.0	0.0
3	Terminal building	8.3	23.6	175.0	0.0	0.0
4	Temporary building	0.0	0.3	0.0	0.0	0.0
5	Residential building	0.9	0.0	0.0	0.0	0.0
6	Ancillary building	2.6	2.9	0.0	0.0	0.0
7	Equipment	0.0	2.5	0.0	0.0	0.0
8	Electrical installations	4.2	124.6	0.0	0.0	0.0
	Total (₹ 787.6 crores)	32.1	264.5	387.0	104.0	0.0

- 9.2. AAI has submitted following details of the proposed capital works to be undertaken during the control period:
 - 9.2.1. Strengthening main runway (₹ 61.7 crores under Runways, Taxiways & Apron in FY 2017-18)

The main runway was last resurfaced in FY 2003-04. In order to improve the riding quality, resurfacing was necessary. Further the main runway has been equipped with CAT-III B lighting system including navigational aids for smooth movement of aircraft during low visibility.

9.2.2. Construction of Isolation bay (₹ 31 crores under Runways, Taxiways & Apron



in FY 2017-18)

The dumbbell / turning pad at 01L end of secondary runway was used as Isolation bay. This restricts operation of the secondary runway. Accordingly the construction of Isolation bay at Kolkata Airport was a mandatory requirement as per Civil Aviation requirement.

9.2.3. Extension of F taxi track towards Northern side (₹ 50 crores under Runways, Taxiways & Apron in FY 2018-19)

In order to enhance the capacity of Secondary runway, the extension of 'F' taxi track on the northern side is an essential requirement, since separation distance between secondary runway and alpha taxi track restricts aircraft movement.

9.2.4. Resurfacing secondary runway 19R/01L (₹ 40 crores under Runways, Taxiways & Apron in FY 2018-19)

The secondary runway was last resurfaced on 2005-06. As the bituminous pavement has lost its life in binding properties, pitting, bleeding and patches with slippage cracks resurfacing is an urgent requirement.

9.2.5. Construction of remote bays - Eastern side of main runway (₹ 92 crores under Runways, Taxiways & Apron in FY 2018-19)

With the introduction of new flights by the existing airlines and new airlines including RCS operation, Kolkata Airport is a hub for the eastern zone. These remote bays are required for aircraft movement and night parking.

9.2.6. Extension of Apron on South side of ITB (₹ 30 crores under Runways, Taxiways & Apron in FY 2018-19)

Presently the area identified is a low lying area and the scheme is at a conceptualized stage by the Planning Department.

9.2.7. Construction of 03 hangars with associated apron and taxi track towards Narayanpur side (₹ 104 crores under Roads, Bridges & culverts in FY 2019-20) The existing hangars at Kolkata Airport was constructed prior to world war two. In order to increase parking bays, these hangars which are in a dilapidated



- condition require to be demolished. Accordingly 03 nos. new hangars with associated apron and taxi track are required to be constructed.
- 9.2.8. Extension of Airside corridor T2 International & Domestic (₹ 175 crores under Terminal Building in FY 2018-19)

The passenger movement has already reached 16 million (approx.) in FY 2016-17. In order to meet the present average growth rate of 20% (considering average of past 02 years growth), the expansion of Security Hold Area is essential as the passenger movement is likely to reach 19 million by the end of FY 2017-18 and so on. Hence, there is a need for expansion for air side corridor for which the capital expenditure is planned.

9.2.9. Provision of Solar Power Plant (₹ 92.3 crores total, ₹ 4.7 crore under Terminal Building in FY 2016-17 and ₹ 87.6 crore under Electrical Installation in FY 2017-18)

The generation of green power is a national agenda where GOI has set a target of 175 GW of renewable power installed capacity by the end of 2022. As a part to fulfil the target as well as to save expenditure on electricity bills & sell the extra generated power if any, this scheme has been finalized in the meeting conveyed by the Chairman, AAI in the office of Secretary, MNRE on 17.05.2015 for generating 15MW power depending on space available at NSCBI Airport, Kolkata for this purpose.

Authority's Examination

- 9.3. The Authority requested AAI to submit the aeronautical capital expenditure to be incurred in FY 2016-17 and in 2nd control period based on actual capital expenditure in FY 2016-17. In response to this, AAI vide submission dated 09.05.2017 provided the revised aeronautical capital expenditure to be incurred in 2nd control period. AAI further submitted the revised capital expenditure in the meeting dated 29.06.2017. The Authority has accordingly updated the capital expenditure for the 2nd control period.
- 9.4. The Authority noted that AAI has considered capital expenditure towards modification of ceremonial lounge ITB (civil works and electrical works) as aeronautical capital Order no. 23/2017-18

expenditure in FY 2016-17 (₹ 0.8 crore) and FY 2017-18 (₹ 1.3 crore). The Authority had proposed to exclude capital expenditure towards modification of ceremonial lounge ITB since it was assumed to be a non-aeronautical asset in the Consultation Paper. However, AAI clarified on 03.11.2017 that the ceremonial lounge are used by passengers and AAI does not earn revenue from it. Hence, AAI submitted that capital expenditure for ceremonial lounge should be considered as aeronautical capital expenditure. Since the lounge is used by passengers, the Authority decides to include ceremonial lounge in the aeronautical capital expenditure (₹ 0.8 crore in FY 2016-17 and ₹ 1.3 crore in FY 2017-18) for 2nd control period.

- 9.5. The Authority noted that AAI has considered capital expenditure towards construction of 03 hangars with associated apron and taxi track towards Narayanpur side (₹ 104 crore) as aeronautical capital expenditure in FY 2019-20. The Authority had proposed to exclude capital expenditure towards construction of 03 hangars with associated apron and taxi track towards Narayanpur side as hangars have been considered as non-aeronautical assets.
- 9.6. The Authority noted that AAI has included capital expenditure towards provision of solar power plant (civil works as part of terminal building ₹ 4.7 crore in FY 2016-17 and electrical works as part of Electrical installation ₹ 87.6 crore in FY 2017-18) as 100% aeronautical capital expenditure in the 2nd control period. The Authority had proposed to consider the allocation of solar power plant capital expenditure based on 92.5% ratio as aeronautical capital expenditure.
- 9.7. The Authority had proposed to consider aeronautical capital expenditure for strengthening main runway (₹ 61.7 crore in FY 2017-18) and construction of isolation bay (₹ 31 crore in FY 2017-18) as submitted by AAI under runways, taxiways and apron.
- 9.8. The Authority had proposed to consider aeronautical capital expenditure for other miscellaneous works for runways, taxiways and aprons (₹ 4.8 crore in FY 2016-17 and ₹ 12.9 crore in FY 2017-18) as submitted by AAI.
- 9.9. The Authority had proposed to consider aeronautical capital expenditure for resurfacing secondary runway 19R/01L (₹ 40 crores in FY 2018-19) as submitted by AAI under



runways, taxiways and apron.

- 9.10. The Authority noted that the total capital expenditure for extension of F taxi track towards Northern side is ₹ 50 crores in FY 2018-19 with total area of 70,000 Sq.m and per sq. m. cost is ₹ 7,143 which is more than normative benchmark of ₹ 4,700 for Runway/taxiway and aprons (excluding earthwork up to subgrade level).
- 9.11. The Authority noted that the total capital expenditure for extension of apron on southern side of ITB is ₹ 30 crores in FY 2018-19 with total area of 42,300 Sq.m and per sq. m. cost is ₹ 7,092 which is more than normative benchmark of ₹ 4,700 for Runway/taxiway and aprons (excluding earthwork up to subgrade level).
- 9.12. The Authority noted that the total capital expenditure for construction of remote bays eastern side of main runway is ₹ 92 crores in FY 2018-19 for 23 bays with total area of 1,30,000 Sq.m. For construction of remote bays, per sq. m. cost is ₹ 7,077 which is more than normative benchmark of ₹ 4,700 for Runway/taxiway and aprons (excluding earthwork up to subgrade level).
- 9.13. The Authority requested justification from AAI for higher than normative benchmark costs for extension of F taxi track towards Northern side (₹ 50 crore), construction of remote bays Eastern side of main runway (₹ 92 crore) and extension of Apron on South side of ITB (₹ 30 crore). AAI, as per the clarification provided dated 11.07.2017, submitted that all the works mentioned herein are rigid pavements. Considering the soil condition of the proposed site and as per the structural design of rigid pavements done by AAI Structural Design cell of CHQ, the pavement consist of a sand and moorum filling, granular sub base, wet mix macadam, dry rolled lean concrete and finally pavement quality concrete as the top layer which are mandatorily required as per existing runway formation level. Accordingly, the rates work out based on DSR-2016 + up to date Cost Index of 28.43%, the cost per Sq.m works out to ₹ 7,100.
- 9.14. The Authority noted that the total capital expenditure for extension of airside corridor T2 International & Domestic is ₹ 175 crores in FY 2018-19 with total area of 16,500 Sq.m and per sq. m. cost is ₹ 1,06,061 which is more than normative benchmark of ₹ 65,000 for terminal building.



- 9.15. The Authority requested justification from AAI for higher than normative benchmark costs for extension of airside corridor T2 International and Domestic. AAI, as per the clarification provided dated 11.07.2017, submitted that the cost of terminal building has been assessed as per the specification adopted for the new Integrated Passenger Terminal Building which work out to ₹ 1,05,000 per Sq.m. The civil construction cost is ₹ 73,500 Sq.m and the cost for electrical & mechanical installation works out to ₹ 31,500 per Sq.m.
- 9.16. The Authority had proposed to revise the total capital expenditure for extension of F taxi track towards Northern side, construction of remote bays - Eastern side of main runway, extension of Apron on South side of ITB and extension of airside corridor T2 -International and Domestic based on normative benchmarks for FY 2015-16 and increase the benchmarks by WPI of 4.2% per annum till the year of capitalization as shown in Table 27. The Authority notes that any increase in benchmark normative rate is dependent on the schedule of capital expenditure, actual increase in cost indices, site, location, design and date of capitalization. The Authority shall consider these while reviewing the actual capital expenditure for determining the amount of capital expenditure to be considered for RAB. For the process of determination of capital expenditure, the Authority has used the same normative benchmark for the AAI airports in a given year and accordingly adjusted the normative benchmark rates. The Authority had asked AAI for detailed information on justification for exceeding the normative benchmarks. Due to lack of detailed information and in the interest of avoiding delays in fixing tariffs, the Authority had proposed to determine capital expenditure using norms at this stage. The Authority is aware of the shortcoming of this approach and therefore, shall undertake a study on reasonableness of capital expenditure after capitalization of these assets and make appropriate adjustments while determining tariffs for third control period. Based on the outcome of study and the fairness of the tender procedures followed for selection of contractor, the Authority had proposed to true-up capital expenditure at the time of tariff determination for 3rd आर्थिक विनियाम् control period.

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Table 27 – Capital expenditure for terminal building, apron and taxi track as proposed by the Authority

Sr. No.	Asset	Year	Area (sq. m.)	Inflation adjusted normative benchmark cost per unit area (₹ per sq. m.)	Allowed Capex (₹ cr.)
1	Extension of F taxi track towards Northern side	2019	70,000	5,317	37
2	Extension of apron on southern side of ITB	2019	42,300	5,317	22
3	Construction of remote bays - eastern side of main runway	2019	130,000	5,317	69
4	Extension of airside corridor T2 - International & Domestic	2019	16,500	73,539	121

- 9.17. The Authority had proposed to consider terminal building related capital expenditure (₹ 8.3 crore in FY2016-17, ₹ 8.7 crore in FY 2017-18, ₹ 121 crore in FY 2018-19) in 2nd control period based on 92.5% ratio for aeronautical capital expenditure (revised to ₹ 7.7 crore in FY2016-17, revised to ₹ 8.0 crore in FY 2017-18, revised to ₹ 107.7 crore in FY 2018-19). The Authority noted that the total capital expenditure for Construction of additional floor in Operational Office (₹ 13.0 crore) has been allocated into aeronautical assets using the operational building ratio of 60.35%. The Authority had proposed to consider the aeronautical capital expenditure for construction of additional floor in Operational Office (₹ 7.8 crore in FY 2017-18) as provided by AAI. The Authority had proposed to consider capital expenditure of construction of sub fire station (₹ 7.1 crore in FY 2017-18) as aeronautical capital expenditure as proposed by AAI.
- 9.18. The Authority had proposed to consider Electrical installation capital expenditure related to terminal building (₹ 4.2 crore in FY 2016-17 and ₹ 30.0 crore in FY 2017-18) in 2nd control period based on 92.5% ratio for aeronautical capital expenditure (₹ 3.9 crore in FY 2016-17 and ₹ 27.7 crore in FY 2017-18) instead of 100% aeronautical as submitted by AAI dated 09.05.2017. The Authority had proposed to consider the capital



- expenditure for augmentation of power supply for east side runway (₹ 7.0 crore in FY 2017-18) as aeronautical capital expenditure as proposed by AAI.
- 9.19. The Authority had proposed to consider the total aeronautical capital expenditure to be capitalized and added to RAB at ₹ 567.3 crores.

Table 28 - Revised aeronautical capital expenditure for 2nd control period as considered by the Authority

S.N.	Particulars (₹ crore)	2016-17	2017-18	2018-19	2019-20	2020-21
1	Runways taxiways & aprons	4.8	105:6	168.8	0.0	0.0
2	Roads bridges & culvert	11.4	5.0	0.0	0.0	0.0
3	Terminal building	7.7	23.0	112.2	0.0	0.0
4	Temporary building	0.0	0.3	0.0	0.0	0.0
5	Residential building	0.9	0.0	0.0	0.0	0.0
6	Ancillary building	2.6	2.9	0.0	0.0	0.0
7	Equipment	0.0	2.5	0.0	0.0	0.0
8	Electrical installations	3.9	115.8	0.0	0.0	0.0
	Total (₹ 567.3 crores)	31.2	255.1	281.1	0.0	0.0

- 9.20. The Authority had noted that the cost of the planned works is indicative. The Authority had proposed to consider the addition to aeronautical assets during the 2nd control period as given in Table 28 subject to true-up of RAB based on actual aeronautical asset addition, outcome of the study mentioned in para 9.16 and the actual costs as per the tender while determining tariffs for the 3rd control period.
- 9.21. In the 2nd control period, project works related to extension of F taxi track, construction of remote bays eastern side of main runway, extension of Airside corridor T2-Intenational & Domestic and provision of Solar Power Plant civil works are proposed to be taken up. These require user consultation as per the Guidelines. The Authority expects AAI to provide all the required project information as part of the consultation process with users.
- 9.22. Based on the material before it and its analysis, the Authority proposed the following:
 - 9.22.1. To consider allowable project cost of ₹ 567.3 crores and accordingly to reckon the amount of ₹ 567.3 crores as addition for total assets during the 2nd control period.



- 9.22.2. Directs AAI to undertake user stakeholder consultation process for major capital expenditure items as per the Guidelines.
- 9.22.3. To true-up the Opening RAB of the next control period depending on the capital expenditure incurred and date of capitalisation of underlying assets in a given year.

Stakeholders' comments and Authority's observations Comments from IATA

- 9.23. With respect to capital expenditure for 2nd control period, IATA submitted as follows: We appreciate AERA's efforts to hold AAI and airports to account in the consumer and Users interests, however meaningful consultation with the airline community from an early stage in the design process is a critical element that has been lacking in every capital investment programme to date that IATA has been involved with or made aware of. As per our previous meetings and comments, we implore AERA to fulfil its duties and enforce its Consultation Protocol in the consumers and Users interests. The alternative is to continue with mock consultations when decisions have already been taken by airports, and are subsequently marginally adjusted by AERA that is both ineffective, nor takes passengers or Users interest or requirements into account.
- 9.24. The only way consumer and User interests will be taken into account is if AERA supports IATA and the airline community to encourage and oblige Kolkata, and other major airports in India to constructively engage through a consultation process i.e.
 - 9.24.1. Ongoing consultation with subject matter experts on design and business case element (costs and benefits) from an early stage
 - 9.24.2. A dedicated consultation forum, with regular schedule meetings
 - 9.24.3. The requirement for transparency and details to be shared in order to enable Users to provide informed feedback
 - 9.24.4. The presence of AERA or it's nominated third party specialists to observe proceedings
 - 9.24.5. Where no forum exists, setting up an Airport Consultative Committee (ACC) will help to facilitate effective consultation



- 9.24.6. As a pre-requisite to investment we strongly recommend Airline support and consensus should be sought for each major project across the airline community as a key objective of the consultation process. This follows best practice consultation (i.e. UKCAA and London Heathrow).
- 9.24.7. For Kolkata, without a process of consultation or ability to at least review the capital expenditures on a project by project basis it is impossible to comment with any certainty from a User's perspective on the requirement for these investments. It is within this context that we would make the following points:
- 9.24.8. We support the application of AERA's approach to implement normative cost benchmarks to ensure a degree of capital efficiency and value for money is applied by constructively challenging AAI's cost plans. IATA strongly supports the need for detailed scrutiny from an independent third party to review the costs of major projects, however in addition we again reiterate the need for consultation with airlines, in order to ensure:
- 9.24.9. Solutions are fit for purpose and meet the needs of airlines i.e. Levels of Service, operational efficiency, asset reliability
- 9.24.10. Recognise that it is only through detailed consultation with Users that discussion on specification can be held.
- 9.24.11. Regarding airfield works (code F taxi extension, southern apron extension, construction of remote bays) as the airport is growing these projects may be appropriate to invest in, however we request further information to understand the benefits of each project i.e. specific metrics and benefits to demonstrate the need to invest to reduce congestion, taxi time or fuel burn, to support improvement in flow rates or reduce runway occupancy times.
- 9.24.12. We support AERA's assessment to reduce the capex regarding AAI's high terminal specification at least until that has been consulted upon with Users in detail, until a Business Case is shared, and airline support secured.
- 9.24.13. We agree with AERA that costs associated with the construction of 3 new hangars is disallowed.

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- 9.24.14. We would like to understand the Business case regarding installation of a solar power plant and the detailed rationale of its 92.5% allocation to aeronautical capital expenditure before allocating our support to it. Any benefits resulting from a reduction in utilities costs should be passed through to Users funding the investments.
- 9.24.15. Further comments we would make on capital expenditure that apply to Kolkata, Goa and any other major aeronautical expenditures are:
- 9.24.16. Inflation costs should be scrutinised by AERA's independent third party as part of its overall scrutiny of costs, as we should expect AAI's procurement team to offset a % of these costs through it's buying power and a competitive tendering process
- 9.24.17. As IATA has previously discussed with AERA, we strongly recommend the introduction of incentives to encourage the on-time delivery of major projects to the quality and specification agreed. Well proven regulatory mechanism such as "capital triggers" have been applied and had a positive impact at airports like London Heathrow.

AAI's submission to IATA's comments

- 9.25. AAI stated that Airport Users Consultative Committee (AUCC) meetings are conducted at airports for discussion of major capital works of that airports. All the stakeholders of that airport including AERA are invited for the meeting.
- 9.26. Further, AAI stated that AERA has followed normative approach for construction of Terminal Building and construction of pavements. (Runway, Taxiways and Apron). It has considered 4.2% per year as inflation for the purpose of normative approach. AERA has further stated that it would give to the expert for study of cost of major capital works of AAI for the purpose of normative approach.
- 9.27. Solar power plant at Kolkata Airport is generating electricity and supplying it to grid in the same line as electricity supplied by the Calcutta State Electricity Company Ltd. Moreover solar power per unit cost of generating electricity is lesser than the electricity generated by thermal power. The concessionaires are paying it to AAI on the basis of

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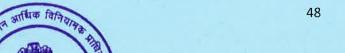
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actual consumption. Hence, it is requested to allow 100% of solar power plant as aeronautical asset.

Authority's examination of IATA's comments and AAI's submission to IATA's comments

- 9.28. The Authority has given careful consideration to the comments from IATA on the capital expenditure and the response of AAI to IATA's comments.
- 9.29. With respect to IATA's comment on the need to consult from an early stage and before projects are approved, the Authority notes that the capital expenditure for assets falling under Category 2 (more than minimum of 10% of opening RAB or ₹ 500 cr.), airport operators are required to undertake consultation with Users including airlines at Stage 1 (Needs Identification Stage) and Stage 3 (Detail project design stage) as per the AERA Guidelines, 2011. Further, the Authority has directed airport operators that an Authority's representative should be invited to become part of the stakeholder consultation meetings for capital expenditure. The Authority would appreciate constructive involvement of airlines in such a consultative process. The Authority would urge AAI to undertake user consultation process as per the norms.
- 9.30. The Authority does not have the mandate to monitor the on-time delivery of the major projects, its quality and specifications. But however, if a capital addition project is delayed due to any unjustifiable cause, the Authority will not consider any addition to cost of the project. The Authority notes the need for prompt investments for improvement of service quality at the airport.
- 9.31. The Authority notes the support of IATA to the Authority's normative approach on capital expenditure for Terminal Building, Runway, Taxiway and Apron. The impact due to cost indices would be considered as per the normative order, that is, Order No. 07/2016-17 issued by the Authority.
- 9.32. The Authority notes IATA's support to disallow the capital expenditure on hangars.
- 9.33. With respect to IATA's comment and AAI's response to IATA's comment on the allocation of solar power plant, the Authority notes that the power generated by solar power plant would be supplied to the grid. Hence, the power generated from the solar power plant is indirectly being used for aeronautical and non-aeronautical services at



the airport. Therefore, the Authority decided to allocate these assets based on the terminal building ratio (aeronautical area to non-aeronautical area) of 92.5% to 7.5%. Further, the power charges at NSCBIA have been reduced after commissioning of the solar power plant in the second control period.

AAI's submission on the asset additions in the 2nd control period

9.34. In respect of the capital expenditure, AAI submitted that the capitalization has been worked out on the basis of Normative Approach, the same may be reconsidered while finalizing the tariff. In respect of the reasons for additional costs, AAI submitted that Kolkata soil condition needs additional 100 mm sand & 300 mm moorum. Resultant additional cost of Rs. 105/- per sqm & Rs. 248/- per sqm respectively. AAI adopts CPWD system of estimating. Cost escalation at present over DSR 2016 is 28.43%. As per above, estimated cost per sqm works out to Rs. 7,100.00. Cost is likely to go further up due to GST impact and revision of minimum wages. These factors apply to cost of Terminal Building also.

Table 29 - As per Kolkata Airport soil conditions the normative benchmark cost/ sq. m. for pavement work as per structural design as provided by AAI

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SI. No.	Description of Item	Quantity	Unit	Rate (Rs.)	Amount (Rs.)	Remarks DSR 2016/Item No.
1	Sand filling (Design depth 300mm)	30	cum	917.00	27,510.0	I-2.27
2	Moorum filling (Design depth 300mm)	30	cum	643.2	19,296.0	I-16.3.1
3	Providing Granular base coarse (Design depth 350mm) for CBR 30	35	cum	2089.7	73,139.5	I-16.78.1
4	Wet Mix Macadum (Design depth 350mm)	35	cum	2132.25	74,628.7	I-16.79
5	Providing dry road lean concrete (Design depth 150mm)	15	cum	3331.95	49,979.2	I-16.80



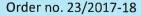
SI. No.	Description of Item	Quantity	Unit	Rate (Rs.)	Amount (Rs.)	Remarks DSR 2016/Item No.
6	Providing Pavement Quality Concrete (Design depth 450mm)	45	cum	6893.25	3,10,196.2	I-16.43.1
	Total				5,54,749.7	
	Add : Cost index 28.43% for Kolkata over DSR 2016				1,57,715.3	
	Cost per 100 sqm.		RAN		7,12,465.1	
	Cost per sqm.				7,124.65	
	Say		(69)		7,100.00	

Authority's examination of AAI's submission

9.35. The Authority has noted the comments from AAI on consideration of the capital expenditure determined based on the normative approach. The Authority noted that AAI has provided some additional information but the detailed estimates and information for inclusion of higher capex beyond normative approach is not yet available. Hence, the Authority decides to consider the capital expenditure based on the normative approach as provided in Table 27.

Decision No. 6. Capital Expenditure

- 6.a. The Authority decides to consider allowable project cost of ₹ 567.3 crores and accordingly to reckon the amount of ₹ 567.3 crores as addition to total assets during the 2nd control period.
- 6.b. The Authority directs AAI to undertake user stakeholder consultation process for major capital expenditure items as per the Guidelines.
- 6.c. The Authority decides to true-up the Opening RAB of the next control period depending on the capital expenditure incurred and date of capitalisation of underlying assets in a given year.



10. Depreciation

- 10.1. AAI has submitted that the depreciation rates used are as per AAI's approved accounting policy. The salient aspects of AAI's depreciation policy being followed are as under:
 - 10.1.1. Method of depreciation: straight line;
 - 10.1.2. 100% of depreciation rates of assets if assets are used in a financial year for 180 days or more. If the assets are used for less than 180 days in a year the depreciation is charged at 50% of the depreciation rates. This policy is effective from the financial year 2012-13;
 - 10.1.3. Residual value for each asset is taken as Re.1 balance to be provided by way of depreciation as per prescribed rates.

Authority's Examination

- 10.2. The Authority had noted that the depreciation policy of AAI is not in accordance with the depreciation rates adopted by the Authority in other private airports. AAI is a statutory body established under the AAI Act and it does not come under the Companies Act. The Board of AAI has approved the depreciation policy that has been adopted by AAI.
- 10.3. The Authority had noted that on some of the assets the depreciation charged by AAI is not in line with the Companies Act 2013. The Authority is of the view that adoption of depreciation rates as prescribed under the Companies Act at any point of time is appropriate, considering the variation in policies adopted by the airport operators. The Authority further had noted that there is no specific mention of the classes of assets viz. apron, taxiway and runway in the Companies Act 2013 or 1956 or in the Income Tax Act 1961.
- 10.4. In this regard, the Authority has separately commissioned a study to determine appropriate depreciation rates for regulation of airports in line with the provisions of the Companies Act 2013. The Authority had proposed to consider the recommendations of the study on depreciation and finalize the depreciation rates in consultation with the stakeholders. It shall make necessary adjustments in RAB and आधिक विनियान्त्र

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true up of depreciation while considering tariff determination in future.

- 10.5. In light of above, for the categories of assets (runway, taxiway and apron) where no specific depreciation rate/ useful life has been mentioned in the Companies Act, the Authority had proposed to adopt depreciation rate of 3.33%. This rate is proposed to be applied on runway, taxiway and apron assets existing as on 01.04.2011 and on these assets added during 1st and 2nd control period.
- 10.6. The Authority had proposed to adopt the depreciation rates mentioned under Companies Act for assets as per the Companies Act 1956 till FY 2013-14 and as per the Companies Act 2013 from FY 2014-15 onwards as the effective date of implementation of the Companies Act 2013 is 01.04.2014.
- 10.7. The Authority had proposed that for the new assets to be capitalized in the 2nd control period, depreciation is charged at 50% of the depreciation rates in the year of capitalization. The Authority has included cargo assets while calculating depreciation for FY 2016-17 as per para 7.12.
- 10.8. The depreciation rates as submitted by AAI and as considered by the Authority during the 1st and 2nd control period are given below:

Table 30 - Depreciation rates as submitted by AAI and as considered by the Authority

No.	Asset Class	As per AAI	As per Authority till FY 2014	As per Authority FY2015 onwards
1	Free hold land	0%	0%	0%
2	Runways, Taxiways & Aprons	13%	3.33%	3.33%
3	Roads bridges & culvert	13%	1.63%	3.33%
4	Terminal building	8%	1.63%	3.33%
5	Cargo complex	8%	1.63%	3.33%
6	Temporary building	100%	100%	33%
7	Residential building	5%	1.63%	3.33%
8	Security fencing – temporary	100%	100%	33%
9	Security fencing wall	8%	1.63%	3.33%
10	Security fencing	8%	1.63%	3.33%
11	Ancillary building	8%	1.63%	3.33%
12	Computer IT & hardware	20%	16.21%	16.67%
13	Software & intangible	20%	20.00%	20.00%



No.	Asset Class	As per AAI	As per Authority till FY 2014	As per Authority FY2015 onwards
14	Plant & machinery	11%	4.75%	6.67%
15	Tools	20%	4.75%	6.67%
16	Equipment	20%	4.75%	6.67%
17	Vehicle	14%	9.50%	12.50%
18	Heavy vehicles	14%	9.50%	12.50%
19	Vehicle car & jeep	14%	9.50%	12.50%
20	Electrical installations	11%	4.75%	10.00%
21	Air conditioning equipment	11%	4.75%	10.00%
22	Electronics installation	11%	4.75%	10.00%
23	Typewriter & other office equipment	18%	4.75%	20%
24	Furniture & fixture	20%	6.33%	10%
25	X ray baggage machine	11%	4.75%	6.67%
26	CFT & fire fighting	13%	4.75%	6.67%

10.9. The revised depreciation for the 2nd control period as per Hybrid Till as proposed by the Authority is given below:

Table 31 - Authority's consideration on depreciation for the 2nd control period – Hybrid Till

No.	Details (₹ crore)	2016-17	2017-18	2018-19	2019-20	2020-21	Total
1	As per AAI	256.7	324.2	313.9	312.4	327.6	1,535.0
2	As per Authority	146.2	150.6	160.1	163.3	162.1	782.3

- 10.10. Based on the material before it and its analysis, the Authority proposed the following:
 - 10.10.1. To adopt depreciation rates as per Table 30 and depreciation for the 2nd control period as per Table 31.
 - 10.10.2. To consider the recommendations of the study on depreciation and finalize the depreciation rates in consultation with the stakeholders. It shall make necessary adjustments in RAB and true up of depreciation while considering tariff determination in future.



Stakeholders' comments and Authority's observations Comments from IATA

10.11. With respect to depreciation, IATA submitted that it agrees with the Authority's proposals for adjusting depreciation.

Authority's examination of IATA's comments

10.12. The Authority has noted IATA's support to adjustment of depreciation.

Decision No. 7. Treatment of Depreciation

- 7.a. The Authority decides to adopt depreciation rates as per Table 30 and depreciation for the 2nd control period as per Table 31.
- 7.b. The Authority decides to consider the recommendations of the study on depreciation and finalize the depreciation rates in consultation with the stakeholders. It shall make necessary adjustments in RAB and true up of depreciation while considering tariff determination in future.



11. RAB for Second control period

11.1. AAI has submitted Regulatory Asset Base for 2nd control period under Hybrid Till as follows:

Table 32 - Summary of the RAB and Depreciation for NSCBIA (Airport Services) as per AAI for the 2nd control period

	Details (₹ crore)	2016-17	2017-18	2018-19	2019-20	2020-21
А	Opening Aeronautical RAB	1,694.2	1,438.5	1,758.8	1,444.8	1,212.4
В	Aeronautical Additional Assets capitalized during the year	1.0	644.5	0.0	80.0	255.0
С	Disposals/Transfers	7//				
D	Depreciation	256.7	324.2	313.9	312.4	327.6
F	Closing Aeronautical RAB (A+B-C-D)	1,438.5	1,758.8	1,444.8	1,212.4	1,139.8
	Average RAB (A+E)/2	1,566.4	1,598.6	1,601.8	1,328.6	1,176.1

Authority's Examination

- 11.2. The Authority had proposed to adopt opening RAB for FY 2016-17 as detailed in Table 25.
- 11.3. The Authority had proposed to adopt depreciation as proposed in Table 31.
- 11.4. The Authority had proposed ₹ 567.3 crores as the addition of aeronautical assets to RAB as detailed in Table 28.
- 11.5. The Authority had proposed in the Consultation Paper to exclude cargo assets from the RAB with effect from 01.04.2016. During the discussion with AAI, it was noted that for FY 2016-17 AAI had continued to handle cargo operations at the NSCBIA. As per AAI's submission dated 12.10.2017, the Authority notes that the accounts for cargo operations are now booked (FY 2017-18) under AAICLAS for NSCBIA. Hence, the Authority decides to include Cargo assets, revenues and operational expenditure from 01.04.2016 till 31.03.2017 and decides to exclude them from 01.04.2017 till 31.03.2021 while determination of tariff in the second control period. Further, the Authority notes that there is no clarity on the transfer of cargo assets to AAICLAS as of now. The Authority will take a view on this while truing up in the 3rd control period based on the

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decisions taken by the AAI.

11.6. The revised Regulatory Asset Base as calculated by the Authority for 2nd control period under Hybrid Till is as follows:

Table 33 - Summary of forecast and Roll forward RAB and Depreciation for NSCBIA (Airport Services) considered by the Authority for 2nd control period – Hybrid Till

	Details (₹ crore)	2016-17	2017-18	2018-19	2019-20	2020-21
Α	Opening Aeronautical RAB	2,311.0	2,169.4	2,273.9	2,394.8	2,231.5
В	Aeronautical Assets capitalized during the year	31.2	255.1	281.1	0.0	0.0
С	Disposals/Transfers	0.0	0.0	0.0	0.0	0.0
D	Depreciation	146.2	150.6	160.1	163.3	162.1
Е	Closing Aeronautical RAB (A+B-C-D)	2,196.0	2,273.9	2,394.8	2,231.5	2,069.4
	Average RAB (A+E)/2	2,253.5	2,221.6	2,334.3	2,313.2	2,150.5
F	Adjustment to Closing RAB of FY 2016-17 due to Cargo RAB	26.6				
	Adjusted Closing RAB for FY 2016-17 excluding Cargo RAB (E-F)	2,169.4	मव-जयह			

11.7. The Authority had proposed to true up the RAB of 2nd control period based on actual asset addition and revised depreciation rates, at the time of determination of tariff for the 3rd control period.

Decision No. 8. RAB for 2nd control period

- 8.a. The Authority decides to consider RAB for 2^{nd} control period as given in Table 33
- 8.b. The Authority decides to true up the RAB of 2nd control period based on actual asset addition and revised depreciation rates based on the outcome of the study commissioned by the Authority, at the time of determination of tariff for the 3rd control period.



12. Cost of Equity, Cost of Debt, Gearing, and Fair Rate of Return (FRoR)

- 12.1. AAI has considered Fair Rate of Return (FRoR) as 14% at par with the decision taken by the Authority in Chennai, Kolkata Guwahati and Lucknow Airports for the 1st control period.
- 12.2. AAI has apportioned debt for NSCBIA and financing activities are undertaken centrally at the corporate office of AAI.
- 12.3. As per clarifications provided by AAI dated 05.06.2017, total debt on books of AAI is 435 crores and total equity is 13,070 crores as on FY 2015-16. The cost of debt is 8.6% for unsecured non-convertible redeemable bonds to be redeemed in FY 2017-18.

Authority's Examination

- 12.4. The Authority has recognised that AAI's capital structure may not be regarded as an efficient one in that it doesn't optimize the cost of funds from a regulatory perspective. The Authority desires that the FRoR allowed to AAI should come down over a period of time by optimizing capital gearing. The Authority may also consider a normative capital structure to determine the FRoR at a later date. It may not be reasonable to expect AAI to contract large amounts of debt over a short period of time.
- 12.5. The Authority had noted that as per a study conducted in respect of the 'Fair Rate of Return Estimation for AAI' in July 2011 it estimated a figure of 14.96% as Fair Rate of Return for AAI. The Authority had noted that it has considered FRoR at 14% for Chennai and Kolkata airport in the 1st control period considering the recommendations of another study done by NIPFP. Based on the decision taken for Chennai and Kolkata airport, the Authority considered FRoR at 14% for Guwahati and Lucknow airport for 1st control period.
- 12.6. Based on the above, the Authority had proposed to consider FRoR at the rate of 14% for NSCBIA for the 1st and 2nd control period as submitted by AAI.
- 12.7. Based on the material before it and its analysis, the Authority proposed the following:

 12.7.1. To consider the FRoR at 14% for NSCBIA for the 1st and 2nd control period.
 - 12.7.2. To undertake a study to determine FRoR for major AAI airports given the low debt structure of AAI as a whole.



Stakeholders' comments and Authority's observations Comments from IATA

12.8. With respect to FRoR, IATA submitted that it disagreed with the approach taken by AERA for setting the cost of capital at 14%. Despite the fact that AERA concedes AAI's almost 100% equity funded capital structure may not be an efficient one, it is still condoning such practice by rewarding AAI with a higher than necessary WACC (and the higher than necessary tax effects).

While we appreciate that AERA indicates that it expects AAI to optimize its gearing over time and that it will also carry out a study on the best FRoR, we believe that AERA should already apply a notional gearing for this regulatory period. Users cannot be negatively affected (i.e. being asked to pay higher charges) by the fact that AAI has not managed its capital structure in an optimal way in the past. At the very least, we urge AERA to set minimum gearing targets (which grow over the regulatory period).

Comments from ATA

12.9. With respect to FRoR, ATA submitted that WACC of 14% for these airports looks very high; attempt should be made to bring it down to a level of 10%-11%.

AAI's submission to IATA's and ATA's comments

12.10. AAI stated that the return on equity considered by AERA in order to calculate Weighted Average Cost of Capital is 16% whereas AERA has allowed only 14% Fair Rate of Return (FROR) on the investment made by AAI.

FROR calculated by reputed consultant in the First Control period is 14.96% whereas AERA has allowed only 14%. The report has already been submitted to AERA.

Normally higher debt proportion in the capital structure is desirable in case where new companies formed for the purpose of undertaking the new projects. This is not the case in case of AAI, which is already in existence and managing the airports and generating the internal resources from the airport operations. As such AAI opted to finance the project mainly from internal resources. Further, in case of higher debt also, there would be outflow on account of servicing the debt.



Authority's examination of IATA's and ATA's comments and AAI's submission to IATA's and ATA's comments

12.11. The Authority has given careful consideration to the comments from IATA and ATA on the FRoR and the response of AAI to IATA's and ATA's comments. The Authority is yet to take a view on the normative capital structure. However, the Authority notes that while determining the FRoR for AAI in the 1st control period a normative capital structure has been assumed by the Authority. The Authority proposes to undertake a study to determine FRoR for major AAI airports. Further decision on the FRoR will be taken after considering the results of such study.

Decision No. 9. FRoR

- 9.a. The Authority decides to consider the FRoR at 14% for NSCBIA for the 1st and 2nd control period.
- 9.b. The Authority will undertake a study to determine FRoR for major AAI airports given the low debt structure of AAI as a whole.



13. Revenue from services other than aeronautical services

13.1. AAI has forecasted revenue from services other than aeronautical services as below:

Table 34 - Revenue from Non-aeronautical Services – Projected by AAI for 2nd control period

No.	Revenue from services other than Regulated Services (₹ crore)	2015-16 (base)	2016-17	2017-18	2018-19	2019-20	2020-21
1	Restaurant / Snack Bars	18.4	21.0	24.0	27.3	31.1	35.5
2	Stalls/Retails	6.1	7.0	8.0	9.1	10.3	11.8
3	Duty Free Shop	17.0	19.4	22.2	25.3	28.8	32.8
4	Hoarding & Display	29.4	33.5	38.2	43.5	49.6	56.6
5	Car Rentals	0.5	0.6	0.7	0.8	0.9	1.0
6	Other Misc. Items	10.7	12.1	13.8	15.8	18.0	20.5
Α	Total Trading Concessions (1+2+3+4+5+6)	82.2	93.7	106.8	121.7	138.8	158.2
7	Land Rent & Leases	45.1	48.4	52.1	56.0	60.2	64.7
8	Hangers	8.9	9.7	10.7	11.8	13.0	14.3
9	Terminal Building & Building Non-Residential	21.0	24.0	27.3	31.2	35.5	40.5
10	Car Parking	10.8	12.3	14.0	16.0	18.2	20.8
11	Admission Tickets	C41.3	1.5	1.7	1.9	2.2	2.5
12	Other Miscellaneous Income	5.5	6.3	7.2	8.2	9.3	10.6
13	Rest Rooms	0.5	0.5	0.6	0.7	0.8	0.9
14	Revenues from Interest Income	0.0	0.0	0:0	0.0	0.0	0.0
15	Interest On Staff Advances	0.4	0.4	0.4	0.5	0.5	0.6
16	License Fee Recovery From Employees	0.1	0.1	0.1	0.1	0.1	0.1
17	Recovery Telephone Charges	0.0	0.0	0.0	0.0	0.0	0.0
	Total	175.7	302.8	341.6	385.6	435.4	491.9

13.2. The growth rates assumed by AAI for forecasting non aeronautical revenues are given

Table 35 – Assumption (growth rates) for Service other than Regulated Services for the 2nd Control Period as per AAI

No.	Particular	2016-17	2017-18	2018-19	2019-20	2020-21
1	Restaurant / Snack Bars	14%	14%	14%	14%	14%
2	Stalls/Retails	14%	14%	14%	14%	14%
3	Duty Free Shop	14%	14%	14%	14%	14%
4	Hoarding & Display	14%	14%	14%	14%	14%
5	Car Rentals	14%	14%	14%	14%	14%



No.	Particular	2016-17	2017-18	2018-19	2019-20	2020-21
6	Other Misc. Items	14%	14%	14%	14%	14%
7	Land Rent & Leases	7.5%	7.5%	7.5%	7.5%	7.5%
8	Hangers	10%	10%	10%	10%	10%
9	Terminal Building & Building					
	Non-Residential	14%	14%	14%	14%	14%
10	Car Parking	14%	14%	14%	14%	14%
11	Admission Tickets	14%	14%	14%	14%	14%
12	Other Miscellaneous Income	14%	14%	14%	14%	14%
13	Rest Rooms	14%	14%	14%	14%	14%
14	Revenues from Interest Income	10%	10%	10%	10%	10%
15	Interest On Staff Advances	10%	10%	10%	10%	10%
16	License Fee Recovery From		900			
	Employees	10%	10%	10%	10%	10%
17	Recovery Telephone Charges	10%	10%	10%	10%	10%

Authority's Examination

- 13.3. The Authority noted that other miscellaneous items (line item 6 in Table 34) and total trading concessions (line item A in Table 34) have been added to total non-aero revenues twice in the total non-aeronautical revenues calculated by AAI. The Authority requested for clarification from AAI for the same. As per the clarification provided dated 30.08.2017, AAI submitted that the other miscellaneous items and total trading concessions (line item 6 and line item A in Table 34) have been inadvertently mapped twice to total non-aeronautical revenues and the same can be corrected. Accordingly, the Authority had proposed to change the non-aeronautical revenues as discussed with AAI.
- 13.4. The Authority noted that as part of clarifications provided dated 09.05.2017, AAI has revised the growth rates to 10% (from 14% as submitted earlier) for revenues from services other than regulated services all the revenues except for land lease revenues and other miscellaneous revenues as per contractual arrangements. The Authority had proposed to consider the revised growth rates as submitted by AAI dated 09.05.2017 for the determination of tariff for the 2nd control period.
- 13.5. The Authority had proposed that non-aeronautical revenues will be trued up if it is higher than the projected revenues. In case there is a shortfall, true-up would be Order no. 23/2017-18

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undertaken only if the Authority is satisfied that there are reasonably sufficient grounds for not realizing the projected revenues. The Authority had proposed to accept the revenues from services other than regulated services as submitted by AAI except for adjustments as detailed below.

Adjustment of lease rentals

13.6. AAI has allotted following land to cargo, ground handling and fuel companies (CGF) for their operations. AAI has considered income from such land lease as non-aeronautical revenues

Table 36 — Details of land allotted to cargo, ground handling and supply of fuel service providers in 2nd control period

Service	Service Provider	Land Allocated (Sq.m)		Land Lease revenues (FY 2015-16) ₹ crore
		Paved	Unpaved	
Fuel	IOCL	33,550		24.4
Fuel	BPCL	6,807	J21-1	4.8
Fuel	HPCL	5,546	मन्त्र	3.9
Fuel	Reliance Industries	3,840		2.8
Ground Handling	Bhadra	1,250	-	1.0

- 13.7. Additionally, AAI has allotted 44.6 Sq.m. of space in Terminal building to GHA.
- 13.8. AAI has created a wholly owned subsidiary AAI Cargo Logistics and Allied Services Company Ltd (AAICLAS) in the FY 2016-17 which will take over all the cargo operations at Kolkata Airport. The proposal for cargo activities will be filed separately by AAICLAS for determination of cargo tariff in the 2nd control period. As per the clarifications received from AAI dated 09.05.2017 and 29.05.2017, AAI will not receive any revenue from AAICLAS for the 2nd control period for cargo operations. As per AAI's submission dated 12.10.2017, the Authority notes that the accounts for cargo operations are now booked (FY 2017-18) under AAICLAS for NSCBIA. Hence, the Authority decides to include Cargo assets, revenues and operational expenditure from 01.04.2016 till 31.03.2017 and decides to exclude them from 01.04.2017 till 31.03.2021 while determination of tariff in the second control period. Further, the Authority notes that

there is no clarity on the revenue received by AAI from AAICLAS's cargo operations at NSCBIA. The Authority, at present, can assume 20% to 30% revenue from cargo operations will be received by AAI. However, since there is no clarity on the revenue sharing mechanism between AAI and AAICLAS and given the fact that there is a shortfall with the proposed tariffs, the Authority has decided to not consider the potential revenue from cargo operations at this moment. The Authority will take a view on this while truing up in the 3rd control period based on the decisions taken by the AAI. The Authority may also make necessary assumptions regarding the revenue that should accrue to AAI in case the revenue share arrangement does not truly reflect the armslength transaction between AAI and its subsidiary.

- 13.9. As per the provisions of the AERA Act, services rendered in respect of cargo, ground handling and fuel supply are aeronautical services.
- 13.10. The Authority noted that AAI in submission dated 09.05.2017 has increased land lease rentals from ground handling agencies and oil companies by 7.5% per annum and had proposed to accept the same. The Authority noted that AAI has increased rent revenues from building non-residential for GH agencies by 10% and had proposed to accept the same.
- 13.11. The Authority had proposed to consider land lease revenues and building non-residential rent revenues on account of the aeronautical services of CGF as aeronautical revenue.

Adjustment for increase in retail area

- 13.12. As part of the clarifications provided by AAI dated 09.05.2017, AAI submitted that tender for proposed additional retail area of 452 Sq.m with MRLF is under process and corresponding additional revenues starting with FY 2017-18 to be considered in the MYTP for 2nd control period.
- 13.13. The Authority noted that hangars charges have been considered as non-aeronautical revenues and hangar assets have been excluded from Regulatory Asset Base.
- 13.14. The Authority observes that non-aeronautical revenue at NSCBIA is low and expects

 AAI to utilize its resources better and maximize its non-aeronautical revenue to keep

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the aeronautical tariff down.

13.15. The Authority had proposed to consider non-aeronautical revenues as given below:

Table 37 - Adjustment to Revenue from Non-aeronautical Services considered by Authority for 2^{nd} control period

Revenue from services other than Regulated Services (₹ crore)	2016-17	2017-18	2018-19	2019-20	2020-21
Non-Aeronautical Revenues as per AAI (A)	302.8	341.6	385.6	435.4	491.9
Adjustment:	17700				
Correction for double counting of certain revenues as mentioned in Para 13.3 (B)	102.1	112.3	123.5	135.9	149.5
Change in revenue from ground handling and fuel services considered as aeronautical revenues (C)	41.4	44.5	47.9	51.6	55.5
Increase in revenues due to additional retail area (D)	0.0	2.2	4.7	5.1	5.7
Change in revenues due to change in growth rate (E)	8.8	14.7	22.6	37.1	54.9
Non-Aeronautical Revenues as per Authority (A-B-C+D-E)	150.5	167.8	186.9	205.7	226.4

- 13.16 Based on the material before it and its analysis, the Authority proposed the following:
 - 13.16.1. To consider the revenues accruing to AAI on account of the aeronautical services of Cargo facility, Ground Handling Services and Supply of fuel to aircraft (FTC) including land lease rentals and building rent from these activities as aeronautical revenue.
 - 13.16.2. To consider the Non Aeronautical Revenue as per Table 37
 - 13.16.3. To true-up non-aeronautical revenues if it is higher than the projected revenues. In case there is a shortfall, true-up would be undertaken only if the Authority is satisfied that there are reasonably sufficient grounds for not realizing the projected revenues.

Comments from ATA

13.17. With respect to non-aeronautical revenues, ATA submitted that the non-aeronautical revenues of these airports are very low as compared to the privatized airports.

Therefore, burden or such under-performance should not be passed on to the tariff and Order no. 23/2017-18

eventually to Air Travellers.

AAI's submission to ATA comments

13.18. AAI stated that the Non-Aeronautical Revenue of all these Airports is in increasing trends. AAI has further stated that AERA proposes to true-up non-aeronautical revenues if it is higher than the projected revenues. In case there is a shortfall, true-up would be undertaken only if AERA is satisfied that there are reasonably sufficient grounds for not realizing the projected revenues.

Authority's examination of ATA's comments and AAI's submission to ATA's comments

13.19. The Authority has given careful consideration to the comments from ATA on the non-aeronautical revenues and the response of AAI to ATA's comments. The Authority has noted that non-aeronautical revenues at these airports is low and hence, the Authority proposed to true up non-aeronautical revenues if it is higher than the projected revenues. In case there is a shortfall, true-up would be undertaken only if the Authority is satisfied that there are reasonably sufficient grounds for not realizing the projected revenues. Further, the Authority has revised the terminal building ratio from 6.73% to 7.5% so as to encourage AAI to utilize more of the terminal building area for non-aeronautical services.

Decision No. 10. Non Aeronautical Revenues

- 10.a. The Authority decides to consider the revenues accruing to AAI on account of the aeronautical services of Cargo facility, Ground Handling Services and Supply of fuel to aircraft (FTC) including land lease rentals and building rent from these activities as aeronautical revenue.
- 10.b. The Authority decides to consider the Non Aeronautical Revenue as per Table 37
- 10.c. The Authority decides that non-aeronautical revenues will be trued up if it is higher than the projected revenues. In case there is a shortfall, true-up would be undertaken only if the Authority is satisfied that there are reasonably sufficient grounds for not realizing the projected revenues.



14. Operation and Maintenance Expenditure

- 14.1. Operation and Maintenance (O&M) expenditure submitted by AAI is segregated into:
 - (i) Payroll expenses; (ii) Admin and General Expenditure; (iii) Repair and Maintenance Expenditure; (iv) Utilities and Outsourcing Expenditure; and (v) Other Outflows. The expenditure related to cargo operations has not been considered by AAI in 2nd control period while determining RAB.
- 14.2. Summary of aeronautical expenses proposed by AAI for 2nd control period is as below:

Table 38 - Summary of Aeronautical O&M expenditure as submitted by AAI for 2^{nd} control period on Hybrid Till

No.	Particulars (₹ crore)	2016-17	2017-18	2018-19	2019-20	2020-21
1	Pay roll Expenditure of NSCBIA	123.9	154.9	167.4	181.0	195.7
2	Expenditure for NSCBIA employees' retirement benefits allocated at CHQ	23.6	29.6	31.0	32.6	34.2
3	Common Expenses related to cargo, commercial and land	1.2	1.5	1.7	1.8	1.9
A	Total Pay roll Expenditure (1+2-3)	146.3	182.9	196.8	211.8	228.0
4	Administrative and General Expenditure	10.1	11.0	12.1	13.2	14.5
5	Apportionment of administration & General expenditure of CHQ/RHQ	35.8	37.6	39.5	41.4	43.5
В	Total Administration & General Expenditure(4+5)	45.9	48.6	51.5	54.6	58.0
С	Repairs and Maintenance Expenditure (Total)	43.0	47.3	52.1	57.3	63.0
6	Power Charges	56.3	56.3	56.3	56.3	56.3
7	Water Charges	12.8	14.1	15.5	17.0	18.7
D	Utility and Outsourcing Expenditure (6+7)	69.1	70.4	71.8	73.3	75.1
E	Other Outflows	53.8	26.0	1.3	1.4	1.5
	Total (A+B+C+D+E)	358.2	375.3	373.4	398.4	425.6

14.3. The details of the assumptions made by AAI for O&M Expenditure are given below:



Table 39 – Assumptions made by AAI for each item of O&M expenditure

No.	Particular	2016-	2017-	2018-	2019-	2020-
	Torticalar	17	18	19	20	21
1	Payroll Expenses*					1 -
	Salaries and Wages	9%	25%	9%	9%	9%
	PF contribution	9%	25%	9%	9%	9%
	Fringe benefits including perks & medical expenses	9%	25%	9%	9%	9%
	Overtime and other staff costs	5%	25%	5%	5%	5%
	Allocation of Retirement Benefit provided at CHQ in r/o NSCBIA Employees	5%	25%	5%	5%	5%
2	R&M Expenses	10%	10%	10%	10%	10%
3	Utility and outsourcing Expenditure	233				
	Power charges	0%	0%	0%	0%	0%
	Other outsourcing costs	10%	10%	10%	10%	10%
4	Administration and General Expenditure					
	Admin & General Expenses	10%	10%	10%	10%	10%
	Apportionment of CHQ/RHQ Expenses	5%	5%	5%	5%	5%
	Municipal Taxes	16%	0%	0%	0%	0%
	License Fees	0%	0%	0%	0%	0%
5	Other Outflows HC4H4	1.नटा				
	Consumption of stores and spares	10%	10%	10%	10%	10%

^{*} Higher growth rate for increase in Payroll costs in FY 2017-18 is due to 7th Pay Commission revision

- 14.4. AAI has segregated total O&M expenditure for the 2nd control period into aeronautical expenses, non-aeronautical expenses, and common expenses. Common expenses in turn have been allocated between aeronautical and non-aeronautical services.
- 14.5. Expense allocation as submitted by AAI for 2nd control period is tabulated below:





Table 40 – O&M Expense allocation as submitted by AAI

Sr. No.	Particulars	Aero Expense	Non-Aero Expense
1	Payroll Expenses - Non-CHQ	91%	9%
2	Payroll Retirement benefit expenses Apportionment – CHQ	100%	0%
3	Admin and General Expenses – Non CHQ	96%	4%
4	Admin and General overheads Expenses Apportionment – CHQ/RHQ	100%	0%
5	R&M Expenses	90%	10%
6	Utility and Outsourcing Charges	92%	8%
7	Other Outflows	93%	7%
	Total	93%	7%

Authority's Examination

14.6. The Authority considered the operating expenses and their projections submitted by AAI and noted the following.

Forecasting of payroll expenses

- 14.6.1. The Authority had noted that payroll costs components Salaries and Wages, medical benefits and PF contribution have been increased by AAI at the growth rate of 9% annually for 2nd control period except for FY 2017-18. These growth rates appear to be on a higher side. The Authority had proposed growth rate of 7% for the above payroll components.
- 14.6.2. The Authority had noted that expenditure on apportionment of retirement benefits provided to CHQ in respect of NSCBIA employees is increased at 5% annually for 2nd control period which is different from the 7% for the above mentioned payroll components. The Authority had proposed to apply the same growth rate of 7% annually except for FY 2017-18 for expenditure on apportionment of retirement benefits provided to CHQ in respect of NSCBIA employees (as per discussion with AAI).
- 14.6.3. The Authority has noted that an increase of 25% has been projected in the pay roll expenditure in FY 2017-18 due to tentative increase in salary and wages on account of wage revision. However, as part of clarifications provided dated 09.05.2017, AAI has revised the growth rate for the payroll expenditure in FY



2017-18 to 40% from earlier 25%. The Authority notes that Public Sector Undertakings are covered under separate wage revision mechanism. Moreover, the Authority is of the view that as on date there is no actual evidence for the said outflow in FY 2017-18 and hence had proposed to true up the expenditure in the 3rd control period. In view of above, an increase of 25% is proposed for projection of the pay roll expenditure for FY 2017-18 in line with the order issued for Trivandrum for the 2nd control period.

14.6.4. AAI has submitted apportionment of CHQ/RHQ expenses on cost basis. The Authority had proposed to adopt CHQ/RHQ overheads apportionment for the 2nd control period based on actual revenue basis data provided by AAI. The Authority had proposed to increase CHQ/RHQ overheads apportionment costs (admin & general expenditure of CHQ/RHQ) by 5% per annum for the 2nd control period as submitted by AAI.

Segregation of aeronautical expenses

- 14.7. The Authority had proposed to adopt ratio of 95% as aeronautical costs to allocate payroll expenses after excluding cargo employees' costs based on ratio of cargo employees to total airport employees.
- 14.8. The Authority noted that apportionment of retirement benefits provided in CHQ in respect of Kolkata airport and apportionment of admin CHQ expenses have been considered as 100% aeronautical expenses. The Authority had proposed to use the ratio of 90% to 10% for aeronautical and non-aeronautical allocation for apportionment of admin CHQ/RHQ expenses after excluding cargo employees' costs on revenue basis. The Authority had proposed to use the ratio of 95% to 5% for aeronautical and non-aeronautical allocation for retirement benefits provided at CHQ in respect of employees at Kolkata airport after excluding cargo employees' costs based on ratio of cargo employees to total airport employees.
- 14.9. The Authority noted that the expenses related to vehicles such as R&M Vehicles, consumption of petrol/ lubricant, vehicle insurance, vehicle hire charges etc. have been considered 100% aeronautical expense. The Authority had proposed to allocate Order no. 23/2017-18

- aforementioned expenses using employee ratio into aeronautical and non-aeronautical expenses.
- 14.10. Terminal Area ratio for calculation of aeronautical assets is proposed as 92.5%. This ratio has been applied to specific expenses in R&M Civil, R&M Electrical and Conservancy Charges.
- 14.11. The Authority noted that certain expenses have been categorized as Project related expenses and have been considered as 100% aeronautical expenses. The Authority requested clarifications from AAI for the same. As per the clarifications provided by AAI dated 09.05.2017, AAI submitted that the project related costs is considered 100% aeronautical because Kolkata project employees works exclusively for Kolkata Airport. As part of further clarifications provided by AAI dated 29.05.2017, AAI submitted that the project employees mainly perform capital works and maintenance works of Kolkata Airport. Project employees primarily comprises of civil and electrical engineers. Based on the clarifications received from AAI, the Authority had proposed to consider O&M expenses related to project based on ratio of 95% as aeronautical costs after excluding cargo employees' costs based on ratio of cargo employees to total airport employees.
- 14.12. The Authority also noted that cargo expenses have not been included as part of MYTP calculation and requested clarifications from AAI for the same. As per the clarifications provided by AAI dated 09.05.2017, AAI submitted that cargo assets, expenses and income have not been considered in the 2nd control period as AAICLAS would file proposal for cargo tariff for 2nd control period separately. However, as per further submission from AAI dated 12.10.2017, the Authority notes that the accounts for cargo operations are now booked (FY 2017-18) under AAICLAS for NSCBIA. Hence, the Authority decides to include Cargo operational expenditure from 01.04.2016 till 31.03.2017 and decides to exclude them from 01.04.2017 till 31.03.2021 while determination of tariff in the second control period. Further, the Authority will review its decision while truing up in the 3rd control period based on the decisions taken by the AAI.

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Correction in projection

- 14.13. The Authority noted that AAI has included financing charges as part of O&M expenses for the 2nd control period. The Authority had proposed not to include interest payments on long term debt as a component of O&M expenses.
- 14.14. AAI submitted vide their submissions dated 29.06.2017 that the R&M Civil Works expenses have to be increased by ₹ 35.68 crore in FY 2016-17 and ₹ 4.39 crore in FY 2017-18 for civil work expenses incurred for strengthening of main runway. The Authority has revised the R&M Civil Works expenditure accordingly.
- 14.15. The Authority also noted that AAI has proposed to incur capital expenditure towards solar power plant which is expected to commission from 01.08.2017. The Authority requested AAI to provide the estimated reduction in power cost due to the commissioning of solar power plant. As per clarification provided by AAI dated 11.07.2017, AAI submitted that on commissioning of the solar power plant, there will not be any change in the current power tariff from the DISCOM (i.e., CESC), but based on the actual solar power generation and consumption at AAI and excess power injection into CESC power grid, there could be reduction in the monthly CESC bills, which is anticipated to be approx. average ₹ 75 to 80 lakhs per month at present tariff. The Authority therefore had proposed to reduce the power costs by ₹ 80 lakhs per month from 01.08.2017.
- 14.16. The O&M expenditure for FY2015-16 which includes both aeronautical and non-aeronautical expense is given in the table below:

Table 41 – Total O&M expenditure for FY 2015-16 as proposed by the Authority

No.	Particulars (₹ crore)	2015-16
1	Pay roll Expenditure of NSCBIA	125.9
2	Expenditure for NSCBIA employees' retirement benefits allocated at CHQ	22.5
3	Less - Common Expenses related to cargo, commercial and land	0
Α	Total Pay roll Expenditure (1+2-3)	148.4
4	Administrative and General Expenditure	9.6
	Apportionment of administration & General expenditure of	19.8



No.	Particulars (₹ crore)	2015-16
5	CHQ/RHQ	
В	Total Administration & General Expenditure(4+5)	29.3
С	Repairs and Maintenance Expenditure (Total)	43.3
6	Power Charges	61.9
7	Others	12.4
D	Utility and Outsourcing Expenditure (6+7)	74.3
E	Other Outflows	1.0
	Total (A+B+C+D+E)	296.3

14.17. Expense allocation proposed to be considered by the Authority after above changes for 2nd control period is tabulated below:

Table 42 – Expense allocation between aeronautical and non-aeronautical services proposed by the Authority

Sr. No.	Particulars	Aero Expense	Non-Aero & Cargo Expense
1	Payroll Expenses - Non-CHQ	88%	12%
2	Payroll Retirement benefit expenses Apportionment – CHQ	88%	12%
3	Admin and General Expenses - Non CHQ	96%	4%
4	Admin and General overheads Expenses Apportionment – CHQ/RHQ	85%	15%
5	R&M Expenses	89%	11%
6	Utility and Outsourcing Charges	91%	9%
7	Other Outflows	93%	7%
	Total	89%	11%

14.18. In view of above, the O&M expenditure is reworked for the purpose of determination of aeronautical tariffs for the 2nd control period under Hybrid Till and given in table below.



Table 43 - Summary of Aeronautical O&M expenditure as per the Authority for the 2^{nd} control period as per Hybrid Till

No.	Particulars (₹ crore)	2016-17*	2017-18	2018-19	2019-20	2020-21
1	Pay roll Expenditure of NSCBIA	127.9	147.5	157.1	167.4	178.3
2	Expenditure for NSCBIA employees' retirement benefits allocated at CHQ	23.0	26.5	28.4	30.3	32.5
3	Less - Common Expenses related to cargo, commercial and land	0.2	1.4	1.5	1.6	1.8
Α	Total Pay roll Expenditure (1+2-3)	150.6	172.5	183.9	196.1	209.0
4	Administrative and General Expenditure	10.4	11.0	12.1	13.2	14.5
5	Apportionment of administration & General expenditure of CHQ/RHQ	18.8	18.5	19.5	20.4	21.4
В	Total Administration & General Expenditure(4+5)	29.2	29.5	31.5	33.6	35.9
С	Repairs and Maintenance Expenditure (Total)	82.3	51.1	51.3	56.5	62.1
6	Power Charges	61.7	49.9	46.7	46.7	46.7
7	Others	12.8	13.9	15.3	16.8	18.5
D	Utility and Outsourcing Expenditure (6+7)	74.5	63.8	62.0	63.6	65.2
E	Other Outflows	1.1	1.1	1.2	1.3	1.5
	Total (A+B+C+D+E)	337.7	318.1	330.0	351.1	373.8

^{*} FY 2016-17 includes cargo operational expenditure

- 14.19. The Authority had proposed to undertake an independent study to assess the reasonableness of the operation and maintenance expenditure. The Authority would consider the results of the study to true-up the operation and maintenance expenditure while tariff determination for the 3rd control period.
- 14.20. It appears that O&M expenditure at NSCBIA is on higher side and expects AAI to reduce the O&M expenditure over a period of time.
- 14.21. Based on the material before it and its analysis, the Authority proposed the following:
 - 14.21.1. To consider the operational and maintenance expenditure as given in Table43 above, for the purpose of determination of aeronautical tariffs for the 2nd



control period.

- 14.21.2. That AAI should endeavour to reduce O&M expenditure over a period of time.
- 14.21.3. To true up the O&M expenditure for FY 2016-17 to FY 2020-21 of the 2nd control period based on the actuals at the time of determination of tariffs for the 3rd control period.

Stakeholders' comments and Authority's observations IATA's comments

- 14.22. Regarding the O&M expenditure, IATA submitted the following comments:
 - 14.22.1. We do not see how it can be justified to assume a 25% growth in personnel expenses in 2017- 18 (even if this is already a lower percentage the originally proposed 40%). Assuming such large growth percentage, with no real justification, does not provide the right incentives to the airport to manage its costs efficiently. At the most, it should be the same percentage as in the rest of the financial years of the regulatory period (i.e. 7%).
 - 14.22.2. We note that the authority has allocated CHQ/RHQ related costs in a 88:12 ratio between aeronautical an non aeronautical activities. However, we note that these costs were allocated among airports on the basis of their revenue. Therefore, we don't understand why these costs are not being allocated on a revenue basis among aeronautical and non-aeronautical activities. We request that AERA, for consistency, also allocates these costs between aeronautical and non-aeronautical activities on a revenue basis.
 - 14.22.3. We support the removal of financing costs. We also agree with the reduction of energy costs.
 - 14.22.4. We note the comments that the authority that it expects AAI to reduce its O&M costs over time. However, the Authority's O&M proposals do not follow these expectations. Particularly, and as commented above, we do not see how allowing a 25% increase in staff costs in 2017/18 is consistent with such a view.
 - 14.22.5. We note the Authority's statement that it intends to carry an independent

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assessment of the reasonableness of O&M expenditure and consider the results as part of the true up exercise for the 3rd regulatory period. It would be important that in the future such assessments are carried out ahead of the period, rather than on a ex-post basis. This allows to set challenging efficiency targets on an ex-ante basis, and provides certainty of the regulatory framework.

AAI's submission to IATA's comments

14.23. AAI stated that the pay revision takes place once in 10 years. The impact of pay revision is approximately 35% whereas AERA has allowed only 25%. The year on year impact on pay is approximately 9% whereas AERA has allowed only 7%.

Further, AAI stated that AERA has used the ratio of 90% to 10% for aeronautical and non-aeronautical allocation for apportionment of admin CHQ/RHQ expenses after excluding cargo employees' costs on revenue basis which is more than the Terminal building ratio provided by AAI. Further AERA has used the ratio of 95% to 5% for aeronautical and non-aeronautical allocation for retirement benefits provided at CHQ in respect of employees at Kolkata airport after excluding cargo employees' costs based on ratio of cargo employees to total airport employees which is more than the actual Non-Aero employees of the total employees i.e. 1.7%.

Authority's examination of IATA's comments and AAI's submission to IATA's comments

- 14.24. The Authority has noted the comments of IATA on the growth rate of 25% for FY 2017-18 for payroll costs. Salaries at AAI are revised every 10 years and during the first year of revision, the increase in salary cost is in the range of 25% to 30%. During the last pay revision, the increase was 50% in the first year but the Authority has considered 25% increase in the current proposal.
- 14.25. The Authority has given careful consideration to IATA's comment on allocating the CHQ/RHQ expenses into aeronautical and non-aeronautical expenses on revenue basis. A conscious decision was taken to apportion CHQ/RHQ costs on revenue basis to each airport. This is based on the rationale that airports with higher revenues would be able to absorb higher costs. The CHQ/RHQ overheads expenses apportioned to NSCBIA have



- been allocated to aeronautical and non-aeronautical component as per para 14.8.
- 14.26. The Authority has noted IATA's comment on removal of financing costs and the reduction of energy costs.
- 14.27. With respect to IATA's comment on setting the operational efficiency target, the Authority has proposed to conduct a study to determine the reasonableness of the O&M expenditure in the 2nd control period and to true-up O&M expenditure for 2nd control period based on the results of the study. In future, the Authority would consider setting operational efficiency targets before the start of the control period for the purposes of true up of O&M expenditure in the subsequent control period.

ATA's comments

14.28. Regarding the O&M expenditure, ATA stated that AERA has allocated the CHQ cost to these airports, on similar lines the benefit or revenue share accrued to AAI from the private airports should also be allocated to the airports. The revenue share for AAI should go in reducing the charges for the AAI airports. Otherwise the revenue share is forming part of the equity capita invested and is attracted for huge return on equity.

AAI's submission to ATA's comments

14.29. AAI stated that the cost after netting off revenues are allocated to the profit centre. CHQ expenses are first appropriated to RHQ on the basis of Revenue earned. RHQ expenses along with CHQ expenses are appropriated to all the airports under a particular RHQ on the basis of revenue earned by the Airports.

Authority's examination of ATA's comments and AAI's submission to ATA's comments

14.30. The Authority is of the view that revenue share accrued to AAI from private airports should not cross-subsidize the tariffs under the regulatory framework of AERA since Authority views each airport of AAI as a separate entity which should earn a fair return on their investments. Besides, the Authority cannot force AAI to subsidize the tariffs from surplus of other airports. However, if AAI keeps the charges at the airport at a level lower than the cap determined by the Authority then the Authority will accept the tariffs proposed by AAI.

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Decision No. 11. Operation and Maintenance expenditure

- 11.a. The Authority decides to consider the operational and maintenance expenditure as given in Table 43 above, for the purpose of determination of aeronautical tariffs for the 2nd control period.
- 11.b. The Authority expects AAI to reduce O&M expenditure over a period of time.
- 11.c. The Authority decides to true up the O&M expenditure for FY 2016-17 to FY 2020-21 of the 2nd control period based on the actuals at the time of determination of tariffs for the 3rd control period.



15. Taxation

15.1. AAI has submitted tax calculations using provisional tax rate of 34.60 % for the 2nd control period. AAI had calculated the tax considering depreciation rates applicable under AAI depreciation policy.

Authority's Examination

Adjustment for 30% of non-aeronautical revenues

15.2. AAI vide their submissions dated 06.03.2017 calculated tax for aeronautical services under Hybrid Till taking into account 30% of revenues from services other than regulated services as part of total revenues. As per MIAL Order No. 32/2012-13 (Decision No. XV), the Authority had decided to consider corporate tax pertaining to earnings from aeronautical services under shared till. Therefore, the Authority had proposed to exclude non-aeronautical component from revenues considered while determining tax for aeronautical services.

Adjustment of aeronautical capital expenditure

15.3. The Authority had proposed to consider aeronautical capital expenditure of ₹ 567.3 crores as given in Table 29 while calculating depreciation as per IT Act

Adjustment of O&M Expenses

15.4. The Authority had proposed to consider O&M expenses as given in Table 43.

Adjustment of aeronautical revenues on account of CGF lease and rent correction

15.5. The Authority had proposed to modify total aeronautical revenues considering lease rentals from CGF as aeronautical as mentioned in Para 13.11

Continuation of existing tariffs in FY 2016-17

15.6. The Authority had proposed to consider existing tariffs while calculating aeronautical revenues for FY 2016-17 as the revised tariffs as submitted by AAI are proposed to be applicable from 01.12.2017 onwards.

Revised Tax as considered by the Authority

15.7. The amount of tax as per submission of AAI and that arrived by the Authority after considering the above mentioned changes is given below:



Table 44 - Amount of Tax for aeronautical services as per AAI submission and as calculated by the Authority for the 2nd control period - Hybrid Till

Income Tax (₹ crore)	2016-17	2017-18	2018-19	2019-20	2020-21	Total
As per AAI	59.5	81.6	123.9	158.5	192.0	615.5
As per Authority	92.6	123.3	186.9	228.5	281.6	912.9

15.8. The detailed calculation of tax for aeronautical service by the Authority is given in table below:

Table 45 - Amount of Tax for aeronautical services as calculated by the Authority for the 2nd control period - Hybrid Till

8/13 KINE // LYNN / AV							
Particular (₹ crore)	2016-17	2017-18	2018-19	2019-20	2020-21		
Aeronautical Revenues	799.9	863.2	1,072.4	1,206.5	1,358.5		
Aeronautical O&M (excluding CHQ/ RHQ Overheads)	295.9	273.1	282.2	300.3	319.9		
CHQ/ RHQ Overheads	41.8	45.Ò	47.8	50.8	53.9		
Depreciation as per IT Act	194.5	188.7	202.3	195.1	170.7		
PBT	267.7	356.5	540.1	660.3	814.0		
Tax for aeronautical services	92.6	123.3	186.9	228.5	281.6		

15.9. The taxes actually paid/ apportioned in the 2nd control period are proposed to be trued up after review in the next control period.

Decision No. 12. Taxation

- 12.a. The Authority decides the corporate tax for aeronautical activities as per Table 45 for the 2nd control period.
- 12.b. The Authority decides to true up the difference between the actual/ apportioned corporate tax paid and that estimated by the Authority for the 2nd control period during determination of tariffs for the 3rd control period.



16. Aggregate Revenue Requirement for Second control period

16.1. AAI has submitted Aggregate Revenue Requirement (ARR) the yield per passenger (YPP) for the 2nd control period as per Hybrid Till. AAI has shown the true-up value separately from yield calculations for 2nd control period. During discussions, AAI had requested for including true-up while calculating tariff for 2nd control period.

Table 46 - ARR and Yield as per AAI for the 2nd control period – Hybrid Till

	Emilia Co						
Details (₹ crore)	2016-17	2017-18	2018-19	2019-20	2020-21		
Average Aeronautical RAB	1,566.4	1,598.6	1,601.8	1,328.6	1,176.1		
Return on Average Aeronautical RAB@14%	219.3	223.8	224.3	186.0	164.7		
Aeronautical Operating Expenditure	358.2	375.3	373.4	398.4	425.6		
Depreciation on aeronautical RAB	256.7	324.2	313.9	312.4	327.6		
Aeronautical Corporate Tax @34.60%	59.5	81.6	123.9	158.5	192.0		
Less- 30% of Non-Aeronautical Revenues	90.8	102.5	115.7	130.6	147.6		
ARR as per AAI	802.8	902.4	919.8	924.8	962.3		
Total ARR as per AAI	सन्यभेव (नयते			4,512.2		
No. of Passengers (as per	14,120,371	15,463,889	16,936,961	18,552,209	20,323,490		
Actual/Projected)	14,120,371	13,403,003	10,550,501	10,552,205	20,323,430		
Discounted ARR	802.8	791.6	707.8	624.2	569.8		
True up short fall in 1 st control period as on 01.04.2016	2,225.4	- 12					
PV of ARR for the control period as on 01.04.2016	me f	A	TTT		5,721.6		
Total Passengers during the control period 85,396,920							
Yield per passenger for the control period (PV of ARR for the control period/Total passengers during the control period) 670							

Authority's examination

- 16.2. The Authority has examined the calculations of AAI for various elements of the regulatory building blocks that contribute to the calculation of ARR.
- 16.3. The Authority has estimated the following ARR and yield for the 2nd control period under Hybrid Till based on various submissions of AAI and proposals considered by



Authority in earlier sections on the building blocks.

Table 47 - ARR and Yield as per Authority for the 2nd control period – Hybrid Till

Details (₹ crore)	2016-17	2017-18	2018-19	2019-20	2020-21	
Average Aeronautical RAB	2,253.5	2,221.6	2,334.3	2,313.2	2,150.5	
Return on Average Aeronautical RAB@14%	315.5	311.0	326.8	323.8	301.1	
Aeronautical Operating Expenditure	337.7	318.1	330.0	351.1	373.8	
Depreciation on aeronautical RAB	146.2	150.6	160.1	163.3	162.1	
Aeronautical Corporate Tax @34.6%	92.6	123.3	186.9	228.5	281.6	
Less – 30% of Non-Aeronautical Revenues	45.1	50.3	56.1	61.7	67.9	
True up short fall in 1 st control period as on 01.04.2016	899.9					
ARR as per Authority	1,746.8	852.7	947.8	1,005.0	1,050.7	
Total ARR as per Authority					5,602.9	
Discounted ARR	1,746.8	747.9	729.3	678.3	622.1	
PV of ARR for the control period as on 01.04.2016					4,524.5	
No. of Passengers (as per Projected)	15,819,539	17,499,473	19,361,205	21,424,662	23,711,970	
Total Passengers during the control period	सत्यमेव ज	च्यते <u> </u>			97,816,847	
Yield per passenger for the control period (PV of ARR for the control period/Total passengers during the control period)						
Target yield per passenger	559.4	582.8	607.2	632.7	659.2	
Target Aeronautical Revenues	884.9	1,019.9	1,175.6	1,355.5	1,563.0	
PV of Target Aeronautical Revenues						





17. Annual Tariff Proposal

- 17.1. AAI has submitted ATP(s) for all years of the 2nd control period.
- 17.2. AAI has submitted the revision in tariff w.e.f. 01.04.2017 till 31.03.2021.
- 17.3. Accordingly AAI has submitted the ATP(s) for 2nd control period in respect of NSCBIA. Authority's Examination
- 17.4. The Authority noted that AAI has not considered any revenue from cargo as part of aeronautical revenues for the 2nd control period. As per the clarifications provided dated 09.05.2017 and 29.05.2017, AAI submitted that no cargo revenue is received by AAI from AAICLAS during the 2nd control period. However, as per AAI's submission dated 12.10.2017, the Authority notes that the accounts for cargo operations are now booked (FY 2017-18) under AAICLAS for NSCBIA. Hence, the Authority decides to include Cargo revenues from 01.04.2016 till 31.03.2017 and decides to exclude them from 01.04.2017 till 31.03.2021 while determination of tariff in the second control period. Further, the Authority notes that there is no clarity on the revenue received by AAI from AAICLAS's cargo operations at NSCBIA. The Authority, at present, can assume 20% to 30% revenue from cargo operations will be received by AAI. However, since there is no clarity on the revenue sharing mechanism between AAI and AAICLAS and given the fact that there is a shortfall with the proposed tariffs the Authority has decided to not consider the potential revenue from cargo operations at this moment. The Authority will take a view on this while truing up in the 3rd control period based on the decisions taken by the AAI. The Authority may also make necessary assumptions regarding the revenue that should accrue to AAI in case the revenue share arrangement does not truly reflect the arms-length transaction between AAI and its subsidiary.
- 17.5. The Authority had proposed to merge UDF and PSF (facilitation) charges and only UDF charges to be applicable on each domestic and international embarking passenger w.e.f. 01.12.2017.
- 17.6. The Authority noted that if the existing tariffs applicable at Kolkata airport are not increased for the second control period, there will be shortfall of ₹840.0 crore vis-à-vis ARR. The shortfall can either be met by increasing various aeronautical charges such as



Landing, Parking & Housing and fuel throughput or increasing UDF or both. Even with the increased landing, parking & housing charges, fuel throughput charges and introduction of aerobridge charges, there is still aeronautical revenues shortfall left visà-vis ARR for which the UDF is increased to reduce the gap. After considering the revised landing, parking & housing, fuel throughput charges and aerobridge charges as proposed by AAI applicable from 01.12.2017, the resultant shortfall is ₹ 714.1 crore without the revised UDF. To reduce the remaining shortfall, AAI has proposed the revised UDF of ₹ 518 per departing domestic passenger and ₹ 1,246 per departing international passenger as given in Table 48.

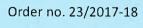
17.7. The revised tariffs as applicable from 01.12.2017 as submitted by AAI and as proposed by the Authority are given in table below:

Table 48 - Revised aeronautical tariffs as submitted by AAI and as proposed by the Authority

Particular	Existing Tariff	Revised tariff by AAI	Revised tariff proposed by Authority
Rate per landing - International	Flightसत्यम्ब ज्	ति	
Up to 100 MT	₹ 650.40 per MT		0.2
	₹ 65,040 + ₹ 874 per MT in excess of 100 MT		
Up to 25 MT		₹ 715 per MT	₹ 715 per MT
Above 25 MT up to 50 MT	वि.आ.	₹ 17,875 + ₹ 790 per MT in excess of 25 MT	₹ 17,875 + ₹ 790 per MT in excess of 25 MT
Above 50 MT up to 100 MT	AEE	₹ 37,625 + ₹ 865 per MT in excess of 100 MT	₹ 37,625 + ₹ 865 per MT in excess of 100 MT
Above 100 MT up to 200 MT	ALI	₹ 80,875 + ₹ 950 per MT in excess of 100 MT	₹ 80,875 + ₹ 950 per MT in excess of 100 MT
Above 200 MT		₹ 1,75,875 + ₹ 1,050 per MT in excess of 200 MT	₹ 1,75,875 + ₹ 1,050 per MT in excess of 200 MT
Rate per Landing - Domestic Flig			
Up to 100 MT	₹ 331.30 per MT		
Above 100 MT	₹ 33,130 + ₹ 445.10		



Particular	Existing Tariff	Revised tariff by AAI	Revised tariff proposed by Authority			
	per MT in excess of 100 MT					
Up to 25 MT		₹ 370 per MT	₹ 370 per MT			
Above 25 MT up to 50 MT		₹ 9,250 + ₹ 430 per MT in excess of 25 MT	₹ 9,250 + ₹ 430 per MT in excess of 25 MT			
Above 50 MT up to 100		₹ 20,000 + ₹ 500 per MT in excess of 50 MT	₹ 20,000 + ₹ 500 per MT in excess of 50 MT			
Above 100 MT up to 200 MT		₹ 45,000 + ₹ 570 per MT in excess of 100 MT	₹ 45,000 + ₹ 570 per MT in excess of 100 MT			
Above 200 MT		₹ 1,02,000 + ₹ 660 per MT in excess of 200 MT	₹ 1,02,000 + ₹ 660 per MT in excess of 200 MT			
Housing Charges						
Up to 100 MT	₹ 17.60 per MT per hour	₹ 28.2 per MT per hour	₹ 28.2 per MT per hour			
Above 100 MT	₹ 1,760 + ₹ 23.60	₹ 2,820 + 37.80 per	₹ 2,820 + 37.80 per			
	per MT per hour in	MT per hour in	MT per hour in			
	excess of 100 MT	excess of 100 MT	excess of 100 MT			
Parking Charges			IV.			
Up to 100 MT	₹9 per MT per hour	₹14.4 per MT per hour	₹ 14.4 per MT per hour			
	₹ 900 + ₹ 11.80 per MT per hour in excess of 100 MT	₹ 1,440 + ₹ 18.80 per MT per hour in excess of 100 MT	₹ 1,440 + ₹ 18.80 per MT per hour in excess of 100 MT			
Throughput Charges						
Rate per KL	₹ 1,478.94	₹1,478.94	₹ 1,478.94			
Aerobridge Charges	AI					
Domestic flight	Nil	₹ 2,000 per hour	₹ 2,000 per hour			
International flight	Nil	₹ 4,000 per hour	₹ 4,000 per hour			
Passenger Service Fee (PSF) – Fa	cilitation					
Domestic Passenger	Nil	₹ 518	Nil			
(per embarking passenger)	Nil	\$ 8.63	Nil			
International Passenger	Nil	₹ 1,246	Nil			
(per embarking passenger)	Nil	\$ 20.77	Nil			
User Development Fee (UDF) (U	DF proposed by Aut	hority instead of PSF	(FC) above)			





Particular	Existing Tariff	Revised tariff by AAI	Revised tariff proposed by Authority
Domestic Passenger (per embarking passenger)	₹ 449	Nil	₹ 518
International Passenger (per embarking passenger)	₹ 1,124	Nil	₹ 1,246
Passenger Service Fee (PSF) - Se	ecurity*		
Domestic Passenger	₹ 130	₹ 130	₹ 130
(per embarking passenger)	\$ 3.25	\$ 3.25	\$ 3.25
International Passenger	₹130	₹ 130	₹ 130
(per embarking passenger)	\$ 3.25	\$ 3.25	\$ 3.25

^{*} PSF-Security is determined by MoCA and the rates as provided by MoCA from time to time shall be applicable

- 17.8. Additionally, from 01.04.2018, the increase in tariffs as submitted by AAI is given below. The Authority had proposed to accept the increase in tariffs for the second control period as submitted by AAI.
 - 17.8.1. Increase of 4% per annum every subsequent year (FY 2018-19 onwards) in UDF per departing passenger charges
 - 17.8.2. Increase of 4% every subsequent year (FY 2018-19 onwards) in landing charges
 - 17.8.3. Increase of 5% every subsequent year (FY 2018-19 onwards) in Parking and housing charges
 - 17.8.4. Increase of 5% every subsequent year (FY 2018-19 onwards) in Aerobridge charges
- 17.9. The Authority noted that AAI's proposed tariff applicable from 01.12.2017 will not be able to recover the proposed ARR for the 2nd control period. Hence, the Authority had proposed to accept the revised tariffs as submitted by AAI which would be applicable from 01.12.2017. The estimated aeronautical revenues based on tariffs as proposed by AAI is indicated in Table 49.
- 17.10. The Authority had noted that revenue from tariff as proposed by AAI would not meet aeronautical revenue permissible for the 2nd control period. The resultant shortfall as on 01.04.2016 is ₹ 523.5 crores. The Authority had proposed to consider the shortfall of



₹ 523.5 crores as on 01.04.2016 in the 2^{nd} control period while determining tariffs for the 3^{rd} control period.

Table 49 - Projected Revenue, Target Revenue and shortfall as per the Authority for the 2^{nd} control period

Projected Aero Revenue based on	2016-17	2017-18	2018-19	2019-20	2020-21
AAI proposed tariffs (₹ crore)					
Landing (A)	192.3	222.3	285.0	315.8	349.9
Parking and Housing (B)	4.6	6.0	8.9	10.0	11.2
UDF/PSF as per existing rates (C)	430.4	473.4	520.8	573.2	631.0
FTP+ITP and lease rentals (D)	83.7	89.7	96.1	103.0	110.4
Ground Handling charges and lease rentals (E)	29.4	31.4	33.7	36.1	38.6
CUTE (F)	12.4	13.7	15.1	16.7	18.5
Cargo charges (G)	47.2	0.0	0.0	0.0	0.0
Aerobridge charges (H)	0.0	4.6	15.3	17.2	19.2
Total Projected Revenue as per			075.0	4 070 0	4.470.0
existing UDF/PSF	799.9 Fulled of	841.0	975.0	1,072.0	1,178.9
(I = A+B+C+D+E+F+G+H)		1007.4	1 1 10 1	4 005 0	4 500 0
Target Aero Revenue	865.2	997.1	1,149.4	1,325.2	1,528.2
Short fall (-)/ Excess (+) in revenue, i.e. difference (Projected – Permissible)	-65.2	-156.1	-174.4	-253.3	-349.2
PV value as on 01.04.2016 with Discount rate (14.00%)	-65.2	-137.0	-134.2	-170.9	-206.8
Total PV of difference as on 01.04.2016 for the control period	311	ta	VI.		-714.1
UDF as per revised rates (J)	430.4	495.6	618.2	707.7	810.5
Total Projected Revenue as per revised UDF (K = I-C+J)	799.9	863.2	1,072.4	1,206.5	1,358.5
Target Aero Revenue	884.9	1,019.9	1,175.6	1,355.5	1,563.0
Short fall (-)/ Excess (+) in revenue, i.e. difference (Projected – Permissible)	-84.9	-156.6	-103.3	-148.9	-204.6
PV value as on 01.04.2016 with Discount rate (14.00%)	-84.9	-137.4	-79.5	-100.5	-121.1
Total PV of difference as on 01.04.2016 for the control period					-523.5



- 17.11. The Authority noted that AAI has taken 6% inflation rate while determining the Yield per Passenger for tariff years in the 2nd control period and X factor of 0.01% from FY 2018-19 onwards. As per RBI issued Results of the Survey of Professional Forecasters on Macroeconomic Indicators Round 45, the WPI inflation is forecasted to be 4.2% for the next 5 years. The Authority had proposed to revise WPI for the 2nd control period to 4.2%.
- 17.12. The Authority had proposed that any shortfall/ excess in revenues for the 2nd control period based on proposed tariffs by AAI to be considered while determining aeronautical tariffs for the 3rd control period.
- 17.13. The Authority notes that ASQ rating at Kolkata has been marginally less than 3.75 for few quarters of 1st control period. However, the Authority further notes that in majority of the quarters in 2nd control period the quarterly ASQ rating is more than 3.75 as required under Section 6.14.3 of Airport Guidelines. The Authority expects AAI to maintain ASQ rating above 3.75 in 3rd control period. Details of the ASQ ratings are provided below.

Table 50 – Quarterly ASQ rating of NSCBIA during the 1st control period

Quarter	2012	2013	2014	2015	2016
Q1	-	3.01	4.22	4.71	4.80
Q2	3	3.84	4.42	4.73	4.72
Q3		4.05	4.66	4.76	4.73
Q4	2.96	4.11	4.66	4.78	4.73
Average	4 1 1 1	3.75	4.49	4.75	4.75

- 17.14. Based on the material before it and its analysis, the Authority proposed the following:
 - 17.14.1. To accept Annual Tariff Proposals as given in Table 48 (and Annexure) for determination of tariff during 2nd control period as the present value of proposed revenues (yield) by AAI is lower than the present value of ARR (yield) as per Authority.
 - 17.14.2. To continue with waiver of landing charges for (a) aircraft with a maximum certified capacity of less than 80 seats, being operated by domestic scheduled

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- operators (b) Helicopters of all types as approved by Govt. of India vide order no. G.17018/7/2001- AAI dated 09.02.2004 in order to encourage and promote intra-regional connectivity at NSCBIA.
- 17.14.3. To provide waiver of landing and other charges in line with the Order No. 20/ 2016-17 dated 31.03.2017 of the Authority.
- 17.14.4. To merge UDF and PSF (facilitation) charges and only UDF charges to be applicable on each domestic and international embarking passenger w.e.f. 01.12.2017.
- 17.14.5. To consider shortfall/ excess in revenues for the 2nd control period based on proposed tariffs by AAI while determining aeronautical tariffs for the 3rd control period.

Stakeholders' comments and Authority's observations IATA's comments

- 17.15. In response to tariff card, IATA submitted that we do not see any justification on why there are charges differentials between international and domestic flights. In particular, we do not see why, in terms of landing charges, the same type of aircraft, with the same number of passengers, would pay different charges. This is discriminatory. We urge AERA to take the steps to gradually eliminate differences in charges where there is no justification behind them.
- 17.16. IATA further stated that we could not understand how the aeronautical revenues were arrived at in Table 45. We would much appreciate if AERA could provide a more detailed explanation as to how these numbers were calculated. Then we will be better able to provide our views.

AAI's submission to IATA's comments

17.17. In regards to IATA's comments on differential tariffs for domestic and international, AAI stated that the differential tariff for domestic and International carriers have been worked out considering market conditions. Such practice of charging different rates for domestic and international carriers is prevalent at many foreign airports also. In Indian context, the tariff for domestic and international flights are different in all the private

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Regulatory N

Airport Operators and AAI operated airports.

The turnaround time is more in case of International passengers than the domestic passengers. The common facilities available at the Airports are used more by the International passengers than the Domestic passengers, so they are charged more than domestic passengers.

Authority's examination of IATA's comments and AAI's submission to IATA's comments

- 17.18. With respect to the tariff differential between international and domestic operations, the Authority notes that the airport has to set up facilities such as immigration, customs, etc. for international operations. For international passengers, facilities required are more and therefore the costs also vary. Hence, the Authority is of the view that international tariffs can be higher than the domestic tariffs.
- 17.19. Annexure 5 provides the details of the aeronautical revenues as shown in Table 45.

ATA's comments

- 17.20. It was observed that the tariff is being calculated based on actuals/ projections. The efficiency of operations at various airports is not being considered at present. However, AERA has clarified that a study is being undertaken to factor this Issue. We suggest that, any revision in the projections resulting in lower tariff should be passed on to the Air Travellers on a periodical basis.
- 17.21. Charges should be optimized to make it affordable to the consumer without sacrificing the quality of the service.
- 17.22. We suggest that standard should be established, for service to be provided i.e. seating arrangement, essential services (catering, medicines, cleanliness of toilets etc.), proper & user-friendly facility in uniform pattern at all respective airports for senior citizens/ disabled air travellers both at the ground and at the time or boarding/ de-boarding to/from the seats of a aircrafts.
- 17.23. The airports in contention are not up to the mark in terms of service qualities. The tariffs should be linked to service quality levels.
- 17.24. ATS / CNS are also a regulated service as per the AERA act. AERA should also consider determining the tariff for these services. Why the cost for these should be passed on to Order no. 23/2017-18

the airports.

AAI's submission to ATA's comments

- 17.25. With respect to ATA's comment on the facilities at the airport, AAI stated that most of the facilities are available at AAI Airports. More facilities would be added for Senior Citizen and Disabled persons.
- 17.26. With respect to ATA' comment on the service quality, AAI stated that the ASQ ratings by ACI are available at AAI Website for all these Airports. ASQ ratings are done on the basis of broad service parameters.
- 17.27. With respect to ATA's comment on the ATS/ CNS charges, AAI stated that neither cost nor revenue of ATS/ CNS are not considered while determining the tariff of major airports.

Authority's examination of ATA's comments and AAI's submission to ATA's comments

- 17.28. With respect to the lower tariffs if O&M expenditure are revised, the Authority determines tariffs for a control period of 5 years. Hence, the Authority would consider the results of the study for reasonableness of the O&M expenditure while true-up of the O&M expenditure of 2nd control period. This would be considered in the determination of aeronautical tariffs for 3rd control period. Hence, the impact of revision in projections of O&M expenditure would be considered in tariff determination of 3rd control period.
- 17.29. With respect to overall benchmark for service quality levels, the Authority has proposed to undertake a pilot study to assess the monitoring of service quality levels at a few select airports. The study will be objective, technology based and will focus on passenger experience as well as the views of the airlines. Based on the pilot study, the methodology will be defined and the service quality at all major airports will be assessed. The linking of tariffs to service quality can be made only after this exercise is carried out.
- 17.30. The Authority has noted ATA's comments on regulation of ANS charges. The Authority is currently in the process of determining the airport charges other than ANS at these airports. The Authority would separately issue guidelines and then, take up



IOCL's comments

17.31. IOCL has submitted that AERA has proposed Fuel throughput charges 1478.94 per kl applicable from 01.10.2017 to 31.03.2018 for Kolkata Airport. We would like to submit that the current throughput charge which is same as the proposed charges is one of the highest in the country. Such high throughput charges has been regularly criticised by the airlines. Hence, we suggest that the rate may reviewed and brought down to rational level. Further, IOCL submitted that any new order may only be released on prospective basis.

HPCL's comments

17.32. HPCL has submitted that AERA has proposed Fuel throughput charges 1478.94 per kl applicable from 01.10.2017 to which we feel is on higher side as compared to other airports. We also wish to inform you that the land rentals charges at Kolkata Airport by AAI are on higher side which we have taken up with AAI for rationalization. We request you to rationalize the throughput charges also.

Further, HPCL submitted that we shall abide by the decision taken by AERA. However, any revision in fuel throughput charges (FTC) should be approved on prospective basis only.

AAI's submission on IOCL's comments

17.33. The fuel throughput charges proposed by AAI for Kolkata is prospective i.e. applicable w.e.f. 01.11.2017. The existing rate of fuel throughput charges of Kolkata Airport has been proposed for the entire second control period.

Authority's examination of IOCL's and HPCL's comments and AAI's submission on IOCL's comments

17.34. With respect to IOCL's and HPCL's comment on quantum of FTC, the Authority notes that the FTC at NSCBIA and many other airports operated by AAI are subject to the commercial agreement between AAI and oil companies. The Authority has considered



FTC as an aeronautical charge and revenues arising therefrom as aeronautical revenues which add upto the price cap arrived at by the Authority. Having considered all these factors, the Authority decides to accept levy of revised FTC as proposed by AAI. This rate shall be effective from 01.12.2017.

BAOA's comments

- 17.35. In respect of the tariff card proposed by the Authority, BAOA submitted as follows:
 - 17.35.1. **Ground Handling (GH) Charges**: Though the income from GH charges and FTC has been considered as aeronautical revenue, the GH charges for various such services undertaken at all these five public airports have not been proposed as part of the aeronautical tariff. The issue of GH charges to be treated as aeronautical services at an airport, as defined in AERA Act, has been repeatedly discussed in MoCA in the presence of AERA's representatives. It is, therefore, requested that separate proposal for GH charges at these five airports may please be immediately sought from airport operators as part of MYTP.
 - 17.35.2. **Housing Charges**: As brought out during discussions on 18 September 2017, all the five airport operators be asked to specify the aeronautical assets being provided for housing of the aircraft, which attracts double the tariff than parking in the open on the tarmac. This is to ensure adherence to provision of AERA Act (para 2(a)(iii) wherein housing or parking an aircraft, in the hangar, or any other ground facilities offered in connection with aircraft operations, is an aeronautical service at public airports.
 - 17.35.3. Fuel Throughput charges (FTC): While FTC charges both at Goa and Pune are Rs. 112.1 per KL, the same charges at Kolkata are Rs. 1478.94 per KL. On querying from public sector oil companies supplying ATF at these public airports, it has been learnt that these charges are not for any additional services provided by the airport operator. Therefore, FTC happens to be the illegal royalty being charged by airport operator at public airports. This is in contravention with NCAP 2016 and the recent AERA's Order 08/2017-18 (para

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Order no. 23/2017-18

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5b) on GH services prohibiting charging of royalty or revenue share in any form for aeronautical services.

Therefore please do not allow any FTC charges at these airports, in view of the fact that separate lease rentals are already being paid by all companies for using the premises of the airport for supplying fuel

- 17.35.4. Para 12b of Consultation Papers (waiving of landing and other charges to RCS flights): Please refer common provision for all airports in this regard referring AERA's Order no. 20/2016-17 dt. 31 March 2017. It is pointed out that, due to delayed development of airport facilities at many major airports, this Order becomes non-implementable by airport operators citing reasons of congestions. Therefore, it is imperative for AERA to immediately monitor timely development of aeronautical infrastructure at all major airports to ensure all public airports continue to perform as per standards and deliver quality, continuity and reliability of the service as specified by Central Government (MoCA). Development expenditure is duly considered while deciding tariff thus, necessitating close monitoring.
- 17.35.5. Annual review of development activities at major airports by AERA:- In order to discharge its duties, as mention in para 13(1)(d) of the Act, AERA must do annual review of approved development plans for all the major airports, post approving the MYTP. In addition to the AAI managed airports, the other PPP model airports at major metros also fall under the same provision of AERA Act. The Operations, Management, Development Agreement (OMDA) signed with the PPP model public airports, would also require AERA to critical monitor the development part of the agreement as economic regulator. The operations and management part of OMDA would continue to be monitored by DGCA for annual review of 'airport license' for these public airports. Please ensure a mechanism is in place for monitoring the development of these airports, as per the approved master plan, to enable AERA perform its duties stated at AERA Act para 13(1)(d). This has become all the more necessary after shifting from



'single till' to 'hybrid till' to provide more non-aeronautical revenue for faster and timely development of aeronautical infrastructure at all these public airports.

It is submit that any unauthorised charge or delayed development at public airports would ultimately lead to unfair charges being levied to the fare paying public.

AAI's submission to BAOA's comments

- 17.36. In regards to BAOA's comments on GH Charges, AAI stated that AAI has considered GHA as Aeronautical Revenue. The charges of GHA is regulated by AERA. AERA will separately fix the charges of independent service provider.
- 17.37. In regards to BAOA's comments on housing charges, AAI stated that AAI has considered Hangar Charges as Non-Aeronautical Revenue. If hangars are used for rent/leases to the airlines, it is to be considered as non-aeronautical income. Whereas if hangars are used for only housing of aircraft and not let out for rent or lease then it is to be considered as aeronautical income.
- 17.38. In regards to BAOA's comments on FTC, AAI stated that Fuel Throughput Charges are considered as Aeronautical Charges. It reduces the revenue requirement of a particular airport.

Authority's examination of BAOA's comments and AAI's submission to BAOA's comments

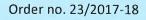
- 17.39. The Authority has noted the comment from BAOA regarding the ground handling charges and the response of AAI to BAOA's comments. It is clarified that ground handling activities at NSCBIA are undertaken by ground handling agencies and not by airport operator. Hence, the ground handling charges are not included in the Consultation Paper of the airport operator. The Authority will separately fix the ground handling charges of independent service providers.
- 17.40. The Authority has noted the comment from BAOA regarding the housing charges and the response of AAI to BAOA's comments. The Authority clarifies that so far hangars have been considered as non-aeronautical assets by the Authority. However, if a view emerges that hangars are aeronautical facilities and should be considered as

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- aeronautical assets then the Authority will come up with separate consultation and determine a methodology to determine the charges.
- 17.41. The Authority has noted the comment from BAOA regarding the FTC and the response of AAI to BAOA's comments. The Authority notes that FTC is an aeronautical tariff which is used to recover the ARR during the control period. In case FTC charges are not levied, as proposed, then the other aeronautical charges such as landing, parking, housing and UDF would have to be increased to recover the ARR. The Authority further notes that it determines the ARR for a control period however, the tariff structure, including FTC, to recover such ARR is proposed by the airport operator. Hence, as the ARR recovery in a control period is different for each of the airport, FTC can be different at each of these airports. Further, the Authority does not find any evidence under NCAP 2016 or AERA's Order no. 08/ 2017-18 that the royalty being charged on aeronautical services by airport operator at public airports is not allowed.
- 17.42. The Authority has noted the comment from BAOA regarding waiving of landing and other charges to RCS flights. The Authority notes that certain airports may be constrained by lack of space to develop facilities required for RCS flights. Wherever land is available airport assets should be constructed to take care of RCS flights. The Authority will take pilot project to assess service quality parameters at some of the airports and then will take up a regular project for service quality assessment at all major airports. **4.91.19.**4

Decision No. 13. Tariff rate card

- 13.a. The Authority decides to accept Annual Tariff Proposals as given in Table 48 (and Annexure) for the 2nd control period as the present value of proposed revenues (yield) by AAI is lower than the present value of ARR (yield) as per Authority. The Authority decides to accept the increase in tariffs for subsequent years of the second control period as below:
 - i) Increase of 4% per annum every subsequent year (FY 2018-19 onwards) in UDF per departing passenger charges
 - ii) Increase of 4% every subsequent year (FY 2018-19 onwards) in landing charges





- iii) Increase of 5% every subsequent year (FY 2018-19 onwards) in Parking and housing charges
- iv) Increase of 5% every subsequent year (FY 2018-19 onwards) in Aerobridge charges
- 13.b. The Authority decides to continue with waiver of landing charges for (a) aircraft with a maximum certified capacity of less than 80 seats, being operated by domestic scheduled operators (b) Helicopters of all types as approved by Govt. of India vide order no. G.17018/7/2001- AAI dated 09.02.2004 in order to encourage and promote intra-regional connectivity at NSCBIA.
- 13.c. The Authority decides to provide waiver of landing and other charges in line with the Order No. 20/ 2016-17 dated 31.03.2017 of the Authority.
- 13.d. The Authority decides to merge UDF and PSF (facilitation) charges and only UDF charges to be applicable on each domestic and international embarking passenger w.e.f. 01.12.2017.
- 13.e. The Authority decides to consider shortfall/ excess in revenues for the 2nd control period based on proposed tariffs by AAI while determining aeronautical tariffs for the 3rd control period.



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AERA

19. Order

- 19.1. In exercise of powers conferred by Section 13 (1) (a) of the AERA Act, 2008 and based on the above decisions, the Authority hereby determines, the aeronautical tariffs to be levied at Kolkata Airport from 01.12.2017 are placed at Annexure I. The tariffs for the subsequent tariff years (i.e. FY 2018-19, FY 2019-20 and FY 2020-21) will be effective from 1st April of each Tariff Year, during the current Control Period with increase in tariffs as specified under Decision No. 13.
- 19.2. In exercise of powers conferred by Section 13 (1) (b) of the AERA Act, 2008, read with Rule 89 of the Aircraft Rules, 1937, the Authority hereby determines the rate of UDF as indicated in the rate card at Annexure I. These rates will be effective from 01.12.2017.

19.3. The tariffs determined herein are ceiling rates, exclusive of taxes, if any.

By the Order of and in the Name of the Authority

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(Puja Jindal) Secretary

To,

Airports Authority of India

Rajiv Gandhi Bhavan

Safdarjung Airport

New Delhi -110003



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Annexure 1 – Detailed Tariff Card as per the Authority to be applicable from 01.12.2017 or date of issuance of the AIC, whichever is later to 31.03.2018

I) LANDING CHARGES

Rate per landing - International Flight

Weight of the Aircraft	Rate Per Landing (In ₹)	
Up to 25 MT	₹715 per MT	
Above 25 MT up to 50 MT	₹ 17,875 + ₹ 790 per MT in excess of 25 MT	
Above 50 MT up to 100	₹ 37,625 + ₹ 865 per MT in excess of 100 MT	
Above 100 MT to 200 MT	₹80,875 + ₹950 per MT in excess of 100 MT	
Above 200 MT	₹1,75,875 + ₹1,050 per MT in excess of 200 MT	

Rate per Landing - Domestic Flight

Weight of the Aircraft	Rate Per Landing (In ₹)
Up to 25 MT	₹ 370 per MT
Above 25 MT up to 50 MT	₹ 9,250 + ₹ 430 per MT in excess of 25 MT
Above 50 MT up to 100	₹ 20,000 ± ₹ 500 per MT in excess of 50 MT
Above 100 MT to 200 MT	₹45,000 + ₹570 per MT in excess of 100 MT
Above 200 MT	₹1,02,000 + ₹660 per MT in excess of 200 MT

Incentives for increasing the Domestic Flight Operation:

Percentage increase in actual aircraft (Landing Domestic) movements per fortnight per operator from the Aircraft movement for the period 16.11.2017 to 30.11.2017	Discount offered on all the movements per fortnight per operator
10%	1%
15%	2%
20%	3%
25%	4%
30%	5%

Notes:

- The initial Aircraft movement per operator per fortnight will be taken from 16.11.2017 to 30.11.2017. The actual Aircraft movement per operator for the period 16.11.2017 to 30.11.2017 would be frozen for the entire Financial Year (01.12.2017 to 31.03.2018) for the purpose of calculation of discount.
- Percentage increase in Aircraft will be rounded off to the nearest whole number.
- Discount on total Landing will be offered only if the payment is made within the stipulated time

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Incentives for increasing the International Flight Operation:

Percentage increase in actual aircraft (Landing International) movements per fortnight per operator from the Aircraft movement for the period 16.11.2017 to 30.11.2017	Discount offered on all the movements
10%	1%
15%	2%
20%	3%
25%	4%
30%	5%

Notes:

- The initial Aircraft movement per operator per fortnight will be taken from 16.11.2017 to 30.11.2017. The actual Aircraft movement per operator for the period 16.11.2017 to 30.11.2017 would be frozen for the entire Financial Year (01.12.2017 to 31.03.2018) for the purpose of calculation of discount.
- Percentage increase in Aircraft will be rounded off to the nearest whole number.
- Discount on total Landing will be offered only if the payment is made within the stipulated time

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Notes

- 1) No Landing charges shall be payable in respect of a) aircraft with a maximum certified Capacity of less than 80 seats, being operated by domestic scheduled operators at airport and b) helicopters of all types c) DGCA approved Flying school/flying training institute aircrafts.
- 2) All domestic legs of International routes flown by Indian Operators will be treated as domestic flights as far as landing charges is concerned, irrespective of flight number assigned to such flights.
- 3) Charges shall be calculated on the basis of nearest MT (i.e. 1000 kg)

II) PARKING AND HOUSING CHARGES

Weight of the Aircraft	Parking Charges Rates per Hour (In ₹)	Housing Charges Rates per Hour (In ₹)
Up to 100 MT	₹14.4 per MT per hour	₹ 28.2 per MT per hour
Above 100 MT	₹ 1,440 + ₹ 18.80 per MT per hour in excess of 100 MT	₹ 2,820 + 37.80 per MT per hour in excess of 100 MT



Note

- 1) No parking charges shall be levied for the first two hours. While calculating free parking period, standard time of 15 minutes shall be added on account of time taken between touch down time and actual parking time on the parking stand. Another standard time of 15 minutes shall be added on account of taxing time of aircraft from parking stand to take off point these periods shall be applicable for each aircraft irrespective of actual time taken in the movement of aircraft after landing and before takeoff.
- 2) For calculating chargeable parking time any part of an hour shall be rounded off to the next hour.
- 3) Charges shall be calculated on the basis of nearest MT.
- 4) Charges for each parking period shall be rounded off to nearest Rupee
- At the in-contact stands and open stands, after free parking, for the next two hours normal parking charges shall be levied. After this period, the charges shall be double the normal parking charges.
- 6) It is decided to waive off the night parking charges in principle for all domestic scheduled operators at Kolkata Airport if the State Government has brought the rate of tax (VAT) on ATF up to 5%. The above waiver of night parking charges (between 2200 hrs. to 0600 hrs) will be made applicable from the date of implementation of 5% tax on ATF by the State Govt. In the event of upward revision in the tax rate of ATF by the State Govt., the relief of free night parking charges will also be deemed to be withdrawn for all the airports within the jurisdiction of the said State

III) THROUGHPUT CHARGES

	Rate Per KL (IN ₹)	
1	₹ 1,478.94	

IV) AEROBRIDGE CHARGES

Aerobridge charges are payable for each usage as per rates given below:

	AND DESCRIPTION	Rate per hour
Domestic Flight	AL	₹ 2,000
International Flight		₹ 4,000

- a) For calculating chargeable Aerobridge usage time, any part of an hour shall be rounded off to the next hour.
- b) Charges for each usage shall be rounded off to the nearest Rupee.

V) PASSENGER SERVICE FEE (PSF) - SECURITY*

р	er embarking passenger	
₹ 130	\$ 3.25	
0-1 22/2017 40		4.00

Order no. 23/2017-18

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* PSF-Security is determined by MoCA and the rates as provided by MoCA from time to time shall be applicable

Notes

	1)	Collection charges: if the payment is made within 15 days of receipt of invoice, then	
		collection charges at ₹ 2.50% of PSF per passenger shall be paid by AAI. No	
	-	collection charges shall be paid in case the airline fails to pay the PSF to AAI within	
		the credit period of 15 days. Wherever collection charges are payable the amount	
		shall be settled within 15 days.	
	2)	No PSF (Security) will be levied for Transit Passengers.	
Ī	3)	For conversion of US \$ into ₹ the rate as on 1 st day of the month for 1 st fortnightly	
į		billing period and rate as on 16 th of the month for the 2 nd fortnightly billing period	
į		shall be adopted. If the payment is made within 15 days of receipt of bills, then	
1		collection at 2.5% of PSF per passanger is payable	

VI) USER DEVELOPMENT FEE (UDF)

Particulars	Rate
Domestic UDF Embarking Passenger	₹ 518
International UDF Embarking Passenger	₹ 1,246

Notes

	The state of the s		
1)	Collection Charge: If the payment is made within 15 days of receipt of invoice then		
	collection charges at ₹ 5 per departing passenger shall be paid by AAI. No collection		
	charges shall be paid in case the airline fails to pay the UDF invoice to AAI within		
	the credit period of 15 days or in case of any part payment. To be eligible to claim		
	this collection charges, the airlines should have no overdue on any account with		
	AAI. Wherever collection charges are payable the amount shall be settled within 15		
	days.		
2)	No collection charges are payable to casual operator/non-scheduled operators		
3)	For calculating the UDF in foreign currency, the RBI reference conversion rate as on		
	the last day of the previous month for tickets issued in the 1 st fortnight and rate as		
	on 15 th of the month for tickets issued in the 2 nd fortnight shall be adopted.		
4)	Revised UDF charges will be applicable on tickets issued on or after 01.12.2017 or		
	date of issuance of the AIC, whichever is later.		
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5)	No UDF will be levied for Transit Passengers		

VII) Exemption from levy and collection from UDF and PSF (SC) at the Airports

The Ministry of Civil Aviation, Govt. of India vide order no. AV.16011/002/2008-AAI dated 30.11.2011 has directed AAI to exempt the following categories of persons from levy and collection of UDF & PSF (Security).



- (a) Children (under age of 2 years),
- (b) Holders of Diplomatic Passport,
- (c) Airlines crew on duty including sky marshals & airline crew on board for the particular flight only (this would not include Dead Head Crew, or ground personnel),
- (d) Persons travelling on official duty on aircraft operated by Indian Armed Forces,
- (e) Persons traveling on official duty for United Nations Peace Keeping Missions.
- (f) Transit/transfer passengers (this exemption may be granted to all the passengers transiting up to 24 hrs. "A passenger is treated in transit only if onward travel journey is within 24 hrs. from arrival into airport and is part of the same ticket, in case 2 separate tickets are issued it would not be treated as transit passenger").
- (g) Passengers departing from the Indian airports due to involuntary re-routing i.e. technical problems or weather conditions.

VIII) GENERAL CONDITION:

- a) Flight operating under Regional Connectivity Scheme will be completely exempted from charges as per Order No. 20/ 2016-17 dated 31.03.2017 of the Authority from the date the scheme is operationalized by GOI.
- b) All the above Charges are excluding of GST. GST at the applicable rates are payable in addition to above charges.

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Annexure 2 - Detailed Tariff Card as per the Authority applicable from 01.04.2018 to 31.03.2019

1) LANDING CHARGES

Rate per landing - International Flight

Weight of the Aircraft Rate Per Landing (In ₹)		
Up to 25 MT	₹ 743.6 per MT	
Above 25 MT up to 50 MT	₹ 18,590 + ₹ 821.6 per MT in excess of 25 MT	
Above 50 MT up to 100	₹ 39,130 + ₹ 899.6 per MT in excess of 100 MT	
Above 100 MT to 200 MT	₹ 84,110 + ₹ 988 per MT in excess of 100 MT	
Above 200 MT	₹ 1,82,910 + ₹ 1,092 per MT in excess of 200 MT	

Rate per Landing - Domestic Flight

Weight of the Aircraft	Rate Per Landing (In ₹)	
Up to 25 MT	₹ 384.8 per MT	
Above 25 MT up to 50 MT	₹ 9,620 + ₹ 447.2 per MT in excess of 25 MT	
Above 50 MT up to 100	₹ 20,800 + ₹ 520 per MT in excess of 50 MT	
Above 100 MT to 200 MT	200 MT ₹46,800 + ₹592.8 per MT in excess of 100 MT	
Above 200 MT	₹ 1,06,080 + ₹ 686.4 per MT in excess of 200 MT	
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Incentives for increasing the Domestic Flight Operation:

Percentage increase in actual aircraft	
(Landing Domestic) movements per	D:
fortnight per operator from the Aircraft	Discount offered on all the movements
movement for the period 16.03.2018 to	per fortnight per operator
31.03.2018	II IZI III
10%	1%
15%	2%
20%	3%
25%	4%
30%	5%
Notes:	

Notes:

- The initial Aircraft movement per operator per fortnight will be taken from 16.03.2018 to 31.03.2018. The actual Aircraft movement per operator for the period 16.03.2018 to 31.03.2018 would be frozen for the entire Financial Year (01.04.2018 to 31.03.2019) for the purpose of calculation of discount.
- Percentage increase in Aircraft will be rounded off to the nearest whole number.
- Discount on total Landing will be offered only if the payment is made within the stipulated time



Incentives for increasing the International Flight Operation:

Percentage increase in actual aircraft (Landing International) movements per fortnight per operator from the Aircraft movement for the period 16.03.2018 to 31.03.2018	Discount offered on all the movements per fortnight per operator
10%	1%
15%	2%
20%	3%
25%	4%
30%	5%

Notes:

- The initial Aircraft movement per operator per fortnight will be taken from 16.03.2018 to 31.03.2018. The actual Aircraft movement per operator for the period 16.03.2018 to 31.03.2018 would be frozen for the entire Financial Year (01.04.2018 to 31.03.2019) for the purpose of calculation of discount.
- Percentage increase in Aircraft will be rounded off to the nearest whole number.
- Discount on total Landing will be offered only if the payment is made within the stipulated time

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Notes

- No Landing charges shall be payable in respect of a) aircraft with a maximum certified Capacity of less than 80 seats, being operated by domestic scheduled operators at airport and b) helicopters of all types c) DGCA approved Flying school/flying training institute aircrafts.
 All domestic legs of International routes flown by Indian Operators will be treated as
- domestic legs of international routes flown by Indian Operators will be treated as domestic flights as far as landing charges is concerned, irrespective of flight number assigned to such flights.
- 3) Charges shall be calculated on the basis of nearest MT (i.e. 1000 kg)

II) PARKING AND HOUSING CHARGES

Weight of the Aircraft	Parking Charges Rates per Hour (In ₹)	Housing Charges Rates per Hour (In ₹)
Up to 100 MT	₹ 15.1 per MT per hour	₹ 29.6 per MT per hour
Above 100 MT	₹ 1,510 + ₹ 19.70 per MT per hour in excess of 100 MT	₹ 2,960 + 39.70 per MT per hour in excess of 100 MT



Note

- No parking charges shall be levied for the first two hours. While calculating free parking period, standard time of 15 minutes shall be added on account of time taken between touch down time and actual parking time on the parking stand. Another standard time of 15 minutes shall be added on account of taxing time of aircraft from parking stand to take off point these periods shall be applicable for each aircraft irrespective of actual time taken in the movement of aircraft after landing and before takeoff.
- 2) For calculating chargeable parking time any part of an hour shall be rounded off to the next hour.
- 3) Charges shall be calculated on the basis of nearest MT.
- 4) Charges for each parking period shall be rounded off to nearest Rupee
- At the in-contact stands and open stands, after free parking, for the next two hours normal parking charges shall be levied. After this period, the charges shall be double the normal parking charges.
- 6) It is decided to waive off the night parking charges in principle for all domestic scheduled operators at Kolkata Airport if the State Government has brought the rate of tax (VAT) on ATF up to 5%. The above waiver of night parking charges (between 2200 hrs. to 0600 hrs) will be made applicable from the date of implementation of 5% tax on ATF by the State Govt. In the event of upward revision in the tax rate of ATF by the State Govt., the relief of free night parking charges will also be deemed to be withdrawn for all the airports within the jurisdiction of the said State

III) THROUGHPUT CHARGES

Rate Per KL (IN ₹)	
₹ 1,478.94	

IV) AEROBRIDGE CHARGES

Aerobridge charges are payable for each usage as per rates given below:

	AND DESCRIPTIONS	Rate per hour
Domestic Flight	A Low	₹ 2,100
International Flight	A-A	₹ 4,200

- a) For calculating chargeable Aerobridge usage time, any part of an hour shall be rounded off to the next hour.
- b) Charges for each usage shall be rounded off to the nearest Rupee.

V) PASSENGER SERVICE FEE (PSF) – SECURITY*

per embarking passenger		
₹ 130	\$ 3.25	
Order no. 23/2017-18	G-A	108

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* PSF-Security is determined by MoCA and the rates as provided by MoCA from time to time shall be applicable

Notes

1)	Collection charges: if the payment is made within 15 days of receipt of invoice, then collection charges at ₹ 2.50% of PSF per passenger shall be paid by AAI. No		
	collection charges shall be paid in case the airline fails to pay the PSF to AAI within the credit period of 15 days. Wherever collection charges are payable the amount		
	shall be settled within 15 days.		
2)	No PSF (Security) will be levied for Transit Passengers.		
3)	For conversion of US \$ into ₹ the rate as on 1 st day of the month for 1 st fortnightly		
,	billing period and rate as on 16 th of the month for the 2 nd fortnightly billing period		
	shall be adopted. If the payment is made within 15 days of receipt of bills, then		
	collection at 2.5% of PSF per passenger is payable.		

VI) USER DEVELOPMENT FEE (UDF)

Particulars	Rate	
Domestic UDF Embarking Passenger	₹ 539	
International UDF Embarking Passenger	₹ 1,296	

Notes

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ı	1)	Collection Charge: If the payment is made within 15 days of receipt of invoice then
1		collection charges at ₹ 5 per departing passenger shall be paid by AAI. No collection
۱		charges shall be paid in case the airline fails to pay the UDF invoice to AAI within
		the credit period of 15 days or in case of any part payment. To be eligible to claim
		this collection charges, the airlines should have no overdue on any account with
ı		AAI. Wherever collection charges are payable the amount shall be settled within 15
		days.
	2)	No collection charges are payable to casual operator/non-scheduled operators
	3)	For calculating the UDF in foreign currency, the RBI reference conversion rate as on
		the last day of the previous month for tickets issued in the 1st fortnight and rate as
		on 15 th of the month for tickets issued in the 2 nd fortnight shall be adopted.
	4)	No UDF will be levied for Transit Passengers

VII) Exemption from levy and collection from UDF and PSF (SC) at the Airports

The Ministry of Civil Aviation, Govt. of India vide order no. AV.16011/002/2008-AAI dated 30.11.2011 has directed AAI to exempt the following categories of persons from levy and collection of UDF & PSF (Security).



- (a) Children (under age of 2 years),
- (b) Holders of Diplomatic Passport,
- (c) Airlines crew on duty including sky marshals & airline crew on board for the particular flight only (this would not include Dead Head Crew, or ground personnel),
- (d) Persons travelling on official duty on aircraft operated by Indian Armed Forces,
- (e) Persons traveling on official duty for United Nations Peace Keeping Missions.
- (f) Transit/transfer passengers (this exemption may be granted to all the passengers transiting up to 24 hrs. "A passenger is treated in transit only if onward travel journey is within 24 hrs. from arrival into airport and is part of the same ticket, in case 2 separate tickets are issued it would not be treated as transit passenger").
- (g) Passengers departing from the Indian airports due to involuntary re-routing i.e. technical problems or weather conditions.

VIII) GENERAL CONDITION:

- a) Flight operating under Regional Connectivity Scheme will be completely exempted from charges as per Order No. 20/ 2016-17 dated 31.03.2017 of the Authority from the date the scheme is operationalized by GOI.
- b) All the above Charges are excluding of GST. GST at the applicable rates are payable in addition to above charges.

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Annexure 3 — Detailed Tariff Card as per the Authority applicable from 01.04.2019 to 31.03.2020

I) LANDING CHARGES

Rate per landing - International Flight

Weight of the Aircraft	Rate Per Landing (In ₹)	
Up to 25 MT	₹ 773.3 per MT	
Above 25 MT up to 50 MT	₹ 19,332.5 + ₹ 854.5 per MT in excess of 25 MT	
Above 50 MT up to 100	₹ 40,695 + ₹ 935.6 per MT in excess of 100 MT	
Above 100 MT to 200 MT	₹ 87,475 + ₹ 1027.5 per MT in excess of 100 MT	
Above 200 MT	₹ 1,90,225 + ₹ 1,135.7 per MT in excess of 200 MT	

Rate per Landing - Domestic Flight

Weight of the Aircraft	Rate Per Landing (In ₹)
Up to 25 MT	₹ 400.2 per MT
Above 25 MT up to 50 MT	₹ 10,005 + ₹ 465.1 per MT in excess of 25 MT
Above 50 MT up to 100	₹ 21,632.5 + ₹ 540.8 per MT in excess of 50 MT
Above 100 MT to 200 MT	₹ 48,672.5 + ₹ 616.5 per MT in excess of 100 MT
Above 200 MT	₹ 1,10,322.5 + ₹ 713.9 per MT in excess of 200 MT
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Incentives for increasing the Domestic Flight Operation:

Percentage increase in actual aircraft (Landing Domestic) movements per fortnight per operator from the Aircraft movement for the period 16.03.2019 to 31.03.2019	Discount offered on all the movements per fortnight per operator
10%	1%
15%	2%
20%	3%
25%	4%
30%	5%

Notes:

- The initial Aircraft movement per operator per fortnight will be taken from 16.03.2019 to 31.03.2019. The actual Aircraft movement per operator for the period 16.03.2019 to 31.03.2019 would be frozen for the entire Financial Year (01.04.2019 to 31.03.2020) for the purpose of calculation of discount.
- Percentage increase in Aircraft will be rounded off to the nearest whole number.
- Discount on total Landing will be offered only if the payment is made within the stipulated time

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Incentives for increasing the International Flight Operation:

Percentage increase in actual aircraft (Landing International) movements per fortnight per operator from the Aircraft movement for the period 16.03.2019 to 31.03.2019	Discount offered on all the movements per fortnight per operator
10%	1%
15%	2%
20%	3%
25%	4%
30%	5%

Notes:

- The initial Aircraft movement per operator per fortnight will be taken from 16.03.2019 to 31.03.2019. The actual Aircraft movement per operator for the period 16.03.2019 to 31.03.2019 would be frozen for the entire Financial Year (01.04.2019 to 31.03.2020) for the purpose of calculation of discount.
- Percentage increase in Aircraft will be rounded off to the nearest whole number.
- Discount on total Landing will be offered only if the payment is made within the stipulated time

Notes

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- No Landing charges shall be payable in respect of a) aircraft with a maximum certified Capacity of less than 80 seats, being operated by domestic scheduled operators at airport and b) helicopters of all types c) DGCA approved Flying school/flying training institute aircrafts.
- 2) All domestic legs of International routes flown by Indian Operators will be treated as domestic flights as far as landing charges is concerned, irrespective of flight number assigned to such flights.
- 3) Charges shall be calculated on the basis of nearest MT (i.e. 1000 kg)

II) PARKING AND HOUSING CHARGES

Weight of the Aircraft	Parking Charges Rates per Hour (In ₹)	Housing Charges Rates per Hour (In ₹)
Up to 100 MT	₹ 15.9 per MT per hour	₹31.1 per MT per hour
Above 100 MT	₹ 1,590 + ₹ 20.70 per MT per hour in excess of 100 MT	₹ 3,110 + 41.70 per MT per hour in excess of 100 MT



Note

- 1) No parking charges shall be levied for the first two hours. While calculating free parking period, standard time of 15 minutes shall be added on account of time taken between touch down time and actual parking time on the parking stand. Another standard time of 15 minutes shall be added on account of taxing time of aircraft from parking stand to take off point these periods shall be applicable for each aircraft irrespective of actual time taken in the movement of aircraft after landing and before takeoff.
- 2) For calculating chargeable parking time any part of an hour shall be rounded off to the next hour.
- 3) Charges shall be calculated on the basis of nearest MT.
- 4) Charges for each parking period shall be rounded off to nearest Rupee
- 5) At the in-contact stands and open stands, after free parking, for the next two hours normal parking charges shall be levied. After this period, the charges shall be double the normal parking charges.
- It is decided to waive off the night parking charges in principle for all domestic scheduled operators at Kolkata Airport if the State Government has brought the rate of tax (VAT) on ATF up to 5%. The above waiver of night parking charges (between 2200 hrs. to 0600 hrs) will be made applicable from the date of implementation of 5% tax on ATF by the State Govt. In the event of upward revision in the tax rate of ATF by the State Govt., the relief of free night parking charges will also be deemed to be withdrawn for all the airports within the jurisdiction of the said State

III) THROUGHPUT CHARGES

Rate Per KL (IN ₹)	
₹ 1,478.94	

IV) AEROBRIDGE CHARGES

Aerobridge charges are payable for each usage as per rates given below:

	and instant	Rate per hour
Domestic Flight		₹ 2,205
International Flight		₹ 4,410

- a) For calculating chargeable Aerobridge usage time, any part of an hour shall be rounded off to the next hour.
- b) Charges for each usage shall be rounded off to the nearest Rupee.

V) PASSENGER SERVICE FEE (PSF) - SECURITY*

	per embarking passenger	
₹ 130	\$ 3.25	
Order no. 23/2017-18	आधिक विक्र	113

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* PSF-Security is determined by MoCA and the rates as provided by MoCA from time to time shall be applicable

Notes

1)	Collection charges: if the payment is made within 15 days of receipt of invoice, then		
	collection charges at ₹ 2.50% of PSF per passenger shall be paid by AAI. No		
	collection charges shall be paid in case the airline fails to pay the PSF to AAI within		
	the credit period of 15 days. Wherever collection charges are payable the amount		
	shall be settled within 15 days.		
2)	No PSF (Security) will be levied for Transit Passengers.		
3)	For conversion of US \$ into ₹ the rate as on 1 st day of the month for 1 st fortnightly		
	billing period and rate as on 16 th of the month for the 2 nd fortnightly billing period		
	shall be adopted. If the payment is made within 15 days of receipt of bills, then		
	collection at 2.5% of PSF per passenger is payable.		

VI) USER DEVELOPMENT FEE (UDF)

Particulars	Rate
Domestic UDF Embarking Passenger	₹ 560.6
International UDF Embarking Passenger	₹ 1,347.8

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	1)	Collection Charge: If the payment is made within 15 days of receipt of invoice then		
I		collection charges at ₹ 5 per departing passenger shall be paid by AAI. No collection		
ı		charges shall be paid in case the airline fails to pay the UDF invoice to AAI within		
		the credit period of 15 days or in case of any part payment. To be eligible to claim		
ı		this collection charges, the airlines should have no overdue on any account with		
ı		AAI. Wherever collection charges are payable the amount shall be settled within 15		
1		days.		
l	2)	No collection charges are payable to casual operator/non-scheduled operators		
۱	3)	For calculating the UDF in foreign currency, the RBI reference conversion rate as on		
۱		the last day of the previous month for tickets issued in the 1st fortnight and rate as		
		on 15 th of the month for tickets issued in the 2 nd fortnight shall be adopted.		
	4)	No UDF will be levied for Transit Passengers		

VII) Exemption from levy and collection from UDF and PSF (SC) at the Airports

The Ministry of Civil Aviation, Govt. of India vide order no. AV.16011/002/2008-AAI dated 30.11.2011 has directed AAI to exempt the following categories of persons from levy and collection of UDF & PSF (Security).

- (a) Children (under age of 2 years),
- (b) Holders of Diplomatic Passport,
- (c) Airlines crew on duty including sky marshals & airline crew on board for the



- particular flight only (this would not include Dead Head Crew, or ground personnel),
- (d) Persons travelling on official duty on aircraft operated by Indian Armed Forces,
- (e) Persons traveling on official duty for United Nations Peace Keeping Missions.
- (f) Transit/transfer passengers (this exemption may be granted to all the passengers transiting up to 24 hrs. "A passenger is treated in transit only if onward travel journey is within 24 hrs. from arrival into airport and is part of the same ticket, in case 2 separate tickets are issued it would not be treated as transit passenger").
- (g) Passengers departing from the Indian airports due to involuntary re-routing i.e. technical problems or weather conditions.

VIII) GENERAL CONDITION:

- a) Flight operating under Regional Connectivity Scheme will be completely exempted from charges as per Order No. 20/ 2016-17 dated 31.03.2017 of the Authority from the date the scheme is operationalized by GOI.
- b) All the above Charges are excluding of GST. GST at the applicable rates are payable in addition to above charges.





Annexure 4 — Detailed Tariff Card as per the Authority applicable from 01.04.2020 to 31.03.2021

I) LANDING CHARGES

Rate per landing - International Flight

Weight of the Aircraft Rate Per Landing (In ₹)	
Up to 25 MT	₹ 804.2 per MT
Above 25 MT up to 50 MT	₹ 20,105 + ₹ 888.7 per MT in excess of 25 MT
Above 50 MT up to 100	₹ 42,322.5 + ₹ 973 per MT in excess of 100 MT
Above 100 MT to 200 MT	₹ 90,972.5 + ₹ 1068.6 per MT in excess of 100 MT
Above 200 MT	₹ 1,97,832.5 + ₹ 1,181.1 per MT in excess of 200 MT

Rate per Landing - Domestic Flight

Weight of the Aircraft	Rate Per Landing (In ₹)	
Up to 25 MT	₹416.2 per MT	
Above 25 MT up to 50 MT	₹ 10,405 + ₹ 483.7 per MT in excess of 25 MT	
Above 50 MT up to 100	₹ 22,497.5 + ₹ 562.4 per MT in excess of 50 MT	
Above 100 MT to 200 MT	₹50,617.5 + ₹ 641.2 per MT in excess of 100 MT	
Above 200 MT	₹ 1,14,737.5 + ₹ 742.5 per MT in excess of 200 MT	

Incentives for increasing the Domestic Flight Operation:

Percentage increase in actual aircraft (Landing Domestic) movements per fortnight per operator from the Aircraft movement for the period 16.03.2020 to	Discount offered on all the movements per fortnight per operator
31.03.2020 10%	1%
15%	2%
20%	3%
25%	4%
30%	5%

Notes:

- The initial Aircraft movement per operator per fortnight will be taken from 16.03.2020 to 31.03.2020. The actual Aircraft movement per operator for the period 16.03.2020 to 31.03.2020 would be frozen for the entire Financial Year (01.04.2020 to 31.03.2021) for the purpose of calculation of discount.
- Percentage increase in Aircraft will be rounded off to the nearest whole number.
- Discount on total Landing will be offered only if the payment is made within the stipulated time



Incentives for increasing the International Flight Operation:

Percentage increase in actual aircraft (Landing International) movements per fortnight per operator from the Aircraft movement for the period 16.03.2020 to 31.03.2020	Discount offered on all the movements per fortnight per operator
10%	1%
15%	2%
20%	3%
25%	4%
30%	5%

Notes:

- The initial Aircraft movement per operator per fortnight will be taken from 16.03.2020 to 31.03.2020. The actual Aircraft movement per operator for the period 16.03.2020 to 31.03.2020 would be frozen for the entire Financial Year (01.04.2020 to 31.03.2021) for the purpose of calculation of discount.
- Percentage increase in Aircraft will be rounded off to the nearest whole number.
- Discount on total Landing will be offered only if the payment is made within the stipulated time

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Notes

3)

1)	No Landing charges shall be payable in respect of a) aircraft with a maximum certified
	Capacity of less than 80 seats, being operated by domestic scheduled operators at
	airport and b) helicopters of all types c) DGCA approved Flying school/flying training
	institute aircrafts.
2)	All domestic legs of International routes flown by Indian Operators will be treated as domestic flights as far as landing charges is concerned, irrespective of flight number
	assigned to such flights.

Charges shall be calculated on the basis of nearest MT (i.e. 1000 kg)

II) PARKING AND HOUSING CHARGES

Weight of the Aircraft	Parking Charges Rates per Hour (In ₹)	Housing Charges Rates per Hour (In ₹)
Up to 100 MT	₹ 16.7 per MT per hour	₹ 32.7 per MT per hour
Above 100 MT	₹ 1,670 + ₹ 21.70 per MT per hour in excess of 100 MT	₹ 3,270 + 43.80 per MT per hour in excess of 100 MT



Note

- 1) No parking charges shall be levied for the first two hours. While calculating free parking period, standard time of 15 minutes shall be added on account of time taken between touch down time and actual parking time on the parking stand. Another standard time of 15 minutes shall be added on account of taxing time of aircraft from parking stand to take off point these periods shall be applicable for each aircraft irrespective of actual time taken in the movement of aircraft after landing and before takeoff.
- 2) For calculating chargeable parking time any part of an hour shall be rounded off to the next hour.
- 3) Charges shall be calculated on the basis of nearest MT.
- 4) Charges for each parking period shall be rounded off to nearest Rupee
- At the in-contact stands and open stands, after free parking, for the next two hours normal parking charges shall be levied. After this period, the charges shall be double the normal parking charges.
- 6) It is decided to waive off the night parking charges in principle for all domestic scheduled operators at Kolkata Airport if the State Government has brought the rate of tax (VAT) on ATF up to 5%. The above waiver of night parking charges (between 2200 hrs. to 0600 hrs) will be made applicable from the date of implementation of 5% tax on ATF by the State Govt. In the event of upward revision in the tax rate of ATF by the State Govt., the relief of free night parking charges will also be deemed to be withdrawn for all the airports within the jurisdiction of the said State

III) THROUGHPUT CHARGES

Rate Per KL (IN ₹)	
₹ 1,478.94	

IV) AEROBRIDGE CHARGES

Aerobridge charges are payable for each usage as per rates given below:

and the second	Rate per hour
Domestic Flight	₹ 2,315
International Flight	₹ 4,631

- a) For calculating chargeable Aerobridge usage time, any part of an hour shall be rounded off to the next hour.
- b) Charges for each usage shall be rounded off to the nearest Rupee.

V) PASSENGER SERVICE FEE (PSF) - SECURITY*

	per embarking passenger	
₹ 130	\$ 3.25	
Order no. 23/2017-18	(d= a)	118

TONOMIC Regulatory Authorities

* PSF-Security is determined by MoCA and the rates as provided by MoCA from time to time shall be applicable

Notes

1)	Collection charges: if the payment is made within 15 days of receipt of invoice, then						
	collection charges at ₹ 2.50% of PSF per passenger shall be paid by AAI. No						
	collection charges shall be paid in case the airline fails to pay the PSF to AAI within						
	the credit period of 15 days. Wherever collection charges are payable the amount						
	shall be settled within 15 days.						
2)	No PSF (Security) will be levied for Transit Passengers.						
3)	For conversion of US \$ into ₹ the rate as on 1 st day of the month for 1 st fortnightly						
	billing period and rate as on 16 th of the month for the 2 nd fortnightly billing period						
	shall be adopted. If the payment is made within 15 days of receipt of bills, then						
	collection at 2.5% of PSF per passenger is payable.						

VI) USER DEVELOPMENT FEE (UDF)

Particulars	Rate
Domestic UDF Embarking Passenger	₹ 583.0
International UDF Embarking Passenger	₹ 1,401.7

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	11000	변경부의 제하다
I	1)	Collection Charge: If the payment is made within 15 days of receipt of invoice then
		collection charges at ₹ 5 per departing passenger shall be paid by AAI. No collection charges shall be paid in case the airline fails to pay the UDF invoice to AAI within the credit period of 15 days or in case of any part payment. To be eligible to claim this collection charges, the airlines should have no overdue on any account with AAI. Wherever collection charges are payable the amount shall be settled within 15 days.
Ī	2)	No collection charges are payable to casual operator/non-scheduled operators
	3)	For calculating the UDF in foreign currency, the RBI reference conversion rate as on the last day of the previous month for tickets issued in the 1^{st} fortnight and rate as on 15^{th} of the month for tickets issued in the 2^{nd} fortnight shall be adopted.
	4)	No UDF will be levied for Transit Passengers

VII) Exemption from levy and collection from UDF and PSF (SC) at the Airports

The Ministry of Civil Aviation, Govt. of India vide order no. AV.16011/002/2008-AAI dated 30.11.2011 has directed AAI to exempt the following categories of persons from levy and collection of UDF & PSF (Security).

- (a) Children (under age of 2 years),
- (b) Holders of Diplomatic Passport,
- (c) Airlines crew on duty including sky marshals & airline crew on board for the



- particular flight only (this would not include Dead Head Crew, or ground personnel),
- (d) Persons travelling on official duty on aircraft operated by Indian Armed Forces,
- (e) Persons traveling on official duty for United Nations Peace Keeping Missions.
- (f) Transit/transfer passengers (this exemption may be granted to all the passengers transiting up to 24 hrs. "A passenger is treated in transit only if onward travel journey is within 24 hrs. from arrival into airport and is part of the same ticket, in case 2 separate tickets are issued it would not be treated as transit passenger").
- (g) Passengers departing from the Indian airports due to involuntary re-routing i.e. technical problems or weather conditions.

VIII) GENERAL CONDITION:

- a) Flight operating under Regional Connectivity Scheme will be completely exempted from charges as per Order No. 20/ 2016-17 dated 31.03.2017 of the Authority from the date the scheme is operationalized by GOI.
- b) All the above Charges are excluding of GST. GST at the applicable rates are payable in addition to above charges.





Annexure 5 – Details of Aeronautical Revenues

S. No.	Particulars	2017	2018*	2019	2020	2021			
	Traffic Assumptions								
1	Domestic ATMs	105,783	113,431	121,631	130,424	139,853			
2	International ATMs	18,371	19,290	20,254	21,267	22,330			
3	Total ATMs	124,154	132,720	141,885	151,691	162,183			
4	Domestic Passengers	13,589,468	15,113,297	16,807,997	18,692,729	20,788,801			
5	International Passengers	2,230,071	2,386,176	2,553,208	2,731,933	2,923,168			
6	Total Passengers	15,819,539	17,499,473	19,361,205	21,424,662	23,711,970			
		TO A STATE OF	ACAS						
7	Fuel throughout (kL)	304,133	325,117	347,567	371,588	397,290			
		Aeronautica	l Revenues		5	4 1 -			
	Landing Charges	T (Te	T/IY						
8	Average landing charges per	24076	30817	32050	33332	34665			
	departing domestic ATM (₹)	at At a second	ANTA TO	02000	00002	3 1003			
	Growth in average landing	AY THE		***					
9	charges per departing domestic	V	28%	4%	4%	4%			
	ATM (₹)	SALES STATES	ETTE XXX						
10	Landing Charges - Domestic	127.3	जयत्149.3	194.9	217.4	242.4			
_	ATM (₹ cr.)								
	Average landing charges per								
11	departing international ATM	70717	85567	88990	92549	96251			
11	(₹)	70717	1/ 8556/	88990	92549	30721			
	Growth in average landing								
12	charges per departing		21%	4%	4%	4%			
	International ATM (₹)		TIC						
4.5	Landing Charges -		1014	711.					
13	International ATM (₹ cr.)	65.0	73.0	90.1	98.4	107.5			
1.4	Total Landing Charges (Dom +	102.2	2222	205.0	245.0	240.0			
14	Int)	192.3	222.3	285.0	315.8	349.9			
	Parking and Housing Charges:								
	Parking and Housing Average								
15	Revenue per departing ATM	749	1198	1258	1321	1387			
	(Dom + Int) (₹)								
	Growth in Parking and Housing								
16	charges per departing ATM		60%	5%	5%	5%			
	(Dom + Int)								
17	Total Parking and Housing	4.6	6.0	8.9	10.0	11.2			



S. No.	Particulars	2017	2018*	2019	2020	2021
	Charges (Dom + Int)					
	User Development Fee (UDF)					
18	Domestic UDF per departing passenger (₹)	449	518	539	560	583
19	Growth in Domestic UDF per departing passenger (%)		15%	4%	4%	4%
20	Revenues from Domestic UDF (₹ cr.)	305.1	356.7	452.7	523.6	605.7
21	International UDF per departing passenger (₹)	1124	1246	1296	1348	1402
22	Growth in International UDF per departing passenger (%)		11%	4%	4%	4%
23	Revenues from International UDF (₹ cr.)	125.3	139.0	165.4	184.1	204.9
24	Total UDF (₹ cr.)	430.4	495.6	618.2	707.7	810.5
		AGA WAY				
	Fuel Throughput Charges (FTC)		Winds.			
25	FTC (₹ per kL)	1478.94	1478.94	1478.94	1478.94	1478.94
26	Revenues from FTC (₹ cr.)	45.0	जयत 48.1	51.4	55.0	58.8
27	Ground Handling Charges (₹ cr.)	26.7	28.5	30.5	32.6	34.8
28	Growth in ground handling charges as per increase in ATMs (%)		6.9%	6.9%	6.9%	6.9%
	A 777			operations.		
29	Cute services (₹ cr.)	12.4	13.7	15.1	16.7	18.5
30	Growth in CUTE charges as per increase in passengers (%)		10.6%	10.6%	10.7%	10.7%
31	Land lease from ground handling agencies (₹ cr.)	1.1	1.2	1.3	1.4	1.5
32	Growth as per contracts (%)		7.5%	7.5%	7.5%	7.5%
33	Land lease from oil companies (₹ cr.)	38.7	41.6	44.7	48.1	51.7
34	Growth as per contracts (%)		7.5%	7.5%	7.5%	7.5%
35	Rent from ground handling agencies (₹ cr.)	1.6	1.8	1.9	2.1	2.3



S. No.	Particulars	2017	2018*	2019	2020	2021
36	Growth as per contracts (%)		10.0%	10.0%	10.0%	10.0%
	Aerobridge charges					
37	Domestic Aerobridge charges (₹)		2000	2100	2205	2315
38	Growth in Domestic Aerobridge charges (%)			5%	5%	5%
39	International Aerobridge charges (₹)	C Andrew	4000	4200	4410	4631
40	Growth in International Aerobridge charges (%)			5%	5%	5%
41	% of Departing ATM using aerobridges		90%	90%	90%	90%
42	Total revenues from aerobridge charges (₹ cr.)		4.6	15.3	17.2	19.2
		J. P. C.	HA TO			
43	Cargo Revenues (₹ cr.)	47.2	0.0	0.0	0.0	0.0
		VAN STATE	Jaka J			
44	Total aeronautical revenues (₹ cr.)	799.9	863.2	1072.4	1206.5	1358.5

^{*} For FY 2017-18, existing tariffs are applicable till 30.11.2017 and revised tariffs are applicable from 01.12.2017 onwards.

