

F.No.AERA/20010/MYTP/AAI-LKO/CP-II/2016-17

Consultation Paper No. 31/2017-18



Airports Economic Regulatory Authority of India

**In the matter of determination of aeronautical tariffs in
respect of Chaudhary Charan Singh International Airport,
Amausi, Lucknow (CCSIA) for the second Control Period
(01.04.2016 – 31.03.2021)**

22nd December, 2017

**AERA Building
Administrative Complex
Safdarjung Airport
New Delhi – 110 003**

Table of Contents

1. Introduction.....	2
2. Methodology for Tariff determination.....	5
3. Multi Year Tariff Proposal for CCSIA.....	7
4. True-up for First control period.....	8
5. Traffic forecast.....	18
6. Allocation of Assets (Aeronautical and Non-Aeronautical).....	21
7. Opening Regulatory Asset Base for Second control period	26
8. Capital Expenditure for Second control period	27
9. Depreciation	40
10. RAB for Second control period	43
11. Cost of Equity, Cost of Debt, Gearing, and Fair Rate of Return (FRoR).....	45
12. Revenue from services other than aeronautical services	46
13. Operation and Maintenance Expenditure.....	51
14. Taxation	59
15. Aggregate Revenue Requirement for Second control period	61
16. Annual Tariff Proposal	63
17. Summary of Proposals.....	71
18. Stakeholders' Consultation Timeline.....	72

1. Introduction

1.1. Lucknow is the capital city of the state of Uttar Pradesh which is the most populous state in India. In addition to being the administrative centre, Lucknow has major industries for IT, automotive, distillery chemicals and garments. Lucknow is among the top cities of India by GDP. Lucknow is also a centre for research and redevelopment. It is ranked 6th by ASSOCHAM in a list of the ten fastest growing job-creating cities in India. The city accounts for 60% of total exports from the state.

1.2. The Chaudhary Charan Singh International Airport, Amausi, Lucknow (CCSIA) is one of the 18 international airports owned and managed by AAI. The traffic handled by CCSIA during the 1st control period is given in table below:

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

Year	Dom. Pax (mn)	Int. Pax (mn)	Total Pax (mn)	Dom. ATMs	Int. ATMs	Total ATMs
2012	1.7	0.4	2.1	15,898	2,652	18,550
2013	1.6	0.4	2.0	15,632	2,763	18,395
2014	1.9	0.4	2.3	16,758	2,924	19,682
2015	2.1	0.5	2.6	16,745	3,004	19,749
2016	2.6	0.6	3.2	20,347	6,970	27,317

1.3. CCSIA, 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.

1.4. Technical and Terminal building details of CCSIA are provided in the table below:

Table 2 – Technical and Terminal building details of CCSIA

Technical Details of CCSIA		
Particulars	Details	
Total airport area	1,261 Acres	
Runway orientation and length	09-27; 2,742 meters	
No. of Taxi Tracks	6	
No. of Apron Bays	19	
Aerodrome Category	4D	
Navigational Aids	VOR/DME ; CAT-3B,ILS,ADS-B	
Operational hours	24	
Terminal building Details		
Particulars	Domestic (T-I)	International (T-II)

Terminal Building Area	20,850 Sq.m.	8,965 Sq.m.
Immigration Counters	-	12
Customs Counters	-	5
Particulars	Domestic (T-I)	International (T-II)
Security Counters	4	3
Departure Conveyor	1	1
Arrival Conveyor	3	2
Peak hour passenger capacity	1250	470
No. of Check-in Counters (CUTE)	17	11
Total Area of Car Parking	9,701 Sq.m	3,232 Sq.m

1.5. The Authority, vide its Order No. 09/2014-15 dated 29.08.2014 had decided to determine the aeronautical tariffs to be levied at CCSIA for the first control period with effect from 01.10.2014. Major decisions of the Authority in its Order No. 09/2014-15 are provided below:

1.5.1. To consider the amount of ₹ 69.30 crore as Initial RAB of CCSIA as on 01.04.2011, and factor it in determination of aeronautical tariffs for the 1st control period.

1.5.2. 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 capitalised.

1.5.3. To true up the depreciation considered during the present aeronautical tariff determination exercise for assets which are yet to be capitalized, based on the actual capitalised assets in the current control period (i.e. the date of capitalisation of the underlying assets in a given year), while determining aeronautical tariffs for the next control period.

1.5.4. To true up the average RAB of the current control period while determining aeronautical tariff for the next control period based on the timing and exact value of asset capitalisation in the current control period.

1.5.5. To true up the traffic volume (Passengers, ATM and Cargo) based on actual throughput during the current control period while determining aeronautical tariffs for the next control period commencing w.e.f. 01.04.2016.

- 1.5.6. To true up the non-aeronautical revenue considered by the Authority in the present aeronautical tariff determination exercise, based on the actual non-aeronautical revenue earned by AAI during the current control period, while determining aeronautical tariffs for the next control period.
- 1.5.7. To review cost of actual O&M expenses (subject to factors provided in the order for the 1st control period) for the purpose of corrections (adjustments) to tariffs for the current Control Period while determining tariffs in the next Control Period.
- 1.5.8. To true up the difference between the actual corporate tax paid and that used by the Authority for determination of tariff for the current control period, while determining the tariff for the next control period.
- 1.5.9. To consider the WACC at 14% for CCSIA for the 1st control period.
- 1.5.10. To true up the amount of under recovery of ARR during the current control period, at the time of determining the aeronautical tariffs for the next control period.

2. Methodology for Tariff determination

- 2.1. 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”), has 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.
- 2.2. The tariff determination process consists of true-up for 1st control period and determination of building blocks for 2nd control period. The Authority proposes 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.
- 2.3. The Aggregate Revenue Requirement (ARR) under regulatory framework of Authority is calculated as under

$$ARR = \sum_{t=1}^5 (ARR_t) \text{ and}$$
$$ARR_t = (FRoR \times RAB_t) + D_t + O_t + T_t - \alpha \times NAR_t$$

Where

- 2.3.1. t is the Tariff Year in the control period;
- 2.3.2. ARR_t is the Aggregate Revenue Requirement for year t;
- 2.3.3. FRoR is the Fair Rate of Return for the control period;
- 2.3.4. RAB_t is the Aeronautical Regulatory Asset Base for year t;
- 2.3.5. D_t is the Depreciation corresponding to the Aeronautical RAB for year t;
- 2.3.6. O_t 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;
- 2.3.7. 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;
- 2.3.8. α is 30% cross subsidy factor for revenue from services other than aeronautical services under Hybrid Till for 2nd control period. α is 100% cross

subsidy factor under Single Till for 1st control period; and

2.3.9. NAR_t is the revenue from services other than aeronautical services (Non-Aeronautical Revenues or NAR) for year t.

2.4. Based on ARR, Yield per Passenger is calculated as per formula given below:

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

Where,

2.4.1. Present value (PV) of ARR_t 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.

2.4.2. VE_t is the Traffic volume in a tariff year t as estimated by the Authority

2.4.3. ARR_t is the Aggregate Revenue Requirement for tariff year t.

2.5. While determining building blocks and ARR for CCSIA, Authority proposes to-

2.5.1. 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

2.5.2. Adopt depreciation rates consistent with Companies Act and for assets not defined in the Companies Act at 3.33%.

2.6. 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.

2.7. The true-up for 1st control period and determination of building blocks for 2nd control period are detailed in subsequent sections.

2.8. It is to be noted that some of the numbers in the order are rounded off for ease in representation.

3. Multi Year Tariff Proposal for CCSIA

- 3.1. In the 1st control period, the Authority, vide its Order No. 09/2014-15 dated 29.08.2014 had decided to determine the aeronautical tariffs to be levied at CCSIA for the first control period with effect from 01.10.2014.
- 3.2. AAI made submissions dated 29.03.2016 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 09.01.2017. 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 09.01.2017 and considered subsequent submissions for this consultation paper.
- 3.3. AAI provides Air Navigation Services (ANS) services in addition to landing, parking and other aeronautical services at CCSIA. AAI has submitted that the tariff proposal does not consider revenues, expenditure and assets on account of ANS. This consultation paper discusses the determination of tariffs for aeronautical services at the airport excluding ANS.
- 3.4. 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 CCSIA. The Authority has utilized these documents as submitted by AAI for determination of tariffs.

4. True-up for First control period

4.1. True-up for 1st control period is calculated as difference between

4.1.1. Permissible aeronautical revenue calculated based on actual traffic and financials

4.1.2. Actual aeronautical revenue received by AAI for 1st control period

4.2. AAI has submitted opening RAB for the 1st control period under Single Till at ₹ 69.3 crores.

Table 3 – Opening RAB for the 1st control period as per AAI – Single Till

S. No.	Particulars	Amount (₹ crore)
1	Original Cost of Airport Assets excluding ANS related assets as on 01.04.2011	140.8
2	Accumulated Depreciation as on 01.04.2011	71.5
3	Opening RAB[(1)-(2)] as on 01.04.2011	69.3

Permissible aeronautical revenues

4.3. AAI has calculated Aggregate Revenue Requirement of ₹ 427.3 crores (PV of ARR is ₹ 320 crores as on 1st April 2012) for 1st control period.

Table 4 - 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	69.3	63.4	178.1	157.8	141.6
Assets capitalized during the year	3.9	136.2	1.2	5.6	1.2
Disposals/ Transfer					
Depreciation	9.8	21.5	21.5	21.7	21.3
Closing RAB	63.4	178.1	157.8	141.6	121.5
Average RAB	66.3	120.7	167.9	149.7	131.6
Return on Average RAB@14%	9.3	16.9	23.5	21.0	18.4
Operating Expenditure	43.4	61.8	61.1	78.4	68.6
Depreciation	9.8	21.5	21.5	21.7	21.3
Corporate Tax	0.0	0.0	0.0	0.0	38.5
Less- Revenue from services other than Regulated services	15.9	15.8	16.7	23.1	38.0
ARR as per AAI	46.6	84.4	89.4	98.0	108.8
Total ARR as per AAI	427.3				
Discounted ARR	46.6	74.1	68.8	66.2	64.4
PV of ARR for the control period as on 01.04.2012	320.0				

Actual aeronautical revenues

4.4. AAI has submitted that it has earned aeronautical revenues of ₹ 279.6 crores during the 1st control period. Correspondingly, AAI has submitted that it has a shortfall of ₹ 275.8 crores (future value as on 01 April 2017) during the 1st control period. The aeronautical revenues for the 1st control period is shown below:

Table 5 - Aeronautical revenue earned for the 1st control period as per AAI Submission – Single Till

No.	Particulars (₹ crore)	2011-12	2012-13	2013-14	2014-15	2015-16
A	Revenues from Regulated Services					
1	Landing Charges:					
1.1	Domestic	9.7	10.2	11.3	17.2	30.9
1.2	International	4.6	5.2	5.8	7.3	15.2
1.3	Total Landing Charges	14.3	15.4	17.1	24.6	46.2
2	Parking and Housing Charges:					
		0.1	0.1	0.1	0.1	0.1
3	PSF(Facilitation Charges(FC)):					
3.1	Domestic	6.4	6.5	7.6	5.2	0.0
3.2	International	1.4	1.5	1.4	1.2	0.4
3.3	Total PSF (FC)	7.8	8.0	9.0	6.3	0.5
4	User Development Fees (UDF):					
4.1	Domestic	0.0	0.0	0.0	15.7	50.4
4.2	International	0.0	0.0	0.0	7.8	29.2
4.3	TOTAL UDF	0.0	0.0	0.0	23.5	79.5
5	Fuel Throughput Charges	1.7	1.9	2.0	2.2	2.5
6	Ground Handling Charges	0.7	0.9	0.9	1.9	2.3
7	Cargo revenues	0.5	0.6	0.5	0.9	1.5
8	CUTE services	0.4	1.0	1.4	1.3	2.1
	Total Aeronautical Revenues	25.4	27.9	30.9	60.8	134.7

Table 6 - 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	46.6	84.4	89.4	98.0	108.8	427.3
2	Aeronautical Revenue	25.4	27.9	30.9	60.8	134.7	279.6
3	Shortfall (+)/ excess (-)	21.1	56.6	58.6	37.3	-25.9	147.6
4	Future Value of shortfall (+)/ excess (-) as on 01.04.2017	46.4	108.9	98.9	55.2	-33.7	275.8

Authority's Examination

4.5. The Authority proposes adjustments on the following building blocks for calculating true-up of 1st control period

4.5.1. Adjustment of depreciation

4.5.2. Adjustment of non-aeronautical revenues

4.5.3. Apportionment of CHQ/RHQ costs and change in tax calculation

4.5.4. Correction of present value factor for shortfall calculation

Adjustment for Depreciation

4.6. 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 7 - Depreciation rates as submitted by AAI

No.	Asset Class	As per AAI
1	Land	0%
2	Leasehold Land	0%
3	Runways	13%
4	Taxiway	13%
5	Aprons	13%
6	Road, Bridges & Culverts	13%
7	Building- Terminal	8%
8	Building – Temporary	100%
9	Building – Residential	5%
10	Security Fencing - Temporary	100%
11	Boundary Wall -Operational	8%
12	Boundary Wall - Residential	5%
13	Other Buildings-Unclassified	8%
14	Computer & Peripherals	20%
15	Intangible Assets- Software	20%
16	Plant & Machinery	11%

17	Tools & Equipment	20%
18	Office Furniture	20%
19	Other Vehicles	14%
20	Vehicle - Cars & Jeeps	14%
21	Electrical Installations	11%
22	Other Office equipment	18%
23	Furniture & Fixtures-Other than office	20%
24	X Ray Baggage System	11%
25	CFT/Fire Fighting Equipment	13%

4.7. The Authority proposes the following depreciation rates

4.7.1. 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

4.7.2. 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 32.

4.8. Depreciation for the 1st control period has been calculated on the basis of actual date of capitalization of assets.

4.9. The revised depreciation for the 1st control period under Single Till is given below:

Table 8 – The Authority’s consideration of depreciation for 1st control period – Single Till

No.	Details (₹ crore)	2011-12	2012-13	2013-14	2014-15	2015-16	Total
1	As per AAI	9.8	21.5	21.5	21.7	21.3	95.9
2	As per Authority	3.0	6.2	6.1	10.8	10.8	36.9

4.10. 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.

4.11. In the case of CCSIA, it is therefore proposed to exclude the existing cost of land (₹ 17.75 crores in FY 2011-12 and addition of ₹ 0.21 crores in FY 2012-13) from the RAB till a final decision is taken on the issue.

4.12. The change in depreciation rates and exclusion of land from RAB results in a change in average RAB of the 1st control period as shown below –

Table 9 – 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	69.3	63.4	178.1	157.8	141.6
	Additions	3.9	136.2	1.2	5.6	1.2
	Disposals					
	Depreciation	9.8	21.5	21.5	21.7	21.3
	Closing RAB	63.4	178.1	157.8	141.6	121.5
	Average RAB	66.3	120.7	167.9	149.7	131.6
2	As per Authority					
	Opening RAB	51.5	52.4	182.2	177.3	172.1
	Additions	3.9	136.0	1.2	5.6	1.2
	Disposals					
	Depreciation	3.0	6.2	6.1	10.8	10.8
	Closing RAB	52.4	182.2	177.3	172.1	162.5
	Average RAB	52.0	117.3	179.8	174.7	167.3

Adjustment for Non-Aeronautical revenues

4.13. The Authority noted that AAI has considered lease rental and rent revenues from 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.

4.14. The Authority proposes to consider the revenues from Ground Handling Services and Supply of fuel to aircraft including land lease rentals as aeronautical revenue.

Table 10 – Comparison of NAR as considered by AAI and the Authority for 1st control period

NAR (₹ crore)	2011-12	2012-13	2013-14	2014-15	2015-16
NAR as submitted by AAI (1)	15.9	15.8	16.7	23.1	38.0
Adjustment					
<i>Revenue from Ground handling and fuel services treated as aeronautical (2)</i>	0.4	0.7	0.7	0.9	2.2
NAR as per Authority (3 = 1 - 2)	15.4	15.1	16.1	22.2	35.8

Adjustment for operating expenditure (CHQ/ RHQ expenditure apportionment)

4.15. 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 CCSIA consist of two components – Expenditure for CCSIA employee’s retirement benefit allocated at CHQ and overheads at CHQ/RHQ. The CHQ/RHQ overheads expense considered for apportionment have been netted off against the income received by CHQ/RHQ.

4.16. The retirement benefit is allocated on the basis of number of employees at CCSIA. The Authority proposes 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/RHQ. 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 11 - 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
1	Northern Region - RHQ Expenses	89.3	116.1	124.0	167.1	155.5
2	Less - Northern Region - RHQ Revenues	7.7	16.1	16.8	11.0	15.5
3	Net Northern Region RHQ Expenses (1-2)	81.6	100.0	107.3	156.1	140.0
	CHQ/ RHQ Overheads allocated to CCSIA	6.7	5.3	4.3	9.1	13.8
Apportionment of Retirement Benefits at CHQ						
	Total provision of retirement benefits at CHQ	159.7	289.4	160.0	275.2	182.9
	Provision of Retirement Benefits at CHQ for CCSIA	3.4	7.4	3.9	6.9	4.3

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

Table 12 - Summary of O&M expenditure as per the Authority for 1st control period -Single Till

No.	Particulars (₹ crore)	2011-12	2012-13	2013-14	2014-15	2015-16
1	Pay roll Expenditure of CCSIA	18.4	20.7	23.6	25.3	24.7
2	Expenditure for CCSIA employees' retirement benefits allocated at CHQ	3.4	7.4	3.9	6.9	4.3
3	Common employees related to ANS	0.7	0.9	0.8	0.8	0.8
A	Total Pay roll Expenditure (1+2-3)	21.1	27.2	26.7	31.4	28.2
4	Administrative and General Expenditure	1.0	2.1	3.1	3.3	3.9
5	Apportionment of administration & General expenditure of CHQ	6.7	5.3	4.3	9.1	13.8
B	Total Administration & General Expenditure(4+5)	7.7	7.4	7.4	12.4	17.6
C	Repairs and Maintenance Expenditure	5.0	6.5	5.0	5.9	5.5
6	Power Charges	2.5	4.9	5.8	6.2	6.1
7	Water Charges	0.0	0.0	1.0	1.0	1.0
8	Other expenses	0.6	0.8	0.9	1.4	1.1
D	Utility and Outsourcing Expenditure	3.0	5.7	7.7	8.6	8.2
E	Other Outflows	0.1	0.1	0.1	0.7	0.5
	Total (A+B+C+D+E)	36.9	46.9	46.9	59.0	60.0

Adjustment in base year for calculating present value of shortfall

4.18. 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 6) is calculated as on 01.04.2017 instead of 01.04.2016. The Authority proposes to consider the present value of shortfall as on 01.04.2016.

Tax calculation for 1st control period

4.19. The tax calculation as submitted by AAI for 1st control period apportions actual tax liability of AAI based on the profit before tax of CCSIA and profit before tax of AAI.

4.20. 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 proposes to determine tax for CCSIA by applying provisional tax rate on the standalone profit before tax of the airport. In addition, for calculation of tax, the Authority proposes to

determine depreciation considering the depreciation rates applicable under Income Tax laws.

4.21. AAI has submitted revised tax calculations based on standalone financials of CCSIA.

The Authority proposes to consider the tax calculation as given below.

Table 13 – 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	25.9	28.5	31.5	61.6	136.9
Non-Aeronautical Revenues	15.4	15.1	16.1	22.2	35.8
O&M (excluding retirement benefits and CHQ/ RHQ Overheads)	26.8	34.2	38.6	43.0	41.9
Retirement benefits and CHQ/ RHQ Overheads	10.1	12.7	8.2	16.0	18.1
Depreciation as per IT Act	7.8	14.6	20.5	18.2	16.3
Profit Before Tax (PBT)	-3.5	-17.9	-19.7	6.7	96.4
Tax	0.0	0.0	0.0	2.3	33.3

4.22. The Authority notes that the tax has been determined by applying a provisional tax rate. While doing so the previous year losses are not carried forward. The Authority seeks stakeholder's comments on the same.

Revised Aggregate Revenue Requirement

4.23. The ARR for the 1st control period has been revised based on adjustments detailed above.

4.23.1. Change in depreciation rates as per Table 32

4.23.2. Apportionment of CHQ/RHQ costs and change in tax calculation

4.23.3. Lease rentals/rents from ground handling agencies and oil companies to be treated as aeronautical revenues

4.23.4. Correction of present value factor for shortfall calculation

Table 14 - 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	52.0	117.3	179.8	174.7	167.3
Return on Average RAB@14%	7.3	16.4	25.2	24.5	23.4
Operating Expenditure	36.9	46.9	46.9	59.0	60.0
Depreciation	3.0	6.2	6.1	10.8	10.8

Details (₹ crore)	2011-12	2012-13	2013-14	2014-15	2015-16
Corporate Tax	0.0	0.0	0.0	2.3	33.3
Less- Revenue from services other than Regulated services	15.4	15.1	16.1	22.2	35.8
ARR as per Authority	31.7	54.5	62.1	74.3	91.8
Total ARR as per Authority	314.4				
Discounted ARR	31.7	47.8	47.8	50.1	54.3
PV of ARR for the control Period as on 01.04.2012	231.8				

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

Table 15 - 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 14)	31.7	54.5	62.1	74.3	91.8	314.4
2	Aeronautical Revenue	25.9	28.5	31.5	61.6	136.9	284.5
3	Shortfall/(Excess)	5.9	25.9	30.6	12.7	-45.1	29.9
4	Future Value of shortfall/(excess) as on 01.04.2016	11.3	43.8	45.3	16.4	-51.4	65.4

Proposal No. 1. True-up for the 1st control period

- 1.a. The Authority proposes to true-up the 1st control period on the basis of Single Till
- 1.b. The Authority proposes to apportion CHQ/RHQ overheads on revenue basis.
- 1.c. The Authority proposes to consider the revenues from Cargo facility, Ground Handling Services and Supply of fuel to aircraft including land lease rentals as aeronautical revenue.
- 1.d. The Authority proposes the following depreciation rates.
 - a. 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
 - b. 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 32.

1.e. The Authority proposes to consider short fall of ₹ 65.4 crores in the 1st control period to be added to ARR for the 2nd control period.

5. Traffic forecast

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

Table 16 - Traffic Growth rates assumed by AAI for the 2nd control period

YEAR	Passenger			ATM		
	Domestic	International	Combined	Domestic	International	Combined
2016-17	16%	14%	16%	15%	2%	12%
2017-18	14%	12%	14%	12%	10%	12%
2018-19	14%	12%	14%	12%	10%	12%
2019-20	14%	12%	14%	12%	10%	12%
2020-21	14%	12%	14%	12%	10%	12%

5.2. AAI submitted that traffic growth rate for FY 2016-17 is based on extrapolation of actual traffic data from April, 2016 to February, 2017.

Authority's Examination

5.3. The Authority observed that the actual traffic data is available for FY 2016-17 for CCSIA. 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 proposes to revise traffic growth rates for FY 2016-17 as per Table 18.

5.4. 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 CCSIA. The details have been provided in table below:

Table 17 - CAGR for Traffic at CCSIA

	Growth rates as per AAI (FY18 to FY21)	10 Year CAGR (FY06 to FY16)	5 Year CAGR (FY11 to FY16)
Passenger			
Domestic	14%	20%	16%
International	12%	18%	12%
ATM			
Domestic	12%	10%	11%
International	10%	19%	24%

5.5. After evaluation of 5 and 10 year CAGR of passenger traffic, the Authority is of the view that 10 year CAGR for passenger traffic is high due to lower initial base traffic and 5 years CAGR provides a more realistic view on potential passenger traffic growth rates for future projections. Hence, the Authority proposes to adopt growth rates for

domestic and international passenger traffic from FY 2017-18 to FY 2020-21 based on 5-year CAGR.

5.6. Further, the Authority notes that growth rates proposed by AAI for domestic ATM traffic are in line with the CAGR of 5 years. Hence, the Authority proposes to adopt growth rates for domestic ATM traffic from FY 2017-18 to FY 2020-21 based on AAI's submission.

5.7. The Authority notes that 5 year CAGR for international ATMs is high due to abrupt increase in ATM traffic in FY 2015-16 and hence may not be taken as representative growth rate for future. As per the clarification provided dated 29.08.2017, AAI submitted that increase in international ATM movement in FY 2015-2016 over the FY 2014-15 by 132%, was due to oil crisis in Nepal. As a result, middle-east airlines bound to Nepal had landed at Lucknow for refuelling and thereafter flown to Nepal. The partial impact of this crisis continued in FY 2016-17 also.

5.8. The Authority proposes to consider growth rate for international ATMs as submitted by AAI.

Table 18 - Traffic growth rates and Traffic as considered by Authority for the 2nd control period

YEAR	Passenger			Air Traffic Movements (ATM)		
	Domestic	International	Combined	Domestic	International	Combined
Growth Rates						
2016-17	25%	12%	22%	21%	-31%	7%
2017-18	16%	12%	16%	12%	10%	12%
2018-19	16%	12%	16%	12%	10%	12%
2019-20	16%	12%	16%	12%	10%	12%
2020-21	16%	12%	16%	12%	10%	12%
Traffic						
2016-17	3,307,351	661,599	3,968,950	24,540	4,816	29,356
2017-18	3,850,475	740,584	4,591,059	27,485	5,298	32,783
2018-19	4,482,789	829,000	5,311,788	30,783	5,828	36,611
2019-20	5,218,939	927,970	6,146,909	34,477	6,410	40,888
2020-21	6,075,978	1,038,757	7,114,735	38,615	7,051	45,666

5.9. The Authority proposes 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.

Proposal No. 2. Traffic Forecast

2.a. The Authority proposes to consider the ATM and passenger traffic as per Table 18.

2.b. The Authority proposes 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.

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

6.1. Under a 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.

6.2. 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 (8 employees) and staff providing aeronautical services (290 employees)
- c) Quarter ratio for residential building – Based on employees allotted quarters (2 employees for non-aeronautical services and 54 employees for aeronautical services)

6.3. The allocation of gross block of assets as on 01.04.2016 as submitted by AAI is given in the table below:

Table 19 – 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 (₹ crore)	Total Assets (₹ crore)	% Aero
1	Land	18.0	18.0	100%
2	Leasehold Land	0.0	0.0	100%
3	Runways	13.8	13.8	100%
4	Taxiway	3.8	3.8	100%
5	Aprons	48.3	48.3	100%
6	Road, Bridges & Culverts	9.1	9.1	100%
7	Building- Terminal	108.0	113.3	95%
8	Building - Temporary	0.6	0.6	100%
9	Building - Residential	1.4	1.4	100%
10	Security Fencing - Temporary	0.1	0.1	100%
11	Boundary Wall -Operational	6.0	6.0	100%
12	Boundary Wall - Residential	0.2	0.2	98%

Sr. No.	Assets	Aero Assets (₹ crore)	Total Assets (₹ crore)	% Aero
13	Other Buildings-Unclassified	0.4	0.4	98%
14	Computer & Peripherals	0.3	0.3	98%
15	Intangible Assets- Software	0.0	0.0	0%
16	Plant & Machinery	10.7	10.8	100%
17	Tools & Equipment	0.4	0.4	100%
18	Office Furniture	0.7	0.7	98%
19	Other Vehicles	1.6	1.6	100%
20	Vehicle- Cars & Jeeps	0.7	0.7	100%
21	Electrical Installations	43.3	43.3	100%
22	Other Office equipment	0.5	0.5	99%
23	Furniture & Fixtures-Other than office	2.6	2.7	98%
24	X Ray Baggage System	2.9	2.9	100%
25	CFT/Fire Fighting Equipment	9.9	9.9	100%
	Total	283.3	288.8	98.1%

Authority's Examination

Allocation based on Terminal Area Ratio

6.4. AAI submitted the workings for the calculation of aeronautical area to non-aeronautical area ratio vide letter dated 09.01.2017.

Table 20 – Workings of Terminal Area Ratio calculation as submitted by AAI for FY 2015-16

S.No.	Category	Domestic Terminal Building (Sq.m)	International Terminal Building (Sq.m)
1	Restaurant / Snack Bars	259.5	20.9
2	T.R. Stall	459.7	49.7
3	Duty Free Shop	0.0	33.0
4	Hoarding & Display	0.0	0.0
5	Building Non-Residential	380.2	402.6
6	Admission Tickets	5.8	3.0
	Total Non-aeronautical area	1,105.3	509.1
	Total Terminal area	20,850	8,965
	Combined Non-aeronautical area		1,614.4
	Combined Terminal area		29,815
	TB Ratio		5.41%

6.5. The Authority observed that the percentage of non-aeronautical area is lower

compared to similar airports. The Authority proposes to adopt 92.5% as aeronautical area for asset allocation of Terminal related assets to encourage growth of non-aeronautical revenues which would cross-subsidize aeronautical charges.

6.6. Specific assets under Office furniture, Plant & Machinery, Tools & Equipment, other office equipment and Furniture and Fixtures inside Terminal Building have been considered as aeronautical by AAI. The Authority proposes to allocate these assets in the ratio of 92.5% to 7.5%.

6.7. Specific assets under Electrical installations related to the Terminal Building have been considered as aeronautical by AAI. The Authority proposes to allocate these assets in the ratio of 92.5% to 7.5%.

6.8. Assets related to vehicles have been considered as aeronautical assets by AAI. The Authority proposes to adopt the employee ratio of 97% (ratio of employees for aeronautical activities to total employees) for allocation of specific assets related to vehicles (Vehicle Cars & Jeep).

6.9. The Authority had noted that no cargo related assets have been separately considered by AAI in RAB while preparing the MYTP for 1st and 2nd control period. As part of the clarifications provided dated 27.11.2017, AAI submitted that no cargo assets have been considered while calculating RAB in the 1st and 2nd control period. As per AAI clarifications, AAI cargo logistics and allied services company limited (AAICLAS) is managing cargo activities at CCSIA, which is 100% subsidiary of AAI. AAICLAS would file cargo MYTP of CCSIA separately. As per AAI's submission dated 27.11.2017, the Authority notes that the accounts for cargo operations are now booked (FY 2017-18) under AAICLAS for CCSIA. 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.

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

Table 21 – Change in allocation of gross block of assets existing as on 01.04.2016 between aeronautical and non-aeronautical services proposed by the Authority

Sr. No.	Particulars	Aero Assets	Justification
1	Building- Terminal	92.4%	Total assets are ₹ 113.3 crores out of which ₹ 1.6 crores are purely aeronautical assets and common assets are ₹ 111.5 crores. Common assets are allocated based on 92.5% ratio as aeronautical assets for assets related to terminal building.
2	Building – Residential	99.4%	Total assets are ₹ 1.4 crores out of which ₹ 1.2 crores are purely aeronautical assets and common assets are ₹ 0.2 crores. Common assets are allocated based on quarters’ ratio as aeronautical assets for assets related to residential buildings.
3	Plant & Machinery	96.8%	Total assets are ₹ 10.8 crores out of which ₹ 7.4 crores are purely aeronautical assets and common assets are ₹ 3.2 crores. Common assets are allocated based on 92.5% ratio as aeronautical assets for assets related to terminal building and based on employee ratio of 97% as aeronautical assets for assets related to office related equipment.
4	Other Vehicles	99.9%	Total assets are ₹ 1.6 crores out of which ₹ 1.5 crores are purely aeronautical assets and common assets are ₹ 0.1 crores. Common assets are allocated based on employee ratio of 97% as aeronautical assets.
5	Electrical Installations	94.4%	Total assets are ₹ 43.3 crores out of which ₹ 12.5 crores are purely aeronautical assets and common assets are ₹ 30.7 crores. Common assets are allocated based on 92.5% ratio as aeronautical assets for assets related to terminal building.

6.11. The cost of land has been excluded from the RAB of 2nd control period as in Para 4.11.

6.12. 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:

Table 22 – 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	Aero Assets (₹ crore)	Total Assets (₹ crore)	% Aero
1	Land	-	18.0	-
2	Leasehold Land	-	0.0	-
3	Runways	13.8	13.8	100%
4	Taxiway	3.8	3.8	100%
5	Aprons	48.3	48.3	100.0%
6	Road, Bridges & Culverts	9.1	9.1	100.0%
7	Building- Terminal	104.7	113.3	92.4%
8	Building – Temporary	0.6	0.6	100.0%
9	Building – Residential	1.4	1.4	99.4%
10	Security Fencing - Temporary	0.1	0.1	100.0%
11	Boundary Wall –Operational	6.0	6.0	100.0%
12	Boundary Wall – Residential	0.2	0.2	96.4%
13	Other Buildings-Unclassified	0.4	0.4	98.3%
14	Computer & Peripherals	0.3	0.3	98.4%
15	Intangible Assets- Software	0.0	0.0	0.0%
16	Plant & Machinery	10.4	10.8	96.8%
17	Tools & Equipment	0.4	0.4	87.8%
18	Office Furniture	0.7	0.7	95.9%
19	Other Vehicles	1.6	1.6	99.9%
20	Vehicle- Cars & Jeeps	0.7	0.7	97.5%
21	Electrical Installations	40.9	43.3	94.4%
22	Other Office equipment	0.5	0.5	98.5%
23	Furniture & Fixtures-Other than office	1.8	2.7	68.2%
24	X Ray Baggage System	2.9	2.9	100.0%
25	CFT/Fire Fighting Equipment	9.9	9.9	100.0%
	Total	258.4	288.8	89.5%

Proposal No. 3. Allocation of assets between Aeronautical and Non-aeronautical services

3.a.The Authority proposes the allocation of assets as on 1st April 2016 between aeronautical and non-aeronautical assets as detailed in Table 22.

7. Opening Regulatory Asset Base for Second control period

7.1. Opening RAB for 2nd control period under Hybrid Till as per AAI submission dated 09.01.2017 is ₹ 117.7 crores

Table 23 - Calculation of opening RAB as on 1st April 2016 as per AAI submission – Hybrid Till

S. No.	Particulars	Amount (₹ crore)
1	Original Cost of Airport Aeronautical Assets excluding ANS related assets as on 01.04.2011	140.8
2	Aeronautical asset addition during the 1 st control period	142.6
3	Cost of Aeronautical Assets [(1)+(2)] as on 01.04.2016	283.3
4	Accumulated Depreciation as on 01.04.2016	165.6
5	Opening RAB[(3)-(4)] as on 01.04.2016	117.7

7.2. The Authority proposes to adopt depreciation rates as detailed earlier in Para 4.7 for calculating RAB for 2nd control period.

7.3. The Authority proposes the allocation of assets between aeronautical and non-aeronautical assets as detailed in Table 22.

7.4. Based on revised depreciation rates and revised asset allocation, the opening RAB for 2nd control period considered by the Authority under Hybrid Till is ₹ 153.1 crores.

Table 24 - 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	121.7
2	Aeronautical asset addition during the 1 st control period	136.8
3	Cost of Aeronautical Assets [(1)+(2)] as on 01.04.2016	258.4
4	Accumulated Depreciation as on 01.04.2016	105.3
5	Opening RAB[(3)-(4)] as on 01.04.2016	153.1

Proposal No. 4. Opening Regulatory Asset Base for the 2nd control period

4.a. The Authority proposes to consider the opening regulatory base for the 2nd control period under Hybrid Till as ₹ 153.1 crores.

8. Capital Expenditure for Second control period

8.1. AAI has in their submissions dated 09.01.2017 submitted aeronautical capital expenditure of ₹ 1,504.4 crores for the 2nd control period and revised the total aeronautical capital expenditure to ₹ 1,645.9 crores for the 2nd control period as per the clarifications provided dated 21.09.2017, 25.10.2017, 01.11.2017 and 22.11.2017 as shown below:

Table 25 – Aeronautical assets to be capitalized at CCSIA for 2nd control period as per AAI

S.N.	Particulars (₹ crore)	2016-17	2017-18	2018-19	2019-20	2020-21
1	Taxiway	0.0	0.0	0.0	0.0	215.0
2	Aprons	0.0	0.0	19.0	0.0	0.0
3	Road, Bridges & Culverts	0.0	0.0	25.0	0.0	0.0
4	Building- Terminal	0.1	0.0	4.7	9.5	1,163.5
5	Building – Residential	0.3	0.0	0.0	0.0	0.0
6	Boundary Wall -Operational	2.6	0.7	0.0	0.0	0.0
7	Boundary Wall - Residential	0.1	0.0	0.0	0.0	0.0
8	Other Buildings-Unclassified	6.3	0.0	3.0	32.0	0.0
9	Computer & Peripherals	0.1	0.0	0.0	0.0	0.0
10	Plant & Machinery	0.6	0.0	10.0	0.0	0.0
11	Electrical Installations	12.0	0.0	0.0	0.0	0.0
12	Other Office Equipment	0.0	0.0	0.0	0.0	0.0
	Total (₹ 1,504.4 crores)	22.0	0.7	61.7	41.5	1,378.5
Revised capital expenditure submitted by AAI dated 21.09.2017, 25.10.2017, 01.11.2017 and 22.11.2017						
1	Taxiways	0.3	0.0	0.0	2.7	80.0
2	Aprons	0.0	0.0	11.8	75.7	0.0
3	Other Buildings	11.8	1.5	12.7	32.8	654.1
4	Building Residential	0.4	0.0	0.0	0.0	0.0
5	Boundary Wall - Operational	0.7	4.1	0.0	12.6	0.0
6	Building Wall Residential	0.0	0.1	0.0	0.0	0.0
7	Other Office	0.0	0.0	0.0	0.0	0.0
8	Plant and Machinery	2.5	0.0	0.0	0.7	0.0
9	Tools and Equipments	1.3	0.6	0.0	0.0	0.0
10	Computers and Peripherals	0.0	0.1	0.0	0.0	0.0
11	Office Furniture	1.4	0.0	0.0	0.0	0.0
12	Vehicles	0.1	0.0	0.0	0.0	0.0
13	Electrical Installations	4.7	5.2	22.4	7.7	697.8
	Total (₹ 1,645.9 crores)	23.3	11.6	46.9	132.2	1431.9

8.2. AAI has submitted following details of the proposed major capital works to be

undertaken during the control period:

8.2.1. Taxiway

8.2.1.1. Construction of parallel taxi track (₹ 80 crores in FY 2020-21)

In the period April to Feb 2016-17, CCSIA has handled 3.61 million passengers which is 22.7% higher than previous year. The existing capacity of terminal building is 3 MPPA and there is a plan for expansion of terminal building so that the overall terminal capacity is increased to 9.75 MPPA. At present, peak hour aircraft movement is 19-20 and the demand is increasing at exceptional rate. Thus to enhance the airside capacity of the airport, construction of parallel taxi track of length 1,710 m is proposed.

8.2.2. Aprons

8.2.2.1. Extension of isolation bay including construction of shoulder (₹ 11.8 crores under Apron in FY 2018-19)

The existing Isolation Bay of size 61x61m is not sufficient to cater for A320-200 Aircraft, Hence, the same is being expanded & strengthened to serve category 'E' type of Aircrafts, which would operate from this airport.

8.2.2.2. Construction of additional 8 parking bays for Code C type of aircrafts (₹ 70.44 crores under Apron in FY 2019-20)

Presently, there are 14 aircraft parking bays for 2 Code E, 1 Code D and 11 Code C aircrafts. The requirement of 8 additional parking bays for Code 4C type of aircraft has been projected by the inter-departmental team constituted for the purpose. Land is available within the airport. Hence, construction of apron on the eastern side of VIP apron for parking of 8 Code 4C type of aircraft in Power in Power out configuration along with two link taxi ways (one connecting runway and other connecting VIP apron) is proposed.

8.2.3. Building – Terminal

8.2.3.1. Construction of new integrated terminal building (₹ 1,383 crores total)

in FY 2020-21, 50% civil cost under Building Terminal and 50% electrical installation cost under Electrical Installations)

In the period April to Feb 2016-17, CCSIA has handled 3.61 million passengers which is 22.7% higher than previous year. The existing capacity of terminal building is 3 MPPA. The above building capacity are saturated, therefore it is proposed to build a new terminal building to cater to the passenger's convenience in future growth of CCSIA.

As per the present proposal, construction of New Integrated Terminal Building, and associated facilities is to be taken up on turnkey contract basis through PMC. The proposal includes a new passenger terminal and dismantling the Terminal Building T1 and merging with T2 so that there will only be one integrated terminal Building of capacity 1,13,000 Sq.m.. This will be adequate to handle 4,000 peak hour passengers (3,200 Domestic and 800 International) with the recommended area specifications and to match the level of services B as per IATA recommendations.

AAI has proposed to consider aeronautical capital expenditure towards civil cost for construction of new integrated terminal building based on 94.5% TB ratio during 2nd control period RAB (₹ 654 crores as aeronautical in FY 2020-21) and consider aeronautical capital expenditure towards electrical installation cost for construction of new integrated terminal building as purely aeronautical capital expenditure during the 2nd control period RAB (₹ 691.5 crores as aeronautical in FY 2020-21). Total aeronautical capital expenditure for construction of new integrated terminal building is considered as ₹ 1,345.5 crores in FY 2020-21.

8.2.4. Other Buildings

8.2.4.1. Construction of Integrated office building (₹ 10.1 crores total in FY 2016-17)

The existing AAI offices occupied in the first floor of International Terminal building (T-1) were having insufficient capacity, DGCA office situated near

International. Terminal Building as the Terminal Building (T-1) and DGCA office are to dismantle to pave way for Construction of Terminal Building T-3, & associated external Development, hence new office complex to accommodate AAI and DGCA employees was required.

AAI has proposed to consider aeronautical capital expenditure towards construction of integrated office building based on 98.4% ratio (%age of area used by airport staff except for commercial and land use staff) during 2nd control period RAB (₹ 10.0 crores as aeronautical in FY 2016-17).

8.2.4.2. Construction of fire station (₹ 30.9 crores in FY 2019-20)

The existing Fire Station is of category VI and was constructed around year 1979. Due to the Expansion and development of CCSIA, New Fire Stations of category IX and category IV along with Emergency Medical Centre and E&M Workshop is proposed and planned.

8.2.4.3. Construction of MET Building (₹ 0.54 crores and ₹ 5.0 crore in FY 2017-18 and FY 2018-19 respectively)

Since the existing structure/ Building is falling in the alignment of construction of Terminal building and external Development, the MET building is being constructed near the DWR Building.

AAI has to construct the MET building without charging anything from MET since it is only dislocation of their existing building. The land will be used by AAI for other development activities in front of T3.

8.2.5. Electrical Installation

8.2.5.1. CAT III Lighting (₹ 17.8 crores in FY 2018-19)

8.2.5.2. Provision of two additional aero bridges (₹ 4.6 crores in FY 2018-19)

As the existing operational PBB has already served more than normal life of 20 years, there is urgent requirement of replacement of the existing PBBs in order to maintain uninterrupted passenger facility.

8.2.6. Boundary Wall – operational

8.2.6.1. Construction of property wall (₹ 11.6 cr. in FY 2019-20)

Authority's Examination

- 8.3. 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 10.08.2017 provided the revised aeronautical capital expenditure to be incurred in 2nd control period. AAI further revised the aeronautical capital expenditure to be incurred vide submission dated 21.09.2017, 25.10.2017, 01.11, 2017 and 22.11.2017.
- 8.4. The Authority proposes to consider aeronautical capital expenditure towards perimeter road (₹ 2.7 crores in FY 2019-20) and ramp equipment area (₹ 0.3 crores in FY 2016-17) under Taxiways as submitted by AAI dated 21.09.2017.
- 8.5. The Authority proposes to consider aeronautical capital expenditure towards extension of isolation bay including construction of shoulder (₹ 11.8 crores in FY 2018-19) and construction of culverts and drainages for 8 parking bays (₹ 5.2 crores in FY 2019-20) under Apron as submitted by AAI dated 21.09.2017.
- 8.6. The Authority proposed to consider capital expenditure for canopy in front T1 civil works (₹ 1.1 crores in FY 2016-17 and ₹ 5.0 crores in FY 2018-19) based on 92.5% ratio as aeronautical capital expenditure (revised to ₹ 1.0 crores in FY 2016-17 and ₹ 4.6 crores in FY 2018-19).
- 8.7. The Authority proposes to consider other minor aeronautical capital expenditure for residential building, boundary wall – residential and boundary wall – operational as submitted by AAI dated 21.09.2017 and 01.11.2017 (total amount is ₹ 18.0 crores during the 2nd control period).
- 8.8. The Authority proposes to consider aeronautical capital expenditure towards construction of integrated office building based on 98.4% ratio (percentage area used by airport staff excluding commercial and land use staff) (₹ 10.0 crores as aeronautical in FY 2016-17) under other buildings as submitted by AAI dated 21.09.2017.
- 8.9. The Authority proposes to consider aeronautical capital expenditure towards construction of fire station (₹ 30.9 crores in FY 2019-20) under other buildings as submitted by AAI dated 21.09.2017.
- 8.10. The Authority proposes to consider aeronautical capital expenditure towards

construction of MET building (₹ 0.5 and 5.0 crores in FY 2017-18 and FY 2018-19 respectively) under other buildings as submitted by AAI dated 01.11.2017 and 22.11.2017.

8.11. The Authority proposes to consider other minor aeronautical capital expenditure under other buildings as submitted by AAI dated 21.09.2017 (total amount is ₹ 6.4 crores during the 2nd control period).

8.12. The Authority proposes to consider aeronautical capital expenditure towards provision of two additional aero bridges (₹ 4.6 crores in FY 2018-19) as submitted by AAI dated 21.09.2017.

8.13. The Authority proposes to consider terminal related electrical installation (₹ 1.0 crores in FY 2016-17 and ₹ 2.3 crores in FY 2017-18) based on 92.5% ratio towards aeronautical capital expenditure (revised to ₹ 0.9 crores in FY 2016-17 and ₹ 2.1 crores in FY2017-18).

8.14. The Authority noted that the capital expenditure of ₹ 3.0 cr. for augmentation of power supply has been double counted in FY 2019-20 and FY 2020-21. Hence, the Authority decides to exclude ₹ 3.0 cr. capital expenditure for augmentation of power in FY 2019-20. Accordingly, the Authority proposes to consider aeronautical capital expenditure towards augmentation of power supply (₹ 6.3 crores in FY 2020-21) and CAT III lighting (₹ 17.77 cr. in FY 2018-19 and ₹ 4.7 crores in FY 2019-20) as submitted by AAI dated 21.09.2017 and 01.11.2017.

8.15. The Authority proposes to consider other minor electrical installation aeronautical assets (₹ 3.7 crores in FY 2016-17 and ₹ 2.9 crores in FY 2017-18) as submitted by AAI dated 21.09.2017.

8.16. The Authority proposes to consider other minor aeronautical capital expenditure for computer & peripherals, plant & machinery, office furniture, other office equipment, tools & equipment and other vehicles as submitted by AAI dated 21.09.2017 and 01.11.2017 (Total amount is ₹ 6.7 crores during the 2nd control period).

8.17. The Authority noted that the total capital expenditure for construction of new integrated terminal building is ₹ 1,383 crores with total area of 1,13,000 Sq.m. and per sq. m. cost is ₹ 1,22,389 per Sq.m which is more than normative benchmark of ₹ 65,000

for Terminal building. The Authority requested AAI to provide justification for higher than normative benchmark costs. As per the clarifications provided dated 25.10.2017, AAI provided the detailed break-up of terminal capital expenditure as given in the table below:

Table 26 - Capital expenditure for terminal building as submitted by AAI

Sr. No.	Particulars	₹ crore
A	Total Cost of New Terminal Building	1383.0
B	Components not considered in Normative Approach.	
1	Superior sanitary fixtures/ auto sensors for urinals as per GRIHA rating.	1.0
2	Development of site, Internal Roads	2.5
3	Elevated road	65.7
4	Hard landscaping work includes pavers tiling, kerb, architectural fountains, water pounds, etc. (area= 35000 sqm)	4.4
5	Superior finishes like ACP cladding, ACP ceiling, Skylight, Metal façade	16.4
6	Horticulture operations	0.8
7	City side canopy over elevated road/ departure curve	16.0
8	Art work	7.9
9	RCC tunnel from substation to PTB	2.8
10	STP	7.0
11	Internal for special lights fixtures	2.0
12	Lightening protection system	1.3
13	Aerobridges (7 nos.)	17.5
14	Aircraft docking system (7 nos.)	2.1
15	Additional escalators proposed more than proportionate requirement as per SQM (12-4) 8 nos.	2.8
16	Additional elevators proposed more than proportionate requirement as per SQM (18-11) 7nos.	2.3
17	Additional HVAC load required more than proportionate requirement due to height difference as per SQM (2500-2123) 377 TR	3.2
18	Building Management system	1.9
19	Maintenance Hoist	5.5
20	LED lighting in landscape	1.5
21	STP (Electro – mechanical equipments)	2.7
22	In line (check –in) baggage system	37.5
23	Solar photo voltaic power generation system	3.0
24	Modification in existing terminal	3.0
25	X-ray machines (in-line)	32.0

26	Heat reflective high performance toughened glass glazing (facade)	18.0
27	Add Contingencies @3%, labour cess, PF, and ESI reimbursement, GST, PMC Charges	327.5
28	Escalation for 1 year	
29	Total cost of (B) (₹ cr.)	588.1
C	Total cost of the terminal building project less above items (₹ cr.)	794.9
31	Cost per sqm (₹)	70,342

8.18. Further, AAI submitted the following justification for the cost per sq. m. of terminal building exceeding the normative benchmarks:

8.18.1. Labour rates at Lucknow which is a class A city as per minimum wages circulated by office of Chief labour commissioner (C), New Delhi. The minimum wages of an unskilled labour is ₹ 536/- per day in class A city (Minimum wages as per notification F.No.1/13 (3)/2017-LS-II dated: 24/04/2017), whereas the minimum wages for unskilled labour during June 2016 at Cochin (Class B city) was ₹ 307/- per day, which is about 76% when compared to labour rate of Lucknow to Cochin. Overall cost implication on account of labour charge increase will be around 19%.

8.18.2. Electric Supply rate at Lucknow is ₹ 8.50 per KWh, whereas at Cochin it is ₹ 7.30 per KWh. Overall cost impact will be around 0.8%.

8.18.3. The proposed terminal building at Lucknow shall be designed with a Green Building concept to achieve GRIHA 4 Star rating, which shall be maintenance friendly and hybrid type, wherein the features of renewable energy (by providing solar panels), natural lighting within terminal building concept will be captured.

8.18.4. The construction of the terminal building was started during 2012. The rate per sqm for Cochin International Airport was worked out during June 2016 as circulated by Airports Economic Regulatory Authority of India vide F.No. AERA/20010/Normative Approach/2014-15 which was ₹ 65,000 per sqm. The escalation from June 2016 to current date will be around 10%.

8.18.5. Rate per sqm of Cochin International Airport Terminal Building is ₹ 65000 per

sqm. Add for increase in labour wages considering 75% towards material and 25% towards labour. The additional cost on increase labour wages will be (₹ 65000 X 25%) X 76% = ₹ 12350 per sqm. Add for increase in materials. Considering 75% towards material and 25% towards labour, the additional cost on increase in material will be (₹ 65000 X 75%) X 10% = ₹ 4875 per sqm. Total ₹ 82225 per sqm. Whereas, the rate per sqm as per normative approach of CCSIA Terminal Building is ₹ 70,342 per sq. m.

8.19. Further, AAI vide their clarifications dated 01.11.2017 submitted that the terminal building will be capitalized in two phases with 1st phase capital expenditure of ₹ 810 cr. in FY 2019-20 and 2nd phase capital expenditure of ₹ 573 cr. in FY 2020-21. The Authority notes from AAI's response dated 08.12.2017 that AAI has submitted the proposal to develop the Terminal Building to Public Investment Board (PIB) after taking approval from AAI Board. The Authority noted that PIB approval for the project has not been received till 08.12.2017. The Authority is of the view that the timeline for completion of construction of new terminal building is tentative and may not be achieved by AAI and hence, proposes to exclude the capitalization of the total capital expenditure for new terminal building (both Phase 1 and Phase 2). In case, AAI incurs the capital expenditure towards the expansion of terminal building and capitalizes the same during the 2nd control period, it will be trued up while determining tariff for 3rd control period. In case the expenditure is incurred during the 2nd control period and AAI feels that this will lead to significant increase in tariff, it may propose revision of tariffs after capitalization of the Terminal Building.

8.20. The Authority noted that the total capital expenditure for construction of additional 8 parking bays is ₹ 70.44 crores with total area of 67,110 Sq.m. and per sq. m. cost is ₹ 10,496 per Sq.m which is more than normative benchmark of ₹ 4,700 for aprons. AAI, in its clarification dated 25.10.2017, submitted the following break-up of the apron cost:

Table 27 - Capital expenditure for apron as submitted by AAI

Sr. No.	Details	₹ cr.
A	Total cost of Apron, Link Taxiways and ancillary works	70.4
B	Components not considered in Normative approach	

1	Earth work upto Subgrade level, GSE Area, Area between GSE Area and Apron & Area between Apron and Perimeter Road.	2.7
2	Perimeter Road	2.2
3	Boundary wall	0.9
4	Culvert	1.1
5	Drainage	3.8
6	Construction of power house cum Engineering office	1.6
7	Augmentation of Power Supply	5.1
8	Provision of Fuel Hydrant	0.6
9	CAT 3B Lighting	4.1
10	Apron Flood Light	1.6
11	Diversion /Shifting of existing structures	0.5
12	Labour Cess@1% on balance item	0.3
13	Contingency @ 3% on overall Items	1.7
14	GST @18% on overall Items	10.7
	Total of B	36.9
C	Components considered in Normative approach	
15	Cost of Apron and Link taxiways	33.5
16	Topographic Survey	0.0
17	Soil Investigation	0.0
	Total Cost of Apron and Link taxiways except items as stated in B	33.5
	Net Cost in Rs per Sqm (₹)	4995

8.21. Further, AAI vide their submission dated 25.10.2017 submitted the following justification for exceeding the normative benchmark:

8.21.1. Labour rates at Lucknow which is a class A city as per minimum wages circulated by office of Chief labour commissioner (C), New Delhi. The minimum wages of an unskilled labour is ₹ 536/- per day in class A city (Minimum wages as per notification F.No.1/13 (3)/2017-LS-II dated: 24/04/2017), whereas the minimum wages for unskilled labour during April 2016 at Cochin (Class B city) was ₹ 307/- per day, which is about 76% when compared to labour rate of Lucknow to Cochin. Overall cost implication on account of labour charge increase will be around 19%.

8.21.2. Electric Supply rate at Lucknow is ₹ 8.50 per KWh, whereas at Cochin it is ₹ 7.30 per KWh. Overall cost impact will be around 0.8%.

8.21.3. Rate per sqm of Cochin International Airport Pavement work ₹ 4700 per sqm.

Add for increase in labour wages - Considering 90% towards material and 5%

towards labour, the additional cost on increase labour wages will be (₹ 4700 X 5%) X 76% = ₹ 179 per sqm. Add for increase in materials - Considering 90% towards material and 5% towards labour, the additional cost on increase in material will be (₹ 4700 X 90%) X 10% = ₹ 423 per sqm. Total- ₹ 5302 per sqm. Whereas, the rate per sqm as per normative approach of pavement work at Lucknow is ₹ 4995 per sqm.

8.22. The Authority noted that AAI's submission on apron cost as per normative order. The Authority proposes to revise the capital expenditure for apron based on normative benchmarks for FY 2015-16 and increase the benchmarks by WPI of 4.2% per annum till the year of capitalization. Additionally, the components which have not been considered as part of normative benchmarks (line item 1, 2, 3, 6, 7, 8, 9, 10 and 11 in Table 27) are added to the capital expenditure arrived as per normative benchmarks. The total capital expenditure for apron arrived at by the Authority is ₹ 56.4 crores as shown in Table 28.

Table 28 – Capital expenditure for apron 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	Apron cost	FY 2020	67,110	5,541	37.2
2	Additional items not considered in normative benchmarks				19.3
	Total capital expenditure for apron				56.4

8.23. The Authority noted that the total capital expenditure for construction of parallel taxi track is ₹ 80 crores with total area of 75,240 Sq.m. and per sq. m. cost is ₹ 10,633 per Sq.m which is more than normative benchmark of ₹ 4,700 for taxiways. The Authority proposes to revise the capital expenditure for construction of parallel taxi track 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 29.

Table 29 – Capital expenditure for construction of parallel 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	Construction of parallel taxi track	FY 2021	75,240	5,773	43.4

8.24. The Authority also proposes to undertake a study by technical experts to estimate the allowable apron and parallel taxi track cost for CCSIA vis-à-vis normative benchmarks. The Authority had asked AAI for detailed information on justification for exceeding the normative benchmarks. Due to lack of adequate information and in the interest of avoiding delays in fixing tariffs, the Authority proposes to determine capital expenditure using normative norms at this stage. The Authority is aware of the shortcomings 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 proposes to true-up the capital expenditure for apron and parallel taxi track at the time of tariff determination for 3rd control period.

8.25. The Authority proposes to consider the total aeronautical capital expenditure to be capitalized and added to RAB at ₹ 246.2 crores.

Table 30 - 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	Taxiway	0.3	0.0	0.0	2.7	43.4
2	Aprons	0.0	0.0	11.8	61.7	0.0
3	Road, Bridges & Culverts	0.0	0.0	0.0	0.0	0.0
4	Building- Terminal	1.0	0.0	4.6	0.0	0.0
5	Building - Residential	0.4	0.0	0.0	0.0	0.0
6	Boundary Wall -Operational	0.7	4.1	0.0	12.6	0.0
7	Boundary Wall - Residential	0.0	0.1	0.0	0.0	0.0
8	Other Buildings-Unclassified	10.6	1.5	8.0	32.8	0.0
9	Computer & Peripherals	0.0	0.1	0.0	0.0	0.0
10	Plant & Machinery	2.5	0.0	0.0	0.7	0.0
11	Electrical Installations	4.6	5.1	22.4	4.7	6.3
12	Other Office Equipments	0.0	0.0	0.0	0.0	0.0

13	Office furniture	1.4	0.0	0.0	0.0	0.0
14	Tools & Equipment	1.3	0.6	0.0	0.0	0.0
15	Vehicle Others	0.1	0.0	0.0	0.0	0.0
	Total (₹ 246.2 cr.)	23.1	11.4	46.8	115.2	49.8

8.26. The Authority notes that the cost of the planned works is indicative. The Authority proposes to consider the addition to aeronautical assets during the 2nd control period as given in Table 30 subject to true-up of RAB based on actual aeronautical asset addition, outcome of the study and the actual costs as per the tender while determining tariffs for the 3rd control period.

8.27. In the 2nd control period, project works related to construction of parallel taxi track, extension of isolation bay including construction of shoulder, construction of 8 additional parking bays, construction of new integrated terminal building, construction of integrated office complex, construction of property boundary wall, construction of fire station and provision of two additional aero bridges 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. The Authority noted that AAI has provided the minutes of AUCC meeting in their submissions dated 01.11.2017 for all the required projects as part of the consultation process with users.

Proposal No. 5. Capital Expenditure

5.a. The Authority proposes to consider allowable project cost of ₹ 246.2 crores and accordingly to reckon the amount of ₹ 246.2 crores as addition for total assets during the 2nd control period.

5.b. AAI should undertake user stakeholder consultation process for major capital expenditure items as per the Guidelines.

5.c. The Authority proposes 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.

9. Depreciation

9.1. 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:

9.1.1. Method of depreciation: straight line;

9.1.2. 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;

9.1.3. 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

9.2. The Authority notes 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.

9.3. The Authority notes 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 notes 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.

9.4. 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 proposes 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.

9.5. 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 proposes 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.

9.6. The Authority proposes 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.

9.7. The Authority proposes 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.

9.8. The depreciation rates as submitted by AAI and as considered by the Authority during the 1st and 2nd control period are given below:

Table 31 - 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	Land	0%	0%	0%
2	Leasehold Land	0%	0%	0%
3	Runways	13%	3.33%	3.33%
4	Taxiway	13%	3.33%	3.33%
5	Aprons	13%	3.33%	3.33%
6	Road, Bridges & Culverts	13%	1.63%	3.33%
7	Building- Terminal	8%	1.63%	3.33%
8	Building - Temporary	100%	100%	33%
9	Building - Residential	5%	1.63%	3.33%
10	Security Fencing - Temporary	100%	100%	33%
11	Boundary Wall -Operational	8%	1.63%	3.33%
12	Boundary Wall - Residential	5%	1.63%	3.33%
13	Other Buildings-Unclassified	8%	1.63%	3.33%
14	Computer & Peripherals	20%	16.21%	16.67%
15	Intangible Assets- Software	20%	20.00%	20.00%
16	Plant & Machinery	11%	4.75%	6.67%
17	Tools & Equipment	20%	4.75%	6.67%
18	Office Furniture	20%	6.33%	10%
19	Other Vehicles	14%	9.50%	12.50%

No.	Asset Class	As per AAI	As per Authority till FY 2014	As per Authority FY2015 onwards
20	Vehicle- Cars & Jeeps	14%	9.50%	12.50%
21	Electrical Installations	11%	4.75%	10.00%
22	Other Office equipment	18%	4.75%	20.00%
23	Furniture & Fixtures-Other than office	20%	6.33%	10%
24	X Ray Baggage System	11%	4.75%	6.67%
25	CFT/Fire Fighting Equipment	13%	4.75%	6.67%

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

Table 32 - 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	20.8	16.2	22.7	25.5	146.1	231.2
2	As per Authority	10.8	11.7	13.4	16.9	19.7	72.4

Proposal No. 6. Treatment of Depreciation

- 6.a. The Authority proposes to adopt depreciation rates as per Table 31 and depreciation for the 2nd control period as per Table 32.
- 6.b. The Authority proposes 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.

10. RAB for Second control period

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

Table 33 - Summary of the RAB and Depreciation for CCSIA (Airport Services) as per AAI for the 2nd control period

	Details (₹ crore)	2016-17	2017-18	2018-19	2019-20	2020-21
A	Opening Aeronautical RAB	117.7	119.3	103.8	142.9	158.8
B	Aeronautical Additional Assets capitalized during the year	22.0	0.7	61.7	41.5	1,378.5
C	Disposals/Transfers					
D	Depreciation	20.8	16.2	22.7	25.5	146.1
E	Closing Aeronautical RAB (A+B-C-D)	119.0	103.8	142.9	158.8	1,391.2
	Average RAB (A+E)/2	118.4	111.5	123.3	150.8	775.0

Authority's Examination

10.2. The Authority proposes to adopt opening RAB for FY 2016-17 as detailed in Table 24.

10.3. The Authority proposes to adopt depreciation as proposed in Table 32.

10.4. The Authority proposes ₹ 246.2 crores as the addition of aeronautical assets to RAB as detailed in Table 30.

10.5. During the discussion with AAI, it was noted that for FY 2016-17 AAI had continued to handle cargo operations at the CCSIA. As per AAI's submission dated 27.11.2017, the Authority notes that the accounts for cargo operations are now booked (FY 2017-18) under AAICLAS for CCSIA. 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. However, as per the clarification provided dated 27.11.2017, no cargo assets have been considered as part of MYTP calculations for 1st and 2nd control period and no adjustment made to RAB on account of cargo assets. 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.

10.6. The revised Regulatory Asset Base as calculated by the Authority for 2nd control

period under Hybrid Till is as follows:

Table 34 - Summary of forecast and Roll forward RAB and Depreciation for CCSIA (Airport Services) considered by the Authority for 2nd control period – Hybrid Till

	Details (₹ crore)	2016-17	2017-18	2018-19	2019-20	2020-21
A	Opening Aeronautical RAB	153.1	165.5	165.2	198.5	296.9
B	Aeronautical Assets capitalized during the year	23.1	11.4	46.8	115.2	49.8
C	Disposals/Transfers	0.0	0.0	0.0	0.0	0.0
D	Depreciation	10.8	11.7	13.4	16.9	19.7
E	Closing Aeronautical RAB (A+B-C-D)	165.5	165.2	198.5	296.9	327.0
	Average RAB (A+E)/2	159.3	165.3	181.8	247.7	311.9

10.7. The Authority proposes 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.

Proposal No. 7. RAB for 2nd control period

7.a. The Authority proposes to consider RAB for 2nd control period as given in Table 34

7.b. The Authority proposes 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.

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

11.1. 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.

11.2. AAI has not taken any debt for financing CCSIA. FRoR is as per what has been adopted for AAI as a whole.

Authority's Examination

11.3. 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.

11.4. The Authority notes 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 notes 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.

11.5. Based on the above, the Authority proposes to consider FRoR at the rate of 14% for CCSIA for the 1st and 2nd control period as submitted by AAI.

Proposal No. 8. FRoR

8.a. The Authority proposes to consider the FRoR at 14% for CCSIA for the 1st and 2nd control period.

8.b. The Authority will undertake a study to determine FRoR for major AAI airports given the low debt structure of AAI as a whole.

12. Revenue from services other than aeronautical services

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

Table 35 - 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	2.5	2.8	3.1	3.4	3.7	4.4
2	TR stall	4.1	4.5	4.9	5.4	5.9	7.1
3	Hoarding & display	3.8	4.1	4.6	5.0	5.5	6.6
4	Land leases	17.7	19.0	20.5	22.0	23.6	25.4
5	Building (residential)	0.0	0.0	0.0	0.0	0.0	0.0
6	Building (non-residential)	4.0	4.1	4.5	5.0	5.4	6.5
7	Duty free shops	0.5	0.5	0.6	0.7	0.7	0.9
8	Car rentals	0.7	0.8	0.8	0.9	1.0	1.2
9	Car parking	2.8	3.1	3.4	3.8	4.2	5.0
10	Admission tickets	1.1	1.2	1.3	1.4	1.6	1.9
11	Other income/ sale of scrap etc	0.8	0.9	1.0	1.1	1.2	1.4
	Total	38.0	41.0	44.7	48.6	52.9	60.6

12.2. The growth rates assumed by AAI for forecasting non aeronautical revenues are given below:

Table 36 – 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	10%	10%	10%	10%	20%
2	TR stall	10%	10%	10%	10%	20%
3	Hoarding & display	10%	10%	10%	10%	20%
4	Land leases	7.5%	7.5%	7.5%	7.5%	7.5%
5	Building (residential)	7.5%	7.5%	7.5%	7.5%	7.5%
6	Building (non-residential)	10%	10%	10%	10%	20%
7	Duty free shops	10%	10%	10%	10%	20%
8	Car rentals	10%	10%	10%	10%	20%
9	Car parking	10%	10%	10%	10%	20%
10	Admission tickets	10%	10%	10%	10%	20%
11	Other income/ sale of scrap etc	10%	10%	10%	10%	20%

Authority's Examination

12.3. The Authority noted that as part of clarifications provided dated 01.11.2017, AAI has revised the growth rates to 10% (from 20% as submitted earlier) for revenues from

services other than regulated services all the revenues except for land lease revenues. AAI has proposed these growth rates based on the contractual agreements. The Authority had proposed to consider the revised growth rates as submitted by AAI dated 01.11.2017 for the determination of tariff for the 2nd control period as they are as per the contracts/ agreements signed or projected as per the contracts/ agreements to be signed in future with the service providers.

12.4. The Authority noted that different numbers have been submitted by AAI for building non-residential revenues in FY 2015-16 in MYTP proposal of 1st control period (₹ 4.0 crores) and in MYTP proposal of 2nd control period (₹ 3.7 crores). As per clarifications provided dated 06.08.2017, AAI submitted that the difference is due to removal of rent from cargo office in 2nd control period MYTP proposal. AAI submitted that the amount of Building (Non-residential) revenue in 1st control period is ₹ 399.5 lakhs and the rent from cargo is ₹ 36.4 lakhs. In trial balance of FY 2015-16, the rent from cargo is shown as ₹ 10.8 lakhs and the rest amount of ₹ 25.6 lakhs is booked under Building (Non-residential revenue).

12.5. 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. The Authority proposes to accept the revenues from services other than regulated services as submitted by AAI except for adjustments as detailed below.

Adjustment of lease rentals

12.6. AAI has allotted following land to ground handling agencies and fuel companies for their operations. AAI has considered income from such land lease as non-aeronautical revenues.

Table 37 – 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
Fuel	IOCL	4,290.9	1.1
Fuel	HPCL	338.9	0.1
Fuel	BPCL	504.0	0.1
Fuel	Reliance	1,600.0	0.4
Ground Handling	Indo Thai Airport Management services	574.4	0.2

12.7. Additionally, AAI has allotted 63.01 Sq.m. of space in Terminal buildings to GHA.

12.8. AAI has created a wholly owned subsidiary AAI Cargo Logistics and Allied Services Company Ltd (AAICLAS) in the FY 2016-17. 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 06.08.2017 and dated 10.08.2017, AAI will not receive any revenue from AAICLAS for the 2nd control period for cargo operations. As per AAI's submission dated 27.11.2017, the Authority notes that the accounts for cargo operations are now booked (FY 2017-18) under AAICLAS for CCSIA. 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 CCSIA. 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, 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.

12.9. As per the provisions of the AERA Act, services rendered in respect of cargo, ground

handling and fuel supply are aeronautical services.

12.10. The Authority noted that AAI in their submission dated 09.01.2017 have increased land lease rentals from cargo, ground handling agencies and oil companies by 7.5% per annum and proposes to accept the same. The Authority noted that AAI has increased rent revenues from building non-residential for GH agencies by 10% and proposes to accept the same.

12.11. The Authority proposes 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

12.12. As part of the clarifications provided by AAI dated 06.08.2017, AAI submitted that tender for proposed increase in retail area is 75 Sq.m. and proposed increase in commercial office area is 75 Sq.m. The corresponding revenue from additional retail area is ₹ 6 lakhs and revenue from additional commercial area is ₹ 0.5 lakhs in FY 2016-17.

12.13. The Authority observes that non-aeronautical revenue at CCSIA is low and expects AAI to utilize its resources better and maximize its non-aeronautical revenue to keep the aeronautical tariff down.

12.14. The Authority proposes to consider non-aeronautical revenues as given below:

Table 38 – Adjustment to Revenue from Non-aeronautical Services considered by Authority for 2nd 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)	41.0	44.7	48.6	52.9	60.6
Adjustment:					
Change in revenue from ground handling and fuel services considered as aeronautical revenues and change in growth rates (B)	2.0	2.2	2.3	2.5	5.6
Non-Aeronautical Revenues as per Authority (A-B)	39.0	42.5	46.3	50.4	54.9

Proposal No. 9. Non Aeronautical Revenues

9.a. The Authority proposes 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.

9.b. The Authority proposes to consider the Non Aeronautical Revenue as per Table 38

9.c. 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.

13. Operation and Maintenance Expenditure

13.1. 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

13.2. Summary of aeronautical expenses proposed by AAI for 2nd control period is as below:

Table 39 - Summary of Aeronautical O&M expenditure as submitted by AAI for 2nd control period on Hybrid Till

No.	Particulars (₹ crore)	2016-17	2017-18	2018-19	2019-20	2020-21
1	Pay roll Expenditure of CCSIA	25.3	35.4	38.5	41.9	45.6
2	Expenditure for CCSIA employees' retirement benefits allocated at CHQ	4.5	6.4	6.7	7.0	7.4
3	Common Expenses related to cargo, commercial and land	0.8	1.2	1.3	1.4	1.5
A	Total Pay roll Expenditure (1+2-3)	29.0	40.6	43.9	47.6	51.5
4	Administrative and General Expenditure	4.0	4.2	4.5	4.9	5.2
5	Apportionment of administration & General expenditure of CHQ/RHQ	23.4	24.6	25.8	27.1	28.5
B	Total Administration & General Expenditure(4+5)	27.4	28.9	30.4	32.0	33.7
C	Repairs and Maintenance Expenditure (Total)	6.5	26.6	31.2	23.4	25.7
6	Power Charges	6.0	6.0	6.0	6.0	6.0
7	Water Charges	1.0	1.0	1.0	1.0	1.0
8	Other expenses	1.1	1.2	1.3	1.5	1.6
D	Utility and Outsourcing Expenditure (6+7+8)	8.1	8.2	8.3	8.5	8.6
E	Other Outflows	0.5	0.6	0.6	0.7	0.7
	Total (A+B+C+D+E)	71.5	104.8	114.5	112.1	120.3

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

Table 40 – Assumptions made by AAI for each item of O&M expenditure

No.	Particular	2016-17	2017-18	2018-19	2019-20	2020-21
1	Payroll Expenses*					
	Salaries and Wages	9%	40%	9%	9%	9%
	Overtime	5%	40%	5%	5%	5%
	Other staff benefits	9%	40%	9%	9%	9%
	Medical expenditure	9%	40%	9%	9%	9%
	Provident fund contribution	9%	40%	9%	9%	9%
	Apportionment of CHQ/RHQ expenses	5%	40%	5%	5%	5%
2	R&M Expenses	10%	10%	10%	10%	10%
3	Utility and outsourcing Expenditure					
	Power charges and water 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	0%	0%	0%	0%	0%
	License Fees	0%	0%	0%	0%	0%
5	Other Outflows					
	Consumption of stores and spares	8%	8%	8%	8%	7%

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

13.4. 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. AAI has not considered O&M expenses related to cargo services as part of MYTP submission for 2nd control period.

13.5. Expense allocation as submitted by AAI for 2nd control period is tabulated below:

Table 41 – O&M Expense allocation as submitted by AAI

Sr. No.	Particulars	Aero Expense	Non-Aero Expense
1	Payroll Expenses - Non-CHQ	94%	6%
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%

Sr. No.	Particulars	Aero Expense	Non-Aero Expense
5	R&M Expenses	98%	2%
6	Utility and Outsourcing Charges	98%	2%
7	Other Outflows	100%	0%
	Total	97%	3%

Authority's Examination

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

Forecasting of payroll expenses

13.6.1. The Authority notes 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 proposes growth rate of 7% for the above payroll components.

13.6.2. The Authority notes that expenditure on apportionment of retirement benefits provided to CHQ in respect of CCSIA employees is increased at 5% annually for 2nd control period which is different from the 7% for the above mentioned payroll components. The Authority proposes 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 CCSIA employees (as per discussion with AAI).

13.6.3. The Authority has noted that an increase of 40% has been projected in the pay roll expenditure in FY 2017-18 by AAI due to tentative increase in salary and wages on account of wage revision. 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 proposes 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.

13.6.4. AAI has submitted apportionment of CHQ/RHQ expenses on cost basis. The CP no. 31/2017-18 dated 22.12.2017

Authority proposes to adopt CHQ/RHQ overheads apportionment for the 2nd control period based on actual revenue basis data provided by AAI. The Authority proposes 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

13.7. The Authority noted that the Payroll Costs in the operational expenditure have been allocated using percentage of employees for aeronautical services to total employees which is 96%. To account for common service employees handling both aeronautical and non-aeronautical activities, the Authority proposes to use ratio of 95% to 5% for allocation of payroll costs to aeronautical component after excluding cargo employees' costs based on ratio of cargo employees to total airport employees.

13.8. The Authority noted that apportionment of retirement benefits provided in CHQ in respect of CCSIA and apportionment of admin CHQ expenses have been considered as 100% aeronautical expenses. The Authority proposes 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 proposes 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 CCSIA after excluding cargo employees' costs based on ratio of cargo employees to total airport employees.

13.9. 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 proposes to allocate aforementioned expenses using employee ratio into aeronautical and non-aeronautical expenses.

13.10. 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, consumption of stores and consumables.

13.11. The Authority also noted that cargo expenses have not been included as part of

MYTP calculations and requested clarifications from AAI for the same. As per the clarifications provided by AAI dated 06.08.2017 and dated 10.08.2017, 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 27.11.2017, the Authority notes that the accounts for cargo operations are now booked (FY 2017-18) under AAICLAS for CCSIA. 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.

13.12. The Authority has noted that CCSIA has installed a solar power plant. As per the clarifications received on 01.11.2017, AAI submitted that total capacity of existing roof top solar power plant is 515 KW. Out of 515 KW, total Solar Energy generation from 500 KW plant since it's commissioning i.e., July, 2015 and Solar Energy generation from 15 KW plant since it's commissioning i.e., January, 2017. Further, AAI submitted that the amount of savings in solar power has been offset by new facilities (such as Admin Building, CAT III lighting etc.) and increase in electricity charges. In addition to AAI clarification, the Authority noted that AAI has proposed no increase in the power charges in the 2nd control period. Hence, the Authority proposes to accept the power charges as submitted by AAI for the 2nd control period.

Correction in projection

13.13. The Authority noted that AAI has increased R&M civil O&M costs by ₹ 0.5 crores in FY 2016-17, ₹ 20 crores in FY 2017-18 and ₹ 24 crores in FY 2018-19. Additionally, AAI has decreased R&M civil O&M costs by ₹ 10 crores in FY 2019-20. As per clarifications provided dated 06.08.2017 and 01.11.2017, AAI submitted that the amount added to R&M civil are for runway re-carpeting work and the total cost is ₹ 44.5 crores. Further, as per clarifications provided dated 01.11.2017, AAI submitted that the amount for runway re-carpeting has been revised to ₹ 16 cr. for FY 2017-18 and FY 10.2 cr. for FY 2018.19 while the remaining cost of ₹ 17.8 cr. is used for CAT IIIB installations in FY

2018-19. Since, the CAT IIIB installation is capital expenditure, it has been capitalized in FY 2018-19. Accordingly, the Authority has accordingly considered the R&M civil costs.

13.14. The Authority noted that AAI has projected collection charges on PSF (FC) and collection charges on UDF during the 2nd control period. However, there is no PSF (FC) levied at CCSIA and hence, the Authority proposes to exclude collection charges on PSF (FC) from other outflows during the 2nd control period.

13.15. The O&M expenditure for FY2015-16 which includes both aeronautical and non-aeronautical expense is given in the table below:

Table 42 – Total O&M expenditure for FY 2015-16 as proposed by the Authority

No.	Particulars (₹ crore)	2015-16
1	Pay roll Expenditure of CCSIA	24.7
2	Expenditure for CCSIA employees' retirement benefits allocated at CHQ	4.3
3	Less - Common Expenses related to cargo, commercial and land	0.8
A	Total Pay roll Expenditure (1+2-3)	28.2
4	Administrative and General Expenditure	3.9
5	Apportionment of administration & General expenditure of CHQ/RHQ	13.8
B	Total Administration & General Expenditure(4+5)	17.6
C	Repairs and Maintenance Expenditure (Total)	5.5
6	Power Charges	6.1
7	Water Charges	1.0
8	Others	1.1
D	Utility and Outsourcing Expenditure (6+7+8)	8.2
E	Other Outflows	0.5
	Total (A+B+C+D+E)	60.0

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

Table 43 – Expense allocation between aeronautical and non-aeronautical services proposed by the Authority

Sr. No.	Particulars	Aero Expense	Non-Aero and Cargo Expenses
1	Payroll Expenses - Non-CHQ	93%	7%
2	Payroll Retirement benefit expenses Apportionment – CHQ	93%	7%
3	Admin and General Expenses – Non CHQ	95%	5%
4	Admin and General overheads Expenses Apportionment – CHQ/RHQ	89%	11%
5	R&M Expenses	91%	9%
6	Utility and Outsourcing Charges	98%	2%
7	Other Outflows	100%	0%
	Total	92%	8%

13.17. 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 44 - Summary of Aeronautical O&M expenditure as per the Authority for the 2nd control period as per Hybrid Till

No.	Particulars (₹ crore)	2016-17	2017-18	2018-19	2019-20	2020-21
1	Pay roll Expenditure of CCSIA	25.1	30.6	32.8	35.0	37.4
2	Expenditure for CCSIA employees' retirement benefits allocated at CHQ	4.4	5.4	5.7	6.1	6.6
3	Less - Common Expenses related to cargo, commercial and land	0.9	1.1	1.1	1.2	1.3
A	Total Pay roll Expenditure (1+2-3)	28.6	34.9	37.4	39.9	42.7
4	Administrative and General Expenditure	3.9	4.2	4.5	4.8	5.2
5	Apportionment of administration & General expenditure of CHQ/RHQ	13.0	13.5	14.2	14.9	15.6
B	Total Administration & General Expenditure(4+5)	17.0	17.7	18.6	19.7	20.8
C	Repairs and Maintenance Expenditure (Total)	6.0	22.1	16.9	7.4	8.1
6	Power Charges	6.1	6.0	6.0	6.0	6.0
7	Water Charges	1.0	1.0	1.0	1.0	1.0
8	Others	1.1	1.2	1.3	1.4	1.5

No.	Particulars (₹ crore)	2016-17	2017-18	2018-19	2019-20	2020-21
D	Utility and Outsourcing Expenditure (6+7+8)	8.2	8.2	8.3	8.4	8.6
E	Other Outflows	0.4	0.5	0.5	0.6	0.6
	Total (A+B+C+D+E)	60.3	83.4	81.7	76.0	80.7

13.18. It appears that O&M expenditure at CCSIA is on higher side and expects AAI to reduce the O&M expenditure over a period of time.

Proposal No. 10. Operation and Maintenance expenditure

10.a. The Authority proposes to consider the operational and maintenance expenditure as given in Table 44 above, for the purpose of determination of aeronautical tariffs for the 2nd control period.

10.b. The Authority expects AAI to reduce O&M expenditure over a period of time.

10.c. The Authority proposes to true up the O&M expenditure for 2016-17 to 2020-21 of the 2nd control period based on the actuals at the time of determination of tariffs for the 3rd control period.

10.d. The Authority decides the following factors for corrections while determining tariffs for the next control period:

- i. Mandated cost incurred due to directions issued by regulatory agencies like DGCA;
- ii. Cost of actual operating expenses including electricity;
- iii. All statutory levies in the nature of fees, levies, taxes and other such charges by Central or State Government or local bodies, local taxes, levies directly imposed on and paid by AAI on final product/service provided by AAI will be reviewed by the Authority for the purpose of corrections. Any additional expenditure by way of interest payments, penalties, fines and such penal levies associated with such statutory levies which AAI has to pay, for either any delay or non-compliance, the same may not be trued up.

14. Taxation

14.1. 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

14.2. AAI vide their submissions dated 09.01.2017 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 proposes to exclude non-aeronautical component from revenues considered while determining tax for aeronautical services.

Adjustment of aeronautical capital expenditure

14.3. The Authority proposes to consider aeronautical capital expenditure of ₹ 246.2 crores as given in Table 30 while calculating depreciation as per IT Act.

Adjustment of O&M Expenses

14.4. The Authority proposes to consider O&M expenses as given in Table 44.

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

14.5. The Authority proposes to modify total aeronautical revenues considering lease rentals from CGF as aeronautical as mentioned in Para 12.11.

Continuation of existing tariffs in FY 2016-17

14.6. The Authority proposes 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 01.02.2018 onwards.

Revised Tax as considered by the Authority

14.7. 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 45 - 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	25.1	22.9	27.9	40.1	10.4	126.4
As per Authority	29.9	22.8	0.0	2.4	4.3	59.5

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

Table 46 - Amount of Tax for aeronautical services as calculated by the Authority for the 2nd control period - Hybrid Till

Particular (₹ crore)	2016-17	2017-18	2018-19	2019-20	2020-21
Aeronautical Revenues	161.8	164.6	93.4	109.1	127.5
Aeronautical O&M (excluding CHQ/ RHQ Overheads)	42.8	64.5	61.8	54.9	58.6
CHQ/ RHQ Overheads	17.4	18.9	19.9	21.0	22.2
Depreciation as per IT Act	15.0	15.3	17.4	26.1	34.2
PBT	86.5	65.9	-5.7	7.0	12.6
Tax for aeronautical services	29.9	22.8	0.0	2.4	4.3

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

14.10. The Authority notes that the tax has been determined by applying a provisional tax rate. While doing so the previous year losses are not carried forward. The Authority seeks stakeholder's comments on the same.

Proposal No. 11. Taxation

11.a. The Authority proposes the corporate tax for aeronautical activities as per Table 46 for the 2nd control period.

11.b. The Authority proposes 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.

15. Aggregate Revenue Requirement for Second control period

15.1. 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 47 - ARR and Yield as per AAI for the 2nd control period – Hybrid Till

Details (₹ crore)	2016-17	2017-18	2018-19	2019-20	2020-21
Average Aeronautical RAB	118.4	111.5	123.3	150.8	775.0
Return on Average Aeronautical RAB@14%	16.6	15.6	17.3	21.1	108.5
Aeronautical Operating Expenditure	71.5	104.8	114.5	112.1	120.3
Depreciation on aeronautical RAB	20.8	16.2	22.7	25.5	146.1
Aeronautical Corporate Tax @34.60%	25.1	22.9	27.9	40.1	10.4
Less- 30% of Non-Aeronautical Revenues	12.3	13.4	14.6	15.9	18.2
ARR as per AAI	121.7	146.1	167.7	183.0	367.1
Total ARR as per AAI	985.6				
No. of Passengers (as per Actual/Projected)	3,748,739	4,260,049	4,841,319	5,502,152	6,253,465
Discounted ARR	121.7	128.2	129.1	123.5	217.4
True up short fall in 1st control period as on 01.04.2016	275.8				
PV of ARR for the control period as on 01.04.2016	995.6				
Total Passengers during the control period	24,605,724				
Yield per passenger for the control period (PV of ARR for the control period/Total passengers during the control period)	404.6				

Authority's examination

15.2. The Authority has examined the calculations of AAI for various elements of the regulatory building blocks that contribute to the calculation of ARR.

15.3. 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 48 - 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	159.3	165.3	181.8	247.7	311.9
Return on Average Aeronautical RAB@14%	22.3	23.1	25.5	34.7	43.7
Aeronautical Operating Expenditure	60.3	83.4	81.7	76.0	80.7
Depreciation on aeronautical RAB	10.8	11.7	13.4	16.9	19.7
Aeronautical Corporate Tax @34.6%	29.9	22.8	0.0	2.4	4.3
Less – 30% of Non-Aeronautical Revenues	11.7	12.7	13.9	15.1	16.5
True up short fall in 1st control period as on 01.04.2016	65.4				
ARR as per Authority	176.9	128.3	106.7	114.8	131.9
Total ARR as per Authority	658.6				
Discounted ARR	176.9	112.5	82.1	77.5	78.1
PV of ARR for the control period as on 01.04.2016	527.2				
No. of Passengers (as per Projected)	3,968,950	4,591,059	5,311,788	6,146,909	7,114,735
Total Passengers during the control period	27,133,441				
Yield per passenger for the control period (PV of ARR for the control period/Total passengers during the control period)	194.3				
Target yield per pax	236.8	246.8	257.1	267.9	279.1
Target Aeronautical Revenues	94.0	113.3	136.6	164.7	198.6
PV of Target Aeronautical Revenues	527.2				

16. Annual Tariff Proposal

16.1. AAI has submitted ATP for FY 2017-18 and provided growth rates from FY 2018-19 onwards.

16.2. AAI has submitted the revision in tariff w.e.f. 01.04.2017 till 31.03.2021.

16.3. AAI has proposed for a scheme of rebate in landing charges depending on the number of landings per week for domestic flight operations.

16.4. Accordingly AAI has submitted the ATP(s) for 2nd control period in respect of CCSIA. The ATP(s) for the tariff years 2017-18 onwards (w.e.f. 01.04.2017) is annexed herewith for stakeholder consultation.

Authority's Examination

16.5. The Authority noted that AAI has not considered any revenues from cargo as part of aeronautical revenues for the 2nd control period. The Authority requested clarifications from AAI for the same. As per the clarifications provided dated 06.08.2017 and 10.08.2017, AAI submitted that no cargo revenue to be received by AAI from AAICLAS during the 2nd control period. However, as per AAI's submission dated 27.11.2017, the Authority notes that the accounts for cargo operations are now booked (FY 2017-18) under AAICLAS for CCSIA. 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 CCSIA. 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, 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.

16.6. The Authority noted that AAI has decreased landing charges as per the revised tariffs to be applicable from 01.04.2017 for domestic ATMs in order to have different landing

charges for international and domestic ATMs.

16.7. The Authority noted that if the existing tariffs applicable at CCSIA are not changed for the second control period, there will be a surplus of ₹ 177.8 crore vis-à-vis ARR. After considering the revised landing, parking & housing and fuel throughput charges as proposed by AAI applicable from 01.02.2018, the resultant surplus is ₹ 181.9 crore without the revised UDF. AAI has proposed the revised UDF of ₹ 408 per departing domestic passenger and ₹ 1,169 per departing international passenger as given in Table 50.

16.8. Further, the Authority noted that the revenue from tariffs and UDF as proposed by AAI to be applicable from 01.02.2018 will exceed the proposed ARR as per Authority for the 2nd control period. The resultant excess as per tariffs proposed by AAI as calculated on 01.04.2016 is provided in table below.

Table 49 - Projected Revenue, Target Revenue and shortfall/ excess based on AAI proposed tariffs for the 2nd control period applicable from 01.02.2018

Projected Aero Revenue based on AAI proposed tariffs (₹ crore)	2016-17	2017-18	2018-19	2019-20	2020-21
Landing (A)	47.8	51.6	49.3	57.2	66.3
Parking and Housing (B)	0.1	0.1	0.1	0.2	0.2
UDF/PSF as per existing rates (C)	102.0	117.1	139.8	167.0	199.6
FTP+ITP and lease rentals (D)	4.5	5.0	5.8	6.6	7.5
Ground Handling Charges and lease rentals (E)	2.7	3.0	3.4	3.7	4.2
CUTE (F)	2.6	3.0	3.4	4.0	4.6
Cargo (G)	2.1	0.0	0.0	0.0	0.0
Total Projected Revenues without increased UDF proposed by AAI (H = A+B+C+D+E+F+G)	161.8	179.7	201.8	238.6	282.3
Target Aero Revenue	110.7	133.5	160.9	194.0	233.9
Short fall (-)/ Excess (+) in revenue, i.e. difference (Projected – Permissible)	51.0	46.2	40.9	44.6	48.4
PV value of shortfall (-)/ excess (+) as on 01.04.2016 with Discount rate (14.00%)	51.0	40.6	31.5	30.1	28.6
Total PV of shortfall (-)/ excess (+) as on 01.04.2016 for the control	181.9				

period					
UDF with revised rates proposed by AAI (I)	102.0	117.9	145.5	173.8	207.7
Total Projected Revenues with increased UDF (J = H-C+I)	161.8	180.5	207.5	245.4	290.4
Target Aero Revenue	111.6	134.5	162.2	195.5	235.8
Short fall (-)/ Excess (+) in revenue, i.e. difference (Projected – Permissible)	50.2	46.0	45.3	49.9	54.6
PV value of shortfall (-)/ excess (+) as on 01.04.2016 with Discount rate (14.00%)	50.2	40.3	34.9	33.7	32.3
Total PV of shortfall (-)/ excess (+) as on 01.04.2016 for the control period					191.3

16.9. Hence, the Authority proposes to reduce the UDF as proposed by AAI such that the ARR is recovered through the revised tariffs and revised UDF. Accordingly, the UDF per departing passenger for domestic and international passengers is revised as per Table 50 to be applicable from 01.02.2018.

16.10. The revised tariffs as applicable from 01.02.2018 as submitted by AAI and as proposed by the Authority are given in table below:

Table 50 - 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 Flight			
Up to 20 MT	₹ 224.70 per MT		
Above 20 MT up to 50 MT	₹ 4,494 + ₹ 460.7 per MT in excess of 20 MT		
Above 50 MT up to 100 MT	₹ 18,315 + ₹ 539.3 per MT in excess of 50 MT		
Above 100 MT	₹ 45,280 + ₹ 612.4 per MT in excess of 100 MT		
Up to 25 MT		₹ 240 per MT	₹ 240 per MT

Particular	Existing Tariff	Revised tariff by AAI	Revised tariff proposed by Authority
Above 25 MT up to 50 MT		₹ 6,000 + ₹ 490 per MT in excess of 25 MT	₹ 6,000 + ₹ 490 per MT in excess of 25 MT
Above 50 MT up to 100 MT		₹ 18,250 + ₹ 570 per MT in excess of 50 MT	₹ 18,250 + ₹ 570 per MT in excess of 50 MT
Above 100 MT up to 200 MT		₹ 46,750 + ₹ 650 per MT in excess of 100 MT	₹ 46,750 + ₹ 650 per MT in excess of 100 MT
Above 200 MT		₹ 1,11,750 + ₹ 750 per MT in excess of 200 MT	₹ 1,11,750 + ₹ 750 per MT in excess of 200 MT
Rate per Landing - Domestic Flight			
Up to 20 MT	₹ 224.70 per MT		
Above 20 MT up to 50 MT	₹ 4,494 + ₹ 460.7 per MT in excess of 20 MT		
Above 50 MT up to 100 MT	₹ 18,315 + ₹ 539.3 per MT in excess of 50 MT		
Above 100 MT	₹ 45,280 + ₹ 612.4 per MT in excess of 100 MT		
Up to 25 MT		₹ 240 per MT	₹ 240 per MT
Above 25 MT up to 50 MT		₹ 6,000 + ₹ 320 per MT in excess of 25 MT	₹ 6,000 + ₹ 320 per MT in excess of 25 MT
Above 50 MT up to 100		₹ 14,000 + ₹ 370 per MT in excess of 50 MT	₹ 14,000 + ₹ 370 per MT in excess of 50 MT
Above 100 MT up to 200 MT		₹ 32,500 + ₹ 420 per MT in excess of 100 MT	₹ 32,500 + ₹ 420 per MT in excess of 100 MT
Above 200 MT		₹ 74,500 + ₹ 470 per MT in excess of 200 MT	₹ 74,500 + ₹ 470 per MT in excess of 200 MT
Housing Charges			
Up to 40 MT	₹ 9.4 per MT per hour		
Above 40 MT up to 100 MT	₹ 376 + ₹ 17.50 per MT per hour in		

Particular	Existing Tariff	Revised tariff by AAI	Revised tariff proposed by Authority
	excess of 40 MT		
Above 100 MT	₹ 1,426 + ₹ 22.50 per MT per hour in excess of 100 MT		
Up to 25 MT		₹ 6 Per Hour Per MT	₹ 6 Per Hour Per MT
Above 25 MT up to 50 MT		₹ 150 + ₹ 8 per MT per Hour in excess of 25 MT	₹ 150 + ₹ 8 per MT per Hour in excess of 25 MT
Above 50 MT up to 100		₹ 350 + ₹ 16 per MT per Hour in excess of 50 MT	₹ 350 + ₹ 16 per MT per Hour in excess of 50 MT
Above 100 MT up to 200 MT		₹ 1,150 + ₹ 20 per MT per Hours in excess of 100 MT	₹ 1,150 + ₹ 20 per MT per Hours in excess of 100 MT
Above 200 MT		₹ 3,150 + ₹ 22 per MT per Hours in excess of 200 MT	₹ 3,150 + ₹ 22 per MT per Hours in excess of 200 MT
Parking Charges			
Up to 40 MT	₹ 4.8 per MT per hour		
Above 40 MT up to 100 MT	₹ 192 + ₹ 9.0 per MT per hour in excess of 40 MT		
Above 100 MT	₹ 732 + ₹ 11.70 per MT per hour in excess of 100 MT		
Up to 25 MT		₹ 3 Per Hour Per MT	₹ 3 Per Hour Per MT
Above 25 MT up to 50 MT		₹ 75 + ₹ 4 per Hour per MT in excess of 25 MT	₹ 75 + ₹ 4 per Hour per MT in excess of 25 MT
Above 50 MT up to 100		₹ 175 + ₹ 8 per MT per Hour in excess of 50 MT	₹ 175 + ₹ 8 per MT per Hour in excess of 50 MT
Above 100 MT up to 200 MT		₹ 575 + ₹ 10 per MT per Hours in excess of 100 MT	₹ 575 + ₹ 10 per MT per Hours in excess of 100 MT
Above 200 MT		₹ 1,575 + ₹ 11 per	₹ 1,575 + ₹ 11 per

Particular	Existing Tariff	Revised tariff by AAI	Revised tariff proposed by Authority
		MT per Hours in excess of 200 MT	MT per Hours in excess of 200 MT
Throughput Charges			
Rate per KL	₹ 361.83	₹ 380	₹ 380
Passenger Service Fee (PSF) – Facilitation			
Domestic Passenger (per embarking passenger)	Nil	Nil	Nil
International Passenger (per embarking passenger)	Nil	Nil	Nil
User Development Fee (UDF)			
Domestic Passenger (per embarking passenger)	₹ 392	₹ 408	₹ 88
International Passenger (per embarking passenger)	₹ 1,124	₹ 1,169	₹ 253
Passenger Service Fee (PSF) – Security*			
Domestic Passenger (per embarking passenger)	₹ 130	₹ 130	₹ 130
International Passenger (per embarking passenger)	\$ 3.25	\$ 3.25	\$ 3.25
Domestic Passenger (per embarking passenger)	₹ 130	₹ 130	₹ 130
International Passenger (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

16.11. The Authority notes that the proposed UDF charges per domestic and international passenger is 77% lower than the existing UDF charges. Further, the Authority has noted that, as an approximation, proposed landing tariffs of domestic ATM of 70 MT (approximate weight for majority of domestic aircrafts) has been reduced by 27% from existing tariffs. The exact rates are specified in the tariff card.

16.12. Additionally, the increase in tariffs as submitted by AAI is given below. The Authority proposes to accept the increase in tariffs for the second control period as submitted by AAI.

16.12.1. Yearly increase of 4% every subsequent year (FY 2018-19 onwards) in landing, parking and housing charges

16.12.2. Yearly increase of 5% every subsequent year (FY 2018-19 onwards) in fuel throughput charges

16.12.3. Yearly increase of 4% every subsequent year (FY 2018-19 onwards) in UDF

per departing passenger

16.13. The estimated aeronautical revenues based on tariffs as proposed by the Authority to be applicable from 01.02.2018 is indicated in Table 51.

Table 51 - Projected Revenue, Target Revenue and shortfall as per the Authority for the 2nd control period

Projected Aero Revenue based on AAI proposed tariffs (₹ crore)	2016-17	2017-18	2018-19	2019-20	2020-21
Landing	47.8	51.6	49.3	57.2	66.3
Parking and Housing	0.1	0.1	0.1	0.2	0.2
UDF	102.0	102.0	31.4	37.5	44.9
FTP+ITP and lease rentals	4.5	5.0	5.8	6.6	7.5
Ground Handling Charges and lease rentals	2.7	3.0	3.4	3.7	4.2
CUTE	2.6	3.0	3.4	4.0	4.6
Cargo	2.1	0.0	0.0	0.0	0.0
Total Projected Revenue	161.8	164.6	93.4	109.1	127.5
Target Aero Revenue	94.0	113.3	136.6	164.7	198.6
Short fall (-)/ Excess (+) in revenue, i.e. difference (Projected – Permissible)	67.8	51.3	-43.1	-55.5	-71.1
PV value as on 01.04.2016 with Discount rate (14.00%)	67.8	45.0	-33.2	-37.5	-42.1
Total PV of difference as on 01.04.2016 for the control period	0.0				

16.14. 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 proposes to revise WPI for the 2nd control period to 4.2%.

16.15. The Authority proposes 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.

16.16. The Authority notes that ASQ rating at CCSIA has been more than 3.75 in every quarter of 1st control period as required under Section 6.14.3 of Airport Guidelines.

Details of the ASQ ratings are provided below.

Table 52 – Quarterly ASQ rating of CCSIA during the 1st control period

Quarter	2012	2013	2014	2015	2016
Q1	-	4.07	4.22	4.53	4.74
Q2	-	4.11	4.26	4.36	4.66
Q3	-	4.18	4.21	4.76	4.70
Q4	3.80	4.16	4.33	4.91	4.78
Average	3.80	4.13	4.26	4.64	4.72

Proposal No. 12. Tariff rate card

12.a. The Authority proposes to accept Annual Tariff Proposals as given in Table 50 (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. Detailed tariff card is provided in Annexure for stakeholder comments.

12.b. The Authority proposes 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 CCSIA.

12.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.

12.d. The Authority proposes to merge UDF and PSF (facilitation) charges and only UDF charges to be applicable on each domestic and international embarking passenger w.e.f. 01.02.2018.

12.e. The Authority proposes 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.

17. Summary of Proposals

Proposal No. 1. True-up for the 1 st control period	16
Proposal No. 2. Traffic Forecast	20
Proposal No. 3. Allocation of assets between Aeronautical and Non-aeronautical services ...	25
Proposal No. 4. Opening Regulatory Asset Base for the 2 nd control period	26
Proposal No. 5. Capital Expenditure	39
Proposal No. 6. Treatment of Depreciation.....	42
Proposal No. 7. RAB for 2 nd control period	44
Proposal No. 8. FRoR.....	45
Proposal No. 9. Non Aeronautical Revenues	49
Proposal No. 10. Operation and Maintenance expenditure.....	58
Proposal No. 11. Taxation	60
Proposal No. 12. Tariff rate card	70

18. Stakeholders' Consultation Timeline

18.1. In accordance with the provision of Section 13(4) of the AERA Act, 2008, the proposal contained in the Section – Summary of proposals (Section 17 above) read with the relevant discussion in the other sections of the paper is hereby put forth for Stakeholders' Consultation. To assist the Stakeholders in making their submissions in a meaningful and constructive manner, necessary documents are enclosed as **Annexure I**. For removal of doubts, it is clarified that the contents of this consultation paper may not be construed as any Order or Direction by the Authority. The Authority shall pass an order, in the matter, only after considering the submissions of the stakeholders' in response hereto and by making such decisions fully documented and explained in terms of the provisions of the Act.

18.2. The Authority welcomes written evidence based feedback, comments and suggestions from stakeholders on the proposals made in (Section 17 above), latest by **15.01.2018** at the following address.

Secretary

Airports Economic Regulatory Authority of India

AERA Building, Administrative Complex Safdarjung Airport

New Delhi -110003

Tel: 011-24695043, Fax: 011-24695039

Email: puja.jindal@nic.in

(S. Machendranathan)
Chairperson

List of Tables

Table 1 - Passenger and ATM traffic during the 1 st control period at CCSIA	2
Table 2 – Technical and Terminal building details of CCSIA	2
Table 3 – Opening RAB for the 1 st control period as per AAI – Single Till.....	8
Table 4 - ARR as per AAI for the 1 st control period – Single Till	8
Table 5 - Aeronautical revenue earned for the 1 st control period as per AAI Submission – Single Till ..	9
Table 6 - ARR and its resultant shortfall as per AAI for 1 st control period – Single Till.....	10
Table 7 - Depreciation rates as submitted by AAI.....	10
Table 8 – The Authority’s consideration of depreciation for 1 st control period – Single Till	11
Table 9 – The Authority’s consideration of average RAB for 1 st control period – Single Till	12
Table 10 – Comparison of NAR as considered by AAI and the Authority for 1 st control period.....	12
Table 11 - Summary of CHQ/ RHQ Overheads as submitted by AAI for 1 st control period	13
Table 12 - Summary of O&M expenditure as per the Authority for 1 st control period -Single Till.....	14
Table 13 – Revised amount of Tax as considered by Authority for the 1 st control period	15
Table 14 - ARR as per Authority for the 1 st control period – Single Till	15
Table 15 - ARR, yield and shortfall as per Authority for 1 st control period – Single Till.....	16
Table 16 - Traffic Growth rates assumed by AAI for the 2 nd control period	18
Table 17 - CAGR for Traffic at CCSIA	18
Table 18 - Traffic growth rates and Traffic as considered by Authority for the 2 nd control period.....	19
Table 19 – Allocation of gross block of assets as on 01.04.2016 between aeronautical and non-aeronautical services as submitted by AAI	21
Table 20 – Workings of Terminal Area Ratio calculation as submitted by AAI for FY 2015-16.....	22
Table 21 – Change in allocation of gross block of assets existing as on 01.04.2016 between aeronautical and non-aeronautical services proposed by the Authority	24
Table 22 – Allocation of gross block of assets as on 01.04.2016 between aeronautical and non-aeronautical services as considered by the Authority	25
Table 23 - Calculation of opening RAB as on 1 st April 2016 as per AAI submission – Hybrid Till.....	26
Table 24 - Calculation of opening RAB as on 1 st April 2016 as per the Authority – Hybrid Till.....	26
Table 25 – Aeronautical assets to be capitalized at CCSIA for 2 nd control period as per AAI	27
Table 26 - Capital expenditure for terminal building as submitted by AAI.....	33
Table 27 - Capital expenditure for apron as submitted by AAI.....	35
Table 28 – Capital expenditure for apron as proposed by the Authority	37
Table 29 – Capital expenditure for construction of parallel taxi track as proposed by the Authority .	37
Table 30 - Revised aeronautical capital expenditure for 2 nd control period as considered by the Authority	38
Table 31 - Depreciation rates as submitted by AAI and as considered by the Authority	41
Table 32 - Authority’s consideration on depreciation for the 2 nd control period – Hybrid Till	42
Table 33 - Summary of the RAB and Depreciation for CCSIA (Airport Services) as per AAI for the 2 nd control period	43
Table 34 - Summary of forecast and Roll forward RAB and Depreciation for CCSIA (Airport Services) considered by the Authority for 2 nd control period – Hybrid Till.....	44
Table 35 - Revenue from Non-aeronautical Services – Projected by AAI for 2 nd control period.....	46
Table 36 – Assumption (growth rates) for Service other than Regulated Services for the 2 nd Control Period as per AAI.....	46
Table 37 – Details of land allotted to cargo, ground handling and supply of fuel service providers in 2 nd control period.....	48
Table 38 – Adjustment to Revenue from Non-aeronautical Services considered by Authority for 2 nd control period	49
CP no. 31/2017-18 dated 22.12.2017	73

Table 39 - Summary of Aeronautical O&M expenditure as submitted by AAI for 2 nd control period on Hybrid Till	51
Table 40 – Assumptions made by AAI for each item of O&M expenditure.....	52
Table 41 – O&M Expense allocation as submitted by AAI.....	52
Table 42 – Total O&M expenditure for FY 2015-16 as proposed by the Authority.....	56
Table 43 – Expense allocation between aeronautical and non-aeronautical services proposed by the Authority	57
Table 44 - Summary of Aeronautical O&M expenditure as per the Authority for the 2 nd control period as per Hybrid Till	57
Table 45 - Amount of Tax for aeronautical services as per AAI submission and as calculated by the Authority for the 2 nd control period - Hybrid Till	60
Table 46 - Amount of Tax for aeronautical services as calculated by the Authority for the 2 nd control period - Hybrid Till	60
Table 47 - ARR and Yield as per AAI for the 2 nd control period – Hybrid Till	61
Table 48 - ARR and Yield as per Authority for the 2 nd control period – Hybrid Till.....	62
Table 49 - Projected Revenue, Target Revenue and shortfall/ excess based on AAI proposed tariffs for the 2 nd control period applicable from 01.02.2018.....	64
Table 50 - Revised aeronautical tariffs as submitted by AAI and as proposed by the Authority	65
Table 51 - Projected Revenue, Target Revenue and shortfall as per the Authority for the 2 nd control period.....	69
Table 52 – Quarterly ASQ rating of CCSIA during the 1 st control period	70

Annexure 1 – Detailed Tariff Card as proposed by the Authority to be applicable from 01.02.2018 to 31.03.2018

I) LANDING CHARGES

Rate per landing - International Flight

Weight of the Aircraft	Proposed - Rate Per Landing (In ₹)
Up to 25 MT	₹ 240 per MT
Above 25 MT up to 50 MT	₹ 6,000 + ₹ 490 per MT in excess of 25 MT
Above 50 MT up to 100 MT	₹ 18,250 + ₹ 570 per MT in excess of 50 MT
Above 100 MT to 200 MT	₹ 46,750 + ₹ 650 per MT in excess of 100 MT
Above 200 MT	₹ 1,11,750 + ₹ 750 per MT in excess of 200 MT

Rate per Landing - Domestic Flight

Weight of the Aircraft	Proposed - Rate Per Landing (In ₹)
Up to 25 MT	₹ 240 per MT
Above 25 MT up to 50 MT	₹ 6,000 + ₹ 320 per MT in excess of 25 MT
Above 50 MT up to 100 MT	₹ 14,000 + ₹ 370 per MT in excess of 50 MT
Above 100 MT to 200 MT	₹ 32,500 + ₹ 420 per MT in excess of 100 MT
Above 200 MT	₹ 74,500 + ₹ 470 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 16.01.2018 to 31.01.2018	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 16.01.2018 to 31.01.2018. The actual Aircraft movement per operator for the period 16.01.2018 to 31.01.2018 would be frozen for the period (01.02.2018 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

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 16.01.2018 to 31.01.2018	Discount offered on all the movements per fortnight per operator
10%	1%
15%	2%
20%	3%
25%	4%
30%	5%
<p>Notes:</p> <ul style="list-style-type: none"> • The initial Aircraft movement per operator per fortnight will be taken from 16.01.2018 to 31.01.2018. The actual Aircraft movement per operator for the period 16.01.2018 to 31.01.2018 would be frozen for the period (01.02.2018 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 	

Note

	Proposed
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

	Proposed Rates (In ₹)	Proposed Rates (In ₹)
Weight of the Aircraft	Parking Charges Rates per Hour	Housing Charges Rates per Hour
Up to 25 MT	₹ 3 Per Hour Per MT	₹ 6 Per Hour Per MT
Above 25 MT up to 50 MT	₹ 75 + ₹ 4 per Hour per MT in excess of 25 MT	₹ 150 + ₹ 8 per MT per Hour in excess of 25 MT
Above 50 MT up to 100	₹ 175 + ₹ 8 per MT per Hour in excess of 50 MT	₹ 350 + ₹ 16 per MT per Hour in excess of 50 MT
Above 100 MT to 200 MT	₹ 575 + ₹ 10 per MT per Hours in excess of 100 MT	₹ 1,150 + ₹ 20 per MT per Hours in excess of 100 MT
Above 200 MT	₹ 1,575 + ₹ 11 per MT per Hours in excess of 200 MT	₹ 3,150 + ₹ 22 per MT per Hours in excess of 200 MT

Note

	Proposed
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.
6)	It is proposed to waive off the night parking charges in principle for all domestic scheduled operators at Lucknow 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

Proposed
Proposed Rate Per KL (IN ₹)
₹ 380

IV) PASSENGER SERVICE FEE (PSF) – SECURITY*

Proposed per embarking passenger	
₹ 130	\$ 3.25

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

Notes

	Proposed
1)	Collection Charge: 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.

V) USER DEVELOPMENT FEE (UDF)

Particulars	Proposed
Domestic	₹ 88
International	₹ 253

Notes

	Proposed
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 1st fortnight and rate as

	on 15th of the month for tickets issued in the 2nd fortnight shall be adopted.
4)	Revised UDF charges will be applicable on tickets issued on or after 01.02.2018.
5)	No UDF will be levied for Transit Passengers

VI) 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.

VII) 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 2 – Details of Aeronautical Revenues

S. No.	Particulars	2017	2018*	2019	2020	2021
Traffic Assumptions						
1	Domestic ATMs	24,540	27,485	30,783	34,477	38,615
2	International ATMs	4,816	5,298	5,828	6,410	7,051
3	Total ATMs	29,356	32,783	36,611	40,888	45,666
4	Domestic Passengers	3,307,351	3,850,475	4,482,789	5,218,939	6,075,978
5	International Passengers	661,599	740,584	829,000	927,970	1,038,757
6	Total Passengers	3,968,950	4,591,059	5,311,788	6,146,909	7,114,735
7	Fuel throughput (kl)	74,511	83,209	92,925	103,781	115,910
Aeronautical Revenues						
Landing Charges						
8	Average landing charges per departing domestic ATM (INR)	30405	22196	23084	24007	24967
9	<i>Growth in average landing charges per departing domestic ATM (INR)</i>		-27%	4%	4%	4%
10	Landing Charges - Domestic ATM (INR cr.)	37.3	39.9	35.5	41.4	48.2
11	Average landing charges per departing international ATM (INR)	43753	45503	47323	49216	51185
12	<i>Growth in average landing charges per departing International ATM (INR)</i>		4%	4%	4%	4%
13	Landing Charges - International ATM (INR cr.)	10.5	11.7	13.8	15.8	18.0
14	Total Landing Charges (Dom + Int)	47.8	51.6	49.3	57.2	66.3
Parking and Housing Charges:						
15	Parking and Housing Average Revenue per departing ATM (Dom+Int)	69	69	72	75	78
16	<i>Growth in Parking and Housing charges per departing ATM (Dom+Int)</i>		0%	4%	4%	4%
17	Total Parking and Housing Charges (Dom + Int)	0.1	0.1	0.1	0.2	0.2

S. No.	Particulars	2017	2018*	2019	2020	2021
	User Development Fee (UDF)					
18	Domestic UDF per departing passenger (INR)	392	88	92	95	99
19	<i>Growth in Domestic UDF per departing passenger (%)</i>		0%	4%	4%	4%
20	Revenues from Domestic UDF (INR cr.)	64.8	65.7	20.5	24.8	30.1
21	International UDF per departing passenger (INR)	1124	253	263	274	285
22	<i>Growth in International UDF per departing passenger (%)</i>		0%	4%	4%	4%
23	Revenues from International UDF (INR cr.)	37.2	36.2	10.9	12.7	14.8
24	Total UDF (INR cr.)	102.0	102.0	31.4	37.5	44.9
	Fuel Throughput Charges (FTC)					
25	FTC (INR per kL)	361.8	380.0	399.0	419.0	439.9
26	Revenues from FTC (INR cr.)	2.7	3.0	3.7	4.3	5.1
27	Ground Handling Charges	2.5	2.8	3.1	3.5	3.9
28	<i>Growth in ground handling charges as per increase in ATMs</i>		11.7%	11.7%	11.7%	11.7%
29	Cute services	2.6	3.0	3.4	4.0	4.6
30	<i>Growth in CUTE charges as per increase in passengers</i>		15.7%	15.7%	15.7%	15.7%
31	Land lease from ground handling agencies	0.2	0.2	0.2	0.2	0.2
32	<i>Growth as per contracts</i>		7.5%	7.5%	7.5%	7.5%
33	Land lease from oil companies	1.8	1.9	2.1	2.2	2.4
34	<i>Growth as per contracts</i>		7.5%	7.5%	7.5%	7.5%
35	Cargo revenues	2.1	0.0	0.0	0.0	0.0
36	Rent from ground handling agencies	0.0	0.0	0.0	0.0	0.0
37	<i>Growth as per contracts</i>		10.0%	10.0%	10.0%	10.0%
38	Total aeronautical revenues	161.8	164.6	93.4	109.1	127.5

* For FY 2017-18, existing tariffs are applicable till 31.01.2018 and revised tariffs are applicable from 01.02.2018 onwards.