

Consultation Paper No. 3/ 2016-17



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

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1. LIST OF ABBREVIATIONS

AAI	Airport Authority of India	IAF	Indian Air Force
AERA or the Authority	Airport Economic Regulatory Authority of India	ICAO	International Civil Aviation Organization
Aero	Aeronautical	IRR	Internal Rate of Return
ANS	Aeronautical services	JVC	Joint Venture Company
ARR	Aggregate Revenue Requirement	MOU	Memorandum of Understanding
ATM	Air traffic movement	MT	Metric Ton
ATP	Annual Tariff Proposal	MTOW	Maximum Take Off Weight
CAGR	Compounded Annual Growth Rate	MYTO	Multi Year Tariff Order
CAPEX	Capital Expenditure	MYTP	Multi Year Tariff Proposal
CHIAL/ Airport Operator	Chandigarh International Airport Limited	NAR	Non-Aeronautical Revenue
CISF	Central Industrial Security Force	Non-Aero	Non-Aeronautical
CNS	Communication Navigation Surveillance	NCAP	National Civil Aviation Policy 2016
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortisation	OPEX	Operating Expenditure
F&B	Food and Beverages	O&M	Operating and Maintenance
FRoR	Fair Rate of Return	P&L	Profit and Loss
FY	Financial Year	p.a.	Per annum
Airport Guidelines	AERA (Terms and Conditions for Determination of Tariff for Airport Operators) Guidelines, 2011 dated 28 February 2011	PAX	Passenger(s)
GMADA	Greater Mohali Area Development Authority	PBB	Passenger Boarding Bridge
GOI	Government Of India	PSF	Passenger Service Fee
HUDA	Haryana Urban Development Authority	RAB	Regulated Asset Base
		INR or ₹	Indian rupees
		SLM	Straight Line Method
		Sq.m.	Square Metre
		UDF	User Development Fee
		YPP	Yield per passenger
		K_e	Cost of equity

2. INTRODUCTION

- 2.1. Chandigarh International Airport Limited, (CHIAL) was incorporated in 2010 to build and operate a new terminal of international standards at the Chandigarh Airport. It is a joint venture of the Airport Authority of India (AAI), Greater Mohali Area Development Authority (GMADA) and Haryana Urban Development Authority (HUDA).
- 2.2. AAI holds 51.0% of the equity shares and the rest of the equity share capital is held equally by GMADA (24.5%) and HUDA (24.5%).
- 2.3. AAI's contribution to equity was provided by value of the new integrated terminal building and other assets constructed by AAI. The balance equity was equally contributed by GMADA and HUDA by way of cost of land acquired for the project.
- 2.4. AAI completed the construction of the new integrated terminal building and handed it over to CHIAL on 01 September 2015. CHIAL started its operations from 19 October 2015. The responsibility for providing major airside facilities and Air Navigation Services at the Airport rests with the Indian Air Force (IAF).
- 2.5. CHIAL has constructed an apron and connecting taxiways for conducting its operations efficiently.
- 2.6. The capacity of the Airport is 4.5 million and the actual throughput during FY15-16 was 1.5 million. Since the terminal building handled 1.5 million passengers in FY 15-16, CHIAL has been declared as a major airport w.e.f. FY 16-17 as per section 2(i) of AERA Act. Therefore, it is mandatorily required to follow the Guidelines issued by the Authority and submit its proposal to the Authority for Tariff determination.

3. **MULTI YEAR TARIFF PROPOSAL SUBMITTED BY CHIAL**

- 3.1. CHIAL filed its MYTP submissions for the first control period i.e. from 2016-17 to 2020-21, vide their letter dated 15.03.2016. Subsequently, CHIAL filed auxiliary submissions dated 02.11.2016 and 25.11.2016 and additional justifications/ clarifications dated 24.11.2016, 30.11.2016, 01.12.2016, 03.12.2016, 05.12.2016, 09.12.2016 and 22.12.2016 and 10.01.2017.

CHIAL has made submissions for the first control period based on actual figures up to the FY 15-16 and projections from FY 16-17 to FY 20-21. CHIAL's Board of Directors has approved the budgets for FY16-17 and FY17-18 and they form the basis for projections of FY 16-17 and FY 17-18.

- 3.2. CHIAL in its submission has included details for capital expenditure, revenue and operating expenditure along with growth rate estimates and the basis for such estimations.
- 3.3. The tariff proposal in respect of the airport tariff does not consider the revenues and expenditure on account of Landing of aircrafts, Runway maintenance, Communication, Navigation, Surveillance / Air Traffic Management (CNS/ATM) services at the airport since these services are being provided by IAF. In case the IAF requests the Authority to revise the Landing charges, the Authority shall consider it separately.
- 3.4. CHIAL's main source of aeronautical revenue at present is from Passenger Service Fee (Facilitation charge) of ₹ 77 per embarking domestic passenger.
- 3.5. With the commencement of international operations from the new integrated terminal, CHIAL has proposed separate charges for domestic and international passengers.

4. METHODOLOGY FOR TARIFF CALCULATION

- 4.1. The methodology adopted by the Authority to determine Aggregate Revenue Requirement (“ARR”) is based on AERA Act, 2008 and the Airport Guidelines issued by AERA.
- 4.2. The methodology also takes into account the recent amendments to the Guidelines regarding the Hybrid-Till mechanism, wherein, only 30% of the Non-Aeronautical revenue is to be used for cross-subsidizing the aeronautical charges as against the earlier practice of taking the entire Non-Aeronautical revenues for cross-subsidizing the aeronautical charges (Single Till).
- 4.3. The Authority shall determine the Aggregate Revenue Requirement (ARR) for the current control period on the basis of the following Regulatory Building Blocks:
 - 4.3.1. Regulatory Asset Base (RAB)
 - 4.3.2. Depreciation (D);
 - 4.3.3. Fair Rate of Return applied to the Regulatory Asset Base (FRoR x RAB);
 - 4.3.4. Operation and Maintenance Expenditure (O);
 - 4.3.5. Taxation (T);
 - 4.3.6. Revenue from services other than aeronautical services (NAR).
- 4.4. Based on the building blocks provided above, the formula for determining ARR under Hybrid Till is as follows:

$$ARR = \sum_{t=1}^5 (ARR_t) \text{ and}$$

$$ARR_t = (FRoR \times RAB_t) + D_t + O_t + T_t - 30\% \text{ of } NAR_t$$

Where

‘t’ is the Tariff Year in the Control Period;

ARR_t is the Aggregate Revenue Requirement for year ‘t’;

FRoR is the Fair Rate of Return for the control period;

RAB_t is the Regulatory Asset Base for the year ‘t’;

D_t is the Depreciation corresponding to the RAB for the year ‘t’;

O_t is the Operation and Maintenance Expenditure for the year ‘t’, which includes all expenditures incurred by the Airport Operator(s) including expenditure incurred on statutory operating costs and other mandate operating costs;

T_t is the corporate tax for the year ‘t’ paid by the airport operator on the aeronautical profits; and

NAR_t is revenue from services other than aeronautical services for the year ‘t’

- 4.5. The present value of total aeronautical revenue that is estimated to be realized each year during the control period at proposed tariff levels is compared with the present value of the ARR during the control period. In case the present value of estimated aeronautical revenue during the control period is lower than the present value of ARR during the control period, the airport operator may opt to increase the proposed tariff. In case the present value of estimated aeronautical revenue is higher than the present value of the ARR then the airport operator will have to reduce its proposed tariff.
- 4.6. The detailed submissions provided by CHIAL in respect of the Regulatory Building Blocks have been discussed in the subsequent sections.

5. REGULATORY ASSET BASE (RAB) AND DEPRECIATION

Opening RAB – CHIAL submission

- 5.1. As per clause 5.2.4 of Airport Guidelines, opening RAB is to be calculated by taking into consideration the original cost of fixed asset, accumulated depreciation, accumulated capital receipts of the nature of contributions from stakeholders, adjustment for value of assets excluded from the scope of RAB and adjustment for value of the land excluded from the scope of RAB.
- 5.2. CHIAL in its submission has classified the opening gross block into aeronautical, non-aeronautical and common assets as shown in table below:

Table 1: Classification of opening gross block into aeronautical, non-aeronautical and common assets (in ₹ lakhs)

Asset description	Aeronautical	Non-Aeronautical	Common	Total
Freehold land	45,318	-	-	45,318
Building Terminal	-	-	28,590	28,590
Electrical installation/ Air Conditioners	-	-	6,071	6,071
Machinery & equipment	4,568	-	233	4,801
Apron	4,346	-	25	4,371
Roads	1,457	-	62	1,519
Furniture & Fixtures	36	-	458	495
Boundary wall- Operational	350	-		350
Boundary wall - Operational - CISF/Security	-	-	227	227
Furniture & Fixtures: Other than office	199	-	18	217
Computers & IT - Security - Servers	-	-	149	149
Electrical installation/Air Conditioners - Security	107	-	-	107
Miscellaneous items (of value less than ₹1 crores)	428	2	10	441
Grand Total	56,810	2	35,843	92,655

- 5.3. Opening common assets have been further classified as aeronautical and non-aeronautical in the ratio of 92:08 as shown in table below:

Table 2: Classification of opening common assets into aeronautical and non-aeronautical assets (in ₹ lakhs)

Asset description	Aeronautical	Non-Aeronautical	Total common assets
Building Terminal	26,303	2,287	28,590
Electrical installation/ Air Conditioners	5,585	486	6,071
Machinery & equipment	214	19	233
Apron	23	2	25
Roads	57	5	62

Asset description	Aeronautical	Non-Aeronautical	Total common assets
Furniture & Fixtures	422	37	458
Boundary wall - Operational - CISF/ Security	209	18	227
Furniture & Fixtures: Other than office	16	1	18
Computers & IT - Security – Servers	137	12	149
Building – Temporary (Porta Pre Fab Structure Office)	9	1	10
Grand Total	32,974	2,869	35,843

5.4. Based on the aforesaid allocation of common assets, Opening RAB is as shown in table below:

Table 3: Assets forming part of opening RAB as on 1st April 2016 (in ₹ lakhs)

Aeronautical assets	Cost
Freehold land	45,318
Building terminal	26,303
Electrical installation/ Air Conditioners	5,585
Machinery & equipment	4,782
Apron	4,369
Roads	1,514
Furniture & Fixtures	458
Boundary Wall- Operational	350
Furniture & Fixtures: Other than office	216
Boundary Wall - Operational - CISF/ Security	209
Computers & IT - Security – Servers	137
Electrical installation/ Air Conditioners - Security	107
Miscellaneous items (of value less than ₹1 crores)	436
Grand total	89,784

Authority's Examination – Opening RAB

Land and Project Cost

- 5.5. The Authority has noted that total land cost (approximately 51% of the total opening RAB) has been considered as an Aeronautical asset for ARR determination.
- 5.6. Historically for development of Airports, land has been provided by State Governments at zero cost to the airport operator. The policy of the GOI also supports this view. In the case of Mopa Airport at Goa, a Golden Share was awarded to the State Government by way of equity participation for the land provided by the Government. Even though the shareholding of the State Governments is expressed in the form of cost of land, the Authority is not inclined to take the cost of land into the RAB and give a return on it since State Governments normally benefit from the development of the new state-of-the-art airport. The development of the airport would also contribute towards the overall socio-economic development of the city and the State. Therefore the Authority has proposed to exclude the cost of land from the RAB.
- 5.7. As per the Authority's order in the matter of "Normative Approach to Building Block in Economic Regulation of major Airports" dated 06 June 2016 (hereafter referred to as

Normative Capital Cost Order), for determination of RAB the project cost ceiling with respect to the Terminal Building is ₹65,000 per sq.m and ₹4,700 per sq.m. for Taxiway/ Apron.

- 5.8. The Authority has noted that as per CHIAL's submission, the project cost per sq.m., for terminal building is ₹66,422 and for apron is ₹5,077 (such costs are inclusive of earth filling costs which cannot be separately identified).

Table 4: Per sq.m. cost of Terminal Building and Apron as per CHIAL's submission

Particulars	Units	Terminal building	Apron
Total Cost as per CHIAL [A]	₹ lakhs	40,246	4,759
Area in Sq.m as per CHIAL [B]	Sq.m.	60,591	93,738
Cost per Sq.m [A] / [B]	₹	66,422	5,077

- 5.9. The Authority has noted that after excluding costs pertaining to CISF/ Security from the cost of terminal building, cost per sq.m. as mentioned above will further reduce to ₹65,602. This is within a reasonable range of the normative cost level of ₹65,000 as prescribed by the Authority. Therefore the Authority has proposed to accept the cost of Terminal Building as submitted by CHIAL.

- 5.10. So far as the Apron and Taxiways are concerned, the cost per sq.m. works out to ₹5,077 including earthwork cost. This is within a reasonable range of the normative cost of ₹4,700 prescribed by the Authority. Therefore the Authority has proposed to accept the cost of Apron and Taxiway as submitted by CHIAL.

Terminal Building and other assets

- 5.11. The Authority has proposed to allocate Terminal Building costs between Aeronautical and Non-Aeronautical as per Terminal Building area segregation. CHIAL's submission on Terminal Building area segregation is as follows:

Table 5: Segregation of Terminal Building area into Aeronautical, Non-aeronautical and Common (in sq.m.)

Floor level	Aero area	Non-aero area	Common area	Total area
Basement	12,899	-	65	12,964
Arrival Lower	13,738	1,145	2,617	17,500
Arrival Upper	5,212	303	78	5,593
Departure Lower	10,476	2,732	1,859	15,067
Departure Upper	1,730	443	122	2,295
Total (in sq.m.)	44,055	4,623	4,741	53,419
Allocation of common area	4,291	450	-	4,741
Total	48,346	5,073	-	53,419
% of Aeronautical area to Non-aeronautical area	90.5%	9.5%		

- 5.12. The Authority has proposed to take into account the above calculation and reclassify the Terminal Building cost at ₹27,895 lakhs as shown below:

Table 6: Revised classification of Terminal Building cost into aeronautical and non-aeronautical (in ₹ lakhs)

Asset description	Aeronautical	Non-Aeronautical	Common	Total
Building Terminal	23,006	2,414	2,476	27,895
Add: Allocation of common assets	2,241	235	-	-
Total	25,246	2,649	-	27,895

5.13. The Authority has proposed to classify all the other common assets (excluding miscellaneous assets of ₹10 lakhs) of ₹7,937 lakhs as Aeronautical assets. Further, the Authority has classified the miscellaneous assets of ₹10 lakhs into Aeronautical and Non-aeronautical as per the revised ratio of 90.5: 9.5. Revised classification of opening gross block into aeronautical and non-aeronautical is shown in the table below:

Table 7: Revised classification of opening gross block into aeronautical, non-aeronautical and common assets (in ₹ lakhs)

Asset description	Aeronautical	Non-Aeronautical	Total
Freehold land	-	-	-
Building Terminal	25,246	2,649	27,895
Electrical installation/ Air Conditioners	6,071	-	6,071
Machinery & equipment	4,801	-	4,801
Apron	4,371	-	4,371
Roads	1,519	-	1,519
Other assets reclassified	694	-	694
Furniture & Fixtures	495	-	495
Boundary wall- Operational	350	-	350
Boundary wall - Operational - CISF/Security	227	-	227
Furniture & Fixtures: Other than office	217	-	217
Computers & IT - Security - Servers	149	-	149
Electrical installation/Air Conditioners - security	107	-	107
Miscellaneous items (of value less than ₹1 crores)	438	3	441
Grand Total	44,684	2,652	47,336

Additions to RAB – CHIAL submission

5.14. CHIAL in its submission has classified the additions to gross block during the control period into aeronautical, non-aeronautical and common assets as shown in table below:

Table 8: Classification of additions to gross block during the control period into aeronautical, non-aeronautical and common assets (in ₹ lakhs)

Asset description	Aeronautical	Non-Aeronautical	Common	Total
Building Terminal	515	150	1,171	1,836
X Ray Baggage System	1,174	-	-	1,174
Electrical installation/Air Conditioners	782	-	223	1,005
Machinery & equipment	898	-	35	933
Building - Temporary	670	-	-	670
Computers & IT hardware & access	-	-	90	90
Roads, bridges & culverts – CISF/ Security	44	-	-	44
Apron	-	-	43	43
Electrical installation/Air Conditioners - Security	-	25	-	25
Furniture & Fixtures: Other than office	20	-	-	20
Vehicles - Security	16	-	-	16
Tools & equipment - Security	11	-	-	11
Tools & equipment	5	-	6	11
Grand Total	4,135	175	1,569	5,879

5.15. Additions to common assets during the control period have been further classified into aeronautical and non-aeronautical in the ratio of 92:08 as shown in table below:

Table 9: Classification of additions to common assets during the control period into aeronautical and non-aeronautical assets (in ₹ lakhs)

Asset description	Aeronautical	Non-Aeronautical	Total
Building Terminal	1,077	94	1,171
Electrical installation/Air Conditioners	205	18	223
Machinery & equipment	32	3	35
Computers & IT hardware & access	83	7	90
Apron	40	3	43
Tools & equipment	6	0	6
Grand total	1,443	125	1,569

5.16. Year-wise additions to RAB after classifying common assets as aeronautical during the first control period is shown in table below:

Table 10: Additions to RAB during control period (in ₹ lakhs)

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	Total
Building - Terminal	555	1,038	-	-	-	1,592
X Ray Baggage System	114	1,060	-	-	-	1,174
Electrical Installation/ Air Conditioners	274	173	540	-	-	987
Machinery & Equipment	255	676	-	-	-	931

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	Total
Building – Temporary	570	100	-	-	-	670
Computers & IT hardware & access	27	56	-	-	-	83
Roads, bridges & culverts - CISF security	44	-	-	-	-	44
Apron	40	-	-	-	-	40
Electrical Installation/ Air Conditioners – Security	-	-	-	-	-	-
Furniture & Fixtures: other than office	5	15	-	-	-	20
Vehicles - Security	1	16	-	-	-	16
Tools & Equipment - Security	1	10	-	-	-	11
Tools & Equipment	6	5	-	-	-	10
Grand Total	1,891	3,148	540	-	-	5,579

Authority's Examination – Additions to RAB

5.17. The Authority has proposed to classify the following common assets as aeronautical assets:

Table 11: Revised classification of additions to common assets as Aeronautical (in ₹ lakhs)

Asset head	Asset description	Original cost
Building terminal	Canopy at entry point along with shed for parking QRT vehicle of Punjab police Mono Rail System for Façade Maintenance	603
Machinery & equipment	Access Control System (Bio Metric)	35
Computers & IT hardware & access	Computers & Other IT Items Creation of Website Miscellaneous Works - Airport System - Networking/LAN etc.	90
Apron	Ramp Equipment Area	43
Electrical installation/Air Conditioners	Miscellaneous- Electrical Work Providing Carbon Flooding System Providing electrical connection for CHIAL offices at Upper Level	223
Tools & equipment	Office equipment	6
Grand total		1,000

5.18. Revised classification of additions to gross block into aeronautical, non-aeronautical and common assets after reclassifying common assets as aeronautical is shown in table below:

Table 12: Revised classification of additions to gross block during the control period into aeronautical, non-aeronautical and common assets (in ₹ lakhs)

Asset description	Aeronautical	Non-Aeronautical	Common	Total
Building Terminal	1,118	150	568	1,836
X Ray Baggage System	1,174	-	-	1,174
Electrical installation/Air Conditioners	1,005	-	-	1,005
Machinery & equipment	933	-	-	933

Asset description	Aeronautical	Non-Aeronautical	Common	Total
Building - Temporary	670	-	-	670
Computers & IT hardware & access	90	-	-	90
Roads, bridges & culverts - CISF /Security	44	-	-	44
Apron	43	-	-	43
Electrical installation/Air Conditioners - Security		25	-	25
Furniture & Fixtures: Other than office	20	-	-	20
Vehicles - Security	16	-	-	16
Tools & equipment - Security	11	-	-	11
Tools & equipment	11	-	-	11
Grand Total	5,136	175	568	5,879

5.19. The Authority has proposed to reclassify the additions to common assets into aeronautical and non-aeronautical in the revised ratio of 90.5:9.5 as shown in the table below:

Table 13: Revised classification of additions to common assets into aeronautical and non-aeronautical (in ₹ lakhs)

Asset description	Aero	Non-Aero	Total
Terminal Building	514	54	568

5.20. Revised additions to RAB during the first control period is shown in table below:

Table 14: Revised additions to RAB (in ₹ lakhs)

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	Total
Building - Terminal	589	1,044	-	-	-	1,632
X Ray Baggage System	114	1,060	-	-	-	1,174
Electrical Installation/ Air Conditioners	285	180	540	-	-	1,005
Machinery & Equipment	256	677	-	-	-	933
Building – Temporary	570	100	-	-	-	670
Computers & IT hardware & access	29	61	-	-	-	90
Roads, bridges & culverts - CISF security	44	-	-	-	-	44
Apron	43	-	-	-	-	43
Electrical Installation/ Air Conditioners – Security	-	-	-	-	-	-
Furniture & Fixtures: other than office	5	15	-	-	-	20
Vehicles - Security	1	16	-	-	-	16
Tools & Equipment - Security	1	10	-	-	-	11
Tools & Equipment	6	5	-	-	-	11
Grand Total	1,943	3,167	540	-	-	5,650

Depreciation on opening RAB – CHIAL submission

5.21. CHIAL has followed straight line method of depreciation and depreciation rates applied to various assets are as per AAI's approved accounting policy considering the useful life of the assets. Further, CHIAL has stated that the assets considered in opening RAB and the accumulated depreciation pertaining to such assets are as per audited financial statements of CHIAL.

Table 15: Depreciation on assets forming part of Opening RAB as on 1 April 2016 (in ₹ lakhs)

Rate	Asset head	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
3.2 %	Boundary wall - CISF/security Boundary wall - Building- terminal Other buildings - CISF/security	376	835	835	835	835	835
6.3 %	Plant & machinery X ray baggage system	138	308	308	308	308	308
9.5 %	Elec. Installation/Air Conditioners - Security Electrical installations Furniture & fixtures-other than office Furniture & fixtures - security Office furniture Vehicles – security	294	658	658	658	658	658
15.8 %	Computers & I.T. - security - servers Intangible assets- software	12	27	27	27	27	27
19.0 %	Aprons Office appliances Road, bridges & culverts Roads, bridges & culverts - CISF security Tools & equipment - security Tools & equipment	502	1,139	1,139	1,139	1,139	931
31.7 %	Building - temporary Building - temporary - CISF/security Computer & peripherals Computers & I.T. hardware & access - CISF/security Roads, bridges & culverts - non-carpeted - CISF security	18	39	39	28	0	-
	Grand Total	1,340	3,007	3,006	2,996	2,968	2,759

Authority's Examination – Depreciation on Opening RAB

5.22. As per Clause 5.3.3 of the Airport Guidelines, the minimum residual value of the asset is considered at 10% and depreciation is allowed up to a maximum of 90% of the original cost of the asset.

5.23. Further, as per clause 5.2.5(e) of the Airport Guidelines, to project depreciation on assets to be commissioned or disposed-off during a control period, it is assumed that such assets have been commissioned or disposed-off half way through the tariff year and depreciation related to such assets shall be calculated on pro-rata basis.

5.24. In relation to above, the Authority has separately commissioned a study to determine appropriate rates of depreciation to be adopted for the regulation of all the airports in line with

the provision of the Companies Act 2013 and revised useful life of various assets based on appropriate residual value of respective assets. The Authority will consider the recommendations from the Study, and take an appropriate decision for adjustment in RAB or true up in the next control period.

- 5.25. The Authority has noted that CHIAL in its submission has assumed an asset life of 5 years for Aprons and taxiway which is similar to the asset life of 'Carpeted Roads – Other than RCC' as per the Companies Act 2013. However, as per tariff orders for other major airports, a rate of 3.33% based on useful life of 30 years for Taxiway and Apron (added during the first control period has been adopted). Accordingly, the Authority has proposed to consider the same in case of CHIAL.
- 5.26. The Authority has also noted that CHIAL in its submission is considering 5% residual value of the asset for total useful life.
- 5.27. Further, in case of depreciation on assets forming part of opening RAB, residual asset balance or depreciation amount, whichever is lower is considered as depreciation amount in the final year of useful life, which means effectively 100% depreciation is charged on certain assets. Such treatment is not in line with the treatment prescribed under the Airport Guidelines.
- 5.28. Accordingly, the Authority has proposed to consider minimum residual value of the asset at 10% and depreciation shall be allowed up to a maximum of 90% of the original cost of the asset. This implies that RAB shall be adjusted by the amount of disposals of assets (10% of original cost) at the end of useful life of each asset.

Table 16: Revised depreciation on Opening RAB of each year during the control period (in ₹ lakhs)

Rate	Asset head	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
3.0 %	Aprons Boundary wall - CISF/security Boundary wall - Building- terminal Other buildings - CISF/security	434	964	983	1,015	1,015	1,015
6.0 %	Plant & machinery X ray baggage system	131	291	313	418	418	418
9.0 %	Elec. installation/air conditioners - security Electrical installations Furniture & fixtures-other than office Furniture & fixtures - security Office furniture Tools & equipment - security Vehicles – security	278	622	648	668	717	717
15.0 %	Computers & I.T. - security - servers Intangible assets- software	12	27	27	27	27	27
18.0 %	Office appliances Road, bridges & culverts Roads, bridges & culverts - CISF security Tools & equipment	121	293	302	303	303	182
30.0 %	Building - temporary Building - temporary - CISF/security Computer & peripherals	17	37	217	249	138	24

Rate	Asset head	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
	Computers & I.T. hardware & access - CISF/security Roads, bridges & culverts - non-carpeted - CISF security						
	Grand Total	994	2,236	2,492	2,680	2,618	2,383

Depreciation on additions to RAB – CHIAL submission

Table 17: Depreciation on additions to RAB during the control period (in ₹ lakhs)

Rate	Asset head	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
3.2 %	Building- Terminal	-	18	50	50	50	50
6.3 %	Plant & Machinery X Ray Baggage System	-	23	133	133	133	133
9.5 %	Electrical Installations Furniture & Fixtures-Other than office Vehicles – Security	-	27	46	97	97	97
19.0 %	Aprons Roads, Bridges & Culverts - CISF Security Tools & Equipment - Security Tools & Equipment	-	17	20	20	20	20
31.7 %	Building - Temporary Computer & Peripherals	-	189	238	238	79	8
	Grand Total	-	274	488	539	380	309

Table 18: Total depreciation during control period as per CHIAL (in ₹ lakhs)

Particulars	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Depreciation on opening RAB as per Table 15	1,340	3,007	3,006	2,996	2,968	2,759
Depreciation on additions to RAB as per Table 17	-	274	488	539	380	309
Total depreciation as per CHIAL	1,340	3,281	3,494	3,535	3,348	3,068

Authority's Examination – Depreciation on Additions to RAB

5.29. The Authority has proposed to consider depreciation on additions during a particular year of the control period for half year in the year of addition and for full year in subsequent years.

Table 19: Revised depreciation on additions to RAB (in ₹ lakhs)

Rate	Asset head	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
3.0 %	Aprons Building- Terminal	-	9	16	-	-	-
6.0 %	Plant & Machinery X Ray Baggage System	-	11	52	-	-	-

Rate	Asset head	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
9.0 %	Electrical Installations Furniture & Fixtures-Other than office Tools & Equipment - Security Vehicles – Security	-	13	10	24	-	-
18.0 %	Roads, Bridges & Culverts - CISF Security Tools & Equipment	-	4	0	-	-	-
30.0 %	Building - Temporary Computer & Peripherals	-	90	24	-	-	-
	Grand Total	-	128	102	24	-	-

Table 20: Total revised depreciation during the control period as per the Authority (in ₹ lakhs)

Particulars	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Revised depreciation on opening RAB as per Table 16	994	2,236	2,492	2,680	2,618	2,383
Revised depreciation on additions to RAB as per Table 19	-	128	102	24	-	-
Total revised depreciation	994	2,364	2,594	2,704	2,618	2,383

RAB summary – CHIAL submission

5.30. RAB during the control period as per CHIAL has been summarized in the table below:

Table 21: RAB as per CHIAL's submission (in ₹ lakhs)

Particulars	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Opening RAB	89,784	88,443	87,053	86,707	83,712	80,364
Additions	-	1,891	3,148	540	-	-
Disposals	-	-	-	-	-	-
Depreciation	(1,340)	(3,281)	(3,494)	(3,535)	(3,348)	(3,068)
Closing RAB	88,443	87,053	86,707	83,712	80,364	77,296
Average RAB	-	87,748	86,880	85,209	82,038	78,830

Authority's Examination - RAB

5.31. Revised RAB during the control period as per the Authority after considering the above decisions has been summarized in the table below:

Table 22: Revised RAB (in ₹ lakhs)

Particulars	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Opening RAB	44,684	43,690	43,269	43,842	41,666	38,988
Depreciation on Opening RAB	994	2,236	2,492	2,680	2,618	2,383
Additions	-	1,943	3,167	540	-	-
Depreciation on Additions	-	128	102	24	-	-
Disposals	-	-	-	12	60	179
Closing RAB	43,690	43,269	43,842	41,666	38,988	36,426
Average RAB	-	43,480	43,556	42,754	40,327	37,707

Proposal No. 1 Regarding RAB

- 1.a. The Authority has proposed to remove land cost from RAB.
- 1.b. The Authority has proposed to accept the cost of the Terminal Building, Apron and Taxiways as submitted by CHIAL since they are within a reasonable range of the rates prescribed in the Normative Capital Cost Order of the Authority on capital cost.
- 1.c. The Authority has proposed to allocate the common area in the Terminal Building into Aeronautical and Non-aeronautical in the ratio of 90.5 to 9.5 based on CHIAL submissions.
- 1.d. The Authority has proposed to allocate the project cost and additions to project cost between Aeronautical and Non-Aeronautical as per revised allocation ratio of 90.5 to 9.5.
- 1.e. The Authority has proposed to consider ₹43,690 lakhs as opening RAB as on 1 April 2016 for the First Control Period as shown in *Table 22*.
- 1.f. The Authority has proposed to consider additions to RAB during the control period as ₹5,650 lakhs as shown in *Table 14*.
- 1.g. The Authority has proposed to adopt a rate of 3.33% based on useful life of 30 years for taxiway and apron (added during the first control period), depreciation rates as specified under the Companies Act 2013 shall be provided on the other assets till the Authority revises its depreciation rates based on the study commissioned to determine depreciation rates.
- 1.h. The Authority has proposed to provide depreciation on additions during the control period for half year in the year of addition and for full year in the subsequent years during the control period.
- 1.i. The Authority has proposed to consider depreciation on RAB as shown in *Table 20*.
- 1.j. The Authority has proposed to consider revised average RAB during the control period for calculation of ARR as shown in *Table 22*.

- 1.k. The Authority has proposed to true up the average RAB to be based on the actual date of capitalization.**
- 1.l. The Authority has proposed to true up the depreciation, as and when the decision to revise the depreciation rates is taken.**

6. FAIR RATE OF RETURN (FRoR)

- 6.1. CHIAL in its submission has proposed the capital structure, funding mechanism, and FRoR as provided below:

Table 23 : Historical & Projected summary of Capital structure of CHIAL (in ₹ crores)

	Actual	Projected				
Particulars	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Additions to RAB	926.6	21.1	32.27	5.4	-	-
Ratio of additions to Debt & Equity	0:100	50:50	50:50	50:50	50:50	50:50
- Equity funding	926.6	10.6	16.1	2.7	-	-
- Debt funding	-	10.6	16.1	2.7	-	-
Total Equity	926.6	937.1	953.3	956.0	956.0	956.0
Total Debt	-	10.6	26.7	29.4	29.4	29.4
Debt-Equity ratio	0:1	0.01:1	0.03:1	0.03:1	0.03:1	0.03:1
Cost of equity (% p.a.)	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%
Cost of debt (% p.a.)	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%
Tax rate (% p.a.)	34.6%					
FRoR (% p.a.)	14.0%	13.9%	13.8%	13.6%	13.6%	13.6%

Authority's Examination

- 6.1. The Authority has proposed to continue with the normative fair return on equity at 14% p.a. as considered in the tariff determination process for other AAI airports in Chennai, Kolkata, Guwahati and Lucknow for the first control period.
- 6.2. The Authority has noted that the opening capital as on 31 March 2016 (FY 15-16) amounting to ₹ 926.6 crores has been funded entirely by equity. Further, CHIAL has proposed to fund the additions to the gross block during the control period equally through debt and equity.
- 6.3. It was further noted by the Authority that internal accruals of CHIAL would be sufficient to fund the entire amount of additions to the gross block. This is clear from the cash flow statement as worked out in *Table 33*. Hence, there will be no requirement of debt in any of the financial years during the first control period.

Proposal No. 2 Regarding FRoR

- 2.a. The Authority has proposed to consider the Cost of Equity at 14% p.a. and FRoR at 14% p.a. for CHIAL for the first control period considering that it would have sufficient internal accruals to fund proposed additions to RAB during the control period and consequently no debt will be required.
- 2.b. The FROR will be trued up based on the actual debt-equity ratio and the cost of debt and equity as determined at the time of next tariff determination.

7. OPERATION AND MAINTENANCE EXPENDITURE

- 7.1. As provided in Clause 5.4 of the Airport Guidelines, the operational and maintenance expenditure shall include all expenditures incurred by the Airport Operators including expenditure incurred on statutory operating cost and other mandated operating costs.
- 7.2. Operation and Maintenance expenditure submitted by CHIAL has been segregated into:
- 7.2.1. Payroll related Expenditure
 - 7.2.2. Administration and General Expenditure
 - 7.2.3. Repair and Maintenance Expenditure
 - 7.2.4. Utilities and Outsourcing Expenditure
- 7.3. CHIAL has submitted details and basis for each of the above proposed expenditure in their submission. The details of the assumptions made by CHIAL for each item of Operation and Maintenance Expenditure are provided in the table below:

Table 24: Assumptions made by CHIAL for each item of Operation and Maintenance Expenditure

S. No.	Item	Assumption	Basis for assumption
i	Payroll related Expenditure	Salaries & Wages, including Dearness Allowances, House Rent Allowance, P.F. Contribution and Medical Expenses are estimated for 47 employees. The same is expected to grow at 13% p.a. for FY18 and at 9% p.a. thereafter. The outsourced manpower has been assumed at ₹ 2 crore in FY18 and a 10% increase has been considered from FY19 to FY21.	An increase of 13% for FY18 has been assumed considering wage revision w.e.f., 01.01.2017. The expenses are expected to grow at 9% p.a. thereafter based on average growth rate over the years. The outsourced manpower is towards FMS Services. Expenses for FY17 and FY18 are as per approved budget estimates by CHIAL board.
ii	Administration and General Expenditure	Expenses for the FY 2015-16 have been considered as per audited accounts. The expenses for the FY17 and FY18 have been considered as per budgeted estimates for the years. An increase of 5% p.a. FY19 onwards has been estimated for all items.	Increase of 5% p.a. for Administration and General Expenses from FY19 onwards is based on normal trend and projected expenditure.
iii	Repair and Maintenance Expenditure	Expenses for FY 2015-16 have been considered for a period of 5.5 months as explained above. The expenses for the FY17 has been considered as per budgeted estimates for the year. An increase of 10% p.a. FY18 onwards has been estimated for all items.	An increase of 10% for Repair & Maintenance expenses is based on normal trend and projected expenditure.
iv	Utilities and Outsourcing Expenditure	Expenses for FY 2015-16 are as per audited accounts. The expenses for FY17 and FY18 have been considered as per the budgeted estimates for the years. An increase of 5-10% p.a. FY19 onwards has been estimated for all items.	Power Charges - Per unit rate has been considered for FY 2015-16 as per the latest electricity bills available. The per unit rate has been reduced for the FY18 considering the provision of solar plant which will help in reduction of per unit cost. The increase of 10% in POL for DG set

S. No.	Item	Assumption	Basis for assumption
			and 5% for Stationery Expenses is based on the normal trend and projected expenditure.

7.4. A summary of costs proposed by CHIAL for the first control period is detailed below:

Table 25: Actual and projected aeronautical O&M expenditure by CHIAL for the first control period (in ₹ lakhs)

S. No.	Particulars	FY 15-16*	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
A	Payroll related Expenditure	252	467	708	774	846	924
B	Administration and General Expenditure	89	206	531	558	586	615
C	Repair and Maintenance Expenditure	192	619	777	855	941	1,035
D	Utilities and Outsourcing Expenditure	198	889	796	840	886	935
	Total (A+B+C+D)	730	2,181	2,813	3,027	3,258	3,509
<i>*Actuals for 5.5 months</i>							

Table 26: O&M expenditure apportionment between aeronautical & non-aeronautical services as per CHIAL (in %)

S. No	Cost Description	Aero	Non-aero	Basis of apportionment
1	Payroll related Expenditure	96%	4%	Based on Details of Employees present in Form 11, part of the submission
2	Administration and General Expenditure			
a	Rent Residential & Hired Vehicles, Travelling Expenses	96%	4%	Based on Details of Employees present in Form 11a of the submission
b	Insurance, Advertisement & Publicity, Other Misc. Expenses	92%	8%	As per Capex Allocation Ratio
c	Legal & Professional Expenses	91%	9%	Not applicable
d	Raj Bhasha Expenses & Financial Charges	100%	0%	Not applicable
3	Repair and Maintenance Expenditure except Conservancy MESS	92%	8%	As per Capex Allocation Ratio
4	Conservancy MESS cost	100%	0%	Not applicable
5	Utilities and Outsourcing Expenditure - Electricity & POL DG Set	100%	0%	Considered 100% Aero as this is on reimbursement basis to Commercial Activities
6	Utilities and Outsourcing Expenditure - Stationery	96%	4%	Based on Details of Employees present in Form 11a of the submission

Authority's Examination

7.5. The Authority has examined the projected items of operating expenses and the classification into aeronautical services and non-aeronautical services as submitted by CHIAL, based on which, it has accordingly proposed the following:

7.5.1. Payroll related expenditure shall be increased by 7% p.a. from FY19 to FY21 instead of CHIAL's proposed increase of 9% p.a. to reflect a more conservative impact of inflation

and such expenditure shall be subsequently reclassified into aeronautical services and non-aeronautical services in the ratio of 95% and 5% respectively.

7.5.2. Finance charges considered under Administration and General Expenditure are to be excluded from the total O&M expenditure in the absence of any debt.

7.5.3. The annual increase in Repair and Maintenance Expenditure from FY17 to FY21 is proposed to be assumed as 5%, 8%, 10%, 10% and 10% per annum respectively considering newly constructed assets would have lower repair costs in initial years. Since data for FY 15-16 was available only for 5.5 months, this has been annualized to calculate the projected data based on the proposed increase during the control period. Further such Repair and Maintenance Expenditure except Conservancy expenses are to be re-apportioned between aeronautical services and non-aeronautical services as per the apportionment ratio of RAB of 90.5 to 9.5 as discussed above.

7.5.4. Power Charges are unreasonable high, considering that CHIAL owns and operates a 3MW solar power plant, and low cost electricity from this type of solar power plant would reduce the total Power Charges. Annual power production (kWh) from solar plant has been estimated as 91,98,000 kWh per annum. Solar power has been valued at ₹4.64/kWh and balance annual power requirement has been valued at ₹6.67/kWh as considered by CHIAL.

7.5.5. The Authority has also noted that O&M expenditure for FY16-17 and FY17-18 is based on the budget approved by CHIAL's Board of Directors, which considers a significant increase in O&M expenditure during the first 2 years of the control period. The Authority has proposed to accept the budget approved by CHIAL's Board of Directors (subject to proposals discussed above), as there will be significant expenditure requirement for the new larger terminal building.

7.6. After considering the above factors, the operational and maintenance expenditure is reworked as follows.

Table 27: Total O&M expenditure as per the Authority for the first control period (in ₹ lakhs)

S. No.	Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
A	Payroll related Expenditure	486	738	789	845	904
B	Administration and General Expenditure	221	302	317	333	350
C	Repair and Maintenance Expenditure	486	525	577	635	698
D	Utilities and Outsourcing Expenditure	784	611	654	700	749
	Total (A+B+C+D)	1,976	2,175	2,338	2,513	2,701

Table 28: Aeronautical O&M expenditure as per the Authority for the first control period (in ₹ lakhs)

S. No.	Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
A	Payroll related Expenditure	462	701	750	802	859
B	Administration and General Expenditure	206	281	295	310	326
C	Repair and Maintenance Expenditure	454	490	539	593	652
D	Utilities and Outsourcing Expenditure	784	610	653	699	748
	Total (A+B+C+D)	1,905	2,082	2,238	2,405	2,585

Proposal No. 3 Regarding Operation and Maintenance expenditure

- 3.a. The Authority has proposed to consider the operational and maintenance expenditure as given in Table 28, for the purpose of determination of aeronautical tariffs for the first Control Period.
- 3.b. The Authority has proposed to true up the Operating expenses based on the actual expenditure during the Control Period.

8. REVENUE FROM SERVICES OTHER THAN AERONAUTICAL SERVICES

8.1. CHIAL has submitted the forecasts of various components of non-aeronautical revenue streams as well as the assumptions underlying the forecast.

8.2. The assumptions made by CHIAL for projecting each source of non-aeronautical revenue are as under:

Table 29: Assumptions made by CHIAL for revenues from Non-aeronautical services

S.No.	Item	Assumption	Basis
1	Trading Concessions including Restaurant, T.R Stalls, Hoarding & Display, etc.	Revenue has been considered based on contracts awarded till date and expected to be awarded in future (revised budget and budgeted estimates for FY 2016-17 and 2017-18 respectively) with 10% increase in revenue year on year basis up to FY 2020-21.	The rate of increase is based on terms of contracts awarded till date.
2	Rent and Services including Land Leases Inside and Outside Terminal Building	Revenue has been considered based on contracts awarded till date and expected to be awarded in future (Revised Budget and Budgeted Estimates for FY 2016-17 and 2017-18 respectively) with 10% increase in revenue year on year basis up to FY 2020-21.	The rate of increase is based on terms of contracts awarded till date.
3	Car Parking	Revenue has been considered based on contracts awarded till date and expected to be awarded in future (Revised Budget and Budgeted Estimates for FY 2016-17 and 2017-18 respectively) with 10% increase in revenue year on year basis up to FY 2020-21.	The rate of increase is based on terms of contracts awarded till date.
4	Interest Income	Interest Income has been considered on investment of surplus funds in short deposit/flexi deposit with banks.	The income is calculated based on Cash Flow and availability of surplus funds and the current rate of interest available on Short Term Deposits.

8.3. Revenue from Non-Aeronautical Services for the first control period submitted by CHIAL are as follows:

Table 30: Revenue from Non-aeronautical services - actual/projected as furnished by CHIAL for the 1st control period (in ₹ lakhs)

	Particulars	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
I.	Revenue from commercial services						
1	Trading concessions (Retails)						
	Food & Beverages	45	103	264	290	319	351
	Retail	-	29	240	264	290	319
	Hoarding & Display	46	296	326	359	394	434
	Others						
	- Admission Tickets	11	26	28	31	34	37
	- IBS / WIFI / Communications	36	84	119	131	144	158

	Particulars	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
	- Taxi Services	-	67	74	81	89	98
	- Miscellaneous	4	78	240	264	290	319
	TOTAL (1)	143	682	1,290	1,419	1,561	1,717
2	Rent & Services						
	Land Leases (Inside TB)	212	251	276	303	334	367
	Land Leases (Outside TB)	27	293	315	347	381	419
	Land for refuelling station	138	338	364	400	440	484
	TOTAL (2)	377	882	954	1,050	1,155	1,270
3	Car Parking	69	273	504	554	610	671
	TOTAL (I)	588	1,838	2,749	3,024	3,326	3,658
II	Miscellaneous						
	Interest Income	139	45	-	-	-	-
	TOTAL (II)	139	45	-	-	-	-
	TOTAL (I+II)	727	1,883	2,749	3,024	3,326	3,658

Authority's Examination

8.4. The Authority has noted that at present there are no duty free shops at the terminal and therefore no income from duty free has been considered by CHIAL. Any income from duty free shops earned during the control period shall be considered for true up calculations in the subsequent control period.

8.5. After careful examination of the various assumptions relating to non-aeronautical revenues the Authority has proposed the following:

8.5.1. Rental income from "Land for refueling station" as shown in table below, shall be excluded from non-aeronautical revenue and considered as revenue from Aeronautical revenues since such rentals from fuel farm operators are essentially in the nature of revenue from Aeronautical services.

Table 31: Rental income from "Land for refueling station" excluded from non-aeronautical revenues and considered as aeronautical revenue (in ₹ lakhs)

Particulars	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Land for refuelling station	138	338	364	400	440	484

8.5.2. The rent from "Land leases" shall be increased by 10% p.a. based on the clause in the rental agreements. Further, as per CHIAL's submission, area earmarked for commercial activities inside Terminal Building is 4,623 sq.m., out of which only 804 sq.m., is being utilized at present. It is assumed that CHIAL will be able to utilize at least 40% of total area available i.e., 1,849 sq.m., by the end of control period and rental from "Land Leases (Inside TB)" has been proportionately increased for each year after FY 16-17 during the control period to reflect the increase in area utilization. The table below summarizes the explanation above:

Table 32: Revised lease rental from space inside Terminal Building (TB) as per the Authority

Particulars		Units	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Space rental as per CHIAL	A	₹ lakhs	251	276	303	334	367
Current utilised area for lease rental Inside TB as per CHIAL	B	Sq.m.	804	804	804	804	804
Lease rental rate	C=A/B	₹/ Sq.m.	31,172	34,289	37,717	41,489	45,638
Total available area for lease rental Inside TB as per CHIAL	D	Sq.m.	4,623				
Proposed Area Utilisation in FY21 by the Authority	E=40% of D	%	1,849				
Proposed annual increase in Area Utilisation by the Authority	F=(E-B)/4	Sq.m.	-	261	261	261	261
Revised leased area inside TB	G = Average are used	Sq.m.	804 (as is)	1,065	1,327	1,588	1,849
Revised lease rental inside TB	H=C*G	₹ lakhs	251	365	500	659	844

8.5.3. Interest at 5% p.a on opening cash balance for each year during the control period shall be considered. Interest income as per CHIAL vis-à-vis interest income reworked by the Authority is provided below:

Table 33: Cash flow statement and revised interest on cash balance (in ₹ lakhs)

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Opening cash balance	3,772	2,776	5,916	12,896	21,455
Profit after tax during the year	(2,165)	3,184	3,926	5,072	5,895
Add: depreciation during the year	3,280	3,531	3,648	3,556	2,934
Add/ (Less) : Working capital	1	(349)	(54)	(70)	(81)
(Less): capital expenditure for the year	(2,112)	(3,227)	(540)	-	-
Change in cash	(996)	3,139	6,981	8,559	8,748
Closing cash balance	2,776	5,916	12,896	21,455	30,203
Interest on cash balance - As per CHIAL	45	-	-	-	-
Interest on opening cash balance - Revised as per the Authority	189	139	296	645	1,073

8.6. The total revised revenue from Non-aeronautical services after considering the above changes is provided in the table below:

Table 34: Revised revenue from Non-aeronautical services (in ₹ lakhs)

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Food & Beverages	103	264	290	319	351
Retail	29	240	264	290	319
Advertisements	296	326	359	394	434
Other Concessions	255	460	506	557	613
Car Parking	273	504	554	610	671
Rent & Leases excluding Rental from Fuel Farm	544	680	847	1,040	1,263
Interest on Cash Balance	189	139	296	645	1,073
Total	1,688	2,614	3,117	3,856	4,724

Proposal No. 4 Regarding Non Aeronautical Revenues

- 4.a. The Authority has proposed to consider the Non Aeronautical Revenue as given in Table 34 for determination of aeronautical tariffs for the first control period.**
- 4.b. The Authority has proposed to true-up the Non Aeronautical Revenue based on the actual Non Aeronautical Revenue earned during the Control Period.**

9. TAXATION

9.1. Clause 5.5.1 and Clause 5.5.2 of the Airport Guidelines state that:

“Taxation represents payments by the Airport Operator in respect of corporate tax on income from assets/ amenities/ facilities/ services taken into consideration for determination of Aggregate Revenue Requirement.”

“The Authority shall review forecast for corporate tax calculation with a view to ascertain inter alia the appropriateness of the allocation and the calculations thereof.”

9.2. As per the Airport Guidelines any interest payments, penalty, fines and other such penal levies associated with corporate tax, shall not be taken into consideration as expenditure or cost.

9.3. Tax liability during the control period considered by CHIAL is provided below:

Table 35: Tax liability as per CHIAL's submission

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Aeronautical revenues	977	6,557	6,950	7,375	7,834
Non-aeronautical revenues	1,883	2,749	3,024	3,326	3,658
Total revenue	2,860	9,306	9,974	10,701	11,493
Aeronautical Operating Expenditure	2,181	2,813	3,027	3,258	3,509
Aeronautical Depreciation	3,281	3,494	3,535	3,348	3,068
Total Expenditure	5,462	6,307	6,562	6,606	6,577
Profit before tax	(2,602)	2,998	3,412	4,095	4,916
TAX @34.608%	(900)	1,038	1,181	1,417	1,701
Profit after tax	(1,701)	1,961	2,231	2,678	3,215

Authority's Examination

9.4. The Authority has noted that CHIAL has considered corporate tax liability @ 34.608% p.a. on total Profit from Aeronautical services plus revenues from Non-aeronautical services. Further, CHIAL has not considered the impact of benefit from unabsorbed tax losses and unabsorbed depreciation and MAT liability on net tax liability. Also, CHIAL has considered negative tax of ₹900.33 lakhs for FY 16-17.

9.5. The Authority has noted that tax liability should be calculated on profit from Aeronautical services only and that the negative tax should be ignored. To achieve the desired result, the Authority has recalculated the net tax liability on CHIAL's reworked profit from aeronautical services after taking into account the impact of benefit from unabsorbed tax losses and unabsorbed depreciation. The table below depicts the net tax liability on profit from aeronautical services:

Table 36: Revised net tax liability as per authority (in ₹ lakhs)

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Total revised aeronautical revenue as per Table 46	1,403	7,140	7,861	8,661	9,550
Less: Revised aeronautical book depreciation as per Companies Act 2013	3,121	3,368	3,484	3,393	2,771
Less: Revised aeronautical O&M expenditure as per Table 28	1,905	2,082	2,238	2,405	2,585
Net profit from Aeronautical activities	(3,623)	1,690	2,139	2,864	4,195
Revised net tax liability as per IT Act 1961	-	254	457	611	895

Proposal No. 5 Regarding Taxation

- 5.a. The Authority has proposed to consider tax as given in Table 36.
- 5.b. The true up amount shall be based on actual tax paid during the control period

10. AGGREGATE REVENUE REQUIREMENT

10.1. The Aggregate Revenue Requirement (ARR) computed by CHIAL for the first control period is as follows:

Table 37: ARR as per CHIAL for the first control period (in ₹ lakhs)

Details	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	Total
Total Revenue from Regulated Services (1)	1,020	1,092	1,173	1,261	1,356	5,901
Total Revenue from services other than Regulated Services (2)	1,883	2,749	3,024	3,326	3,658	14,639
Hybrid Till (30% of 2 above) (2A)	565	825	907	998	1,098	4,392
Operating Expenditure (3)	2,181	2,813	3,027	3,258	3,509	14,788
Depreciation (4)	3,281	3,494	3,535	3,348	3,068	16,726
Taxation (5)	-	-	-	-	-	-
Total Expenditure (3) + (4) + (5) = (6)	5,462	6,307	6,562	6,606	6,577	31,514
Regulatory Operating Profit (1) + (2) - (6) = (7)	(2,559)	(2,467)	(2,365)	(2,019)	(1,563)	(10,974)
Capital Expenditure (8)	1,891	3,148	540	-	-	5,579
Opening RAB (9)	88,443	87,053	86,707	83,712	80,364	4,26,279
Disposals/ Transfers (10)	-	-	-	-	-	-
Closing RAB (8) – (4) - (10) = (11)	87,053	86,707	83,712	80,364	77,296	4,15,131
Average RAB [(9) + (11)] / 2 = (12)	87,748	86,880	85,209	82,038	78,830	4,20,705
Return on Average RAB (12)*14% = (13)	12,285	12,163	11,929	11,485	11,036	58,899
TAX @ 34.608% (14)	(900)	1,038	1,181	1,417	1,701	4,437
ARR [(3)+(4)+(13)-(2A)+(14)] = (15)	16,281	18,684	18,765	18,511	18,217	90,458

Authority's Examination

10.2. After careful examination of the ARR as per CHIAL's submission, the Authority has proposed that the date of order shall be considered as 1 April 2017 for calculating discounting factors. However, discounting factors considered by CHIAL are based on the assumption that revenues/ expenses for a particular financial year will be received/ incurred on the first day of that financial year. However, this is not a reasonable assumption. Accordingly, the discounting factors shall be revised to reflect the assumption that revenues/ expenses for a particular financial year will be received/ incurred on the last day of that financial year. For instance, revenues/ expenses for FY16-17 shall be assumed to be received on 1 April 2017 and accordingly the discount factor for FY16-17 will be 1.

10.3. The Revised ARR after considering the above changes is provided in the table below:

Table 38: Revised ARR as per the Authority for the first control period (in ₹ lakhs)

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	Total
Average RAB [1]	43,480	43,556	42,754	40,327	37,707	2,52,011
FRoR [2]	14.0 %	14.0 %	14.0 %	14.0 %	14.0 %	
Return on Average RAB [1]*[2]	6,087	6,098	5,986	5,646	5,279	29,095
Add: Operating Expenditure as per Table 28	1,905	2,082	2,238	2,405	2,585	11,214
Add: Depreciation as per Table 20	2,364	2,594	2,704	2,618	2,383	13,656
Add: Taxation as per Table 36	-	254	457	611	895	2,217
Less: Hybrid Till (30% of Non-Aero revenue as per Table 34)	506	784	935	1,157	1,417	4,800
Add: Under / (Over) Recovery from Previous Control Period	-	-	-	-	-	-
ARR	9,849	10,244	10,449	10,123	9,724	50,389
Discounted ARR	9,849	8,986	8,040	6,830	5,755	39,461
Σ PV(ARR)		39,461				

Proposal No. 6 Regarding ARR

- 6.a. The Authority has proposed to consider the ARR as determined in *Table 38* for determination of aeronautical tariffs for the first control period.
- 6.b. True up of all the building blocks shall be considered in the next control period

11. TRAFFIC FORECAST

11.1. As per the Airport Guidelines, the airport operator is required to submit traffic forecasts as part of the MYTP submissions. The Airport Guidelines further provide that the Authority would reserve the right to review such forecast assumptions, methodologies and processes to determine the final forecast to be used for determination of tariffs. The Guidelines further state that the Authority will also use forecast correction mechanism if the actual traffic happens to fall outside the prescribed bands whilst keeping the upper and lower band percentages equal. As part of the tariff determination process, the Authority would require Airport Operators to provide proposals for the values of the upper and lower bands, support of evidence for the rationale of such bands and will review the operation of the bands and determine the final bands for tariff determination. As per the Guidelines (Clause 6.15.2), any variation outside these bands would be shared equally between the Airport Operator and users.

11.2. As per the traffic statistics provided by CHIAL in its submissions, the historical & projected Passenger & ATM traffic along with their Y-o-Y growth rates is provided in the tables below:

Table 39: Historical & Projected Passenger traffic as per CHIAL submission

Financial Year	Domestic	Y-o-Y growth (Domestic)	International	Y-o-Y growth (International)
FY07	1,54,705	-	-	-
FY08	2,29,608	48%	-	-
FY09	3,64,167	59%	-	-
FY10	4,70,304	29%	-	-
FY11	6,45,036	37%	-	-
FY12	8,02,059	24%	-	-
FY13	8,81,555	10%	-	-
FY14	10,49,397	19%	-	-
FY15	12,06,292	15%	-	-
FY16	15,34,058	27%	-	-
FY17	16,87,464	10%	89,100	-
FY18	18,56,210	10%	2,19,000	146%
FY19	20,04,707	8%	2,19,000	-
FY20	21,65,084	8%	2,19,000	-
FY21	23,38,290	8%	2,19,000	-

Table 40: Historical & Projected ATM Traffic as per CHIAL submission

Financial Year	Domestic	Y-o-Y growth (Domestic)	International	Y-o-Y growth (International)
FY07	2,820	-	-	-
FY08	3,842	36%	-	-
FY09	4,804	25%	-	-
FY10	5,683	18%	-	-
FY11	7,751	36%	-	-
FY12	8,545	10%	-	-
FY13	9,960	17%	-	-
FY14	9,690	-3%	-	-
FY15	10,968	13%	-	-
FY16	13,130	20%	-	-
FY17	14,180	8%	594	-

Financial Year	Domestic	Y-o-Y growth (Domestic)	International	Y-o-Y growth (International)
FY18	15,315	8%	1,460	146%
FY19	16,234	6%	1,460	-
FY20	17,208	6%	1,460	-
FY21	18,240	6%	1,460	-

Authority's Examination

11.3. The Authority calculated 5-year and 10-year CAGR (Compounded Annual Growth Rate) for Domestic ATM and Domestic Passenger movements (based on Table 39 & Table 40 above), from FY12 to FY16 and from FY07 to FY16 respectively as below:

Table 41: Historical 5-year and 10-year CAGR for Domestic Passenger and ATM traffic

Particulars	Domestic	
	FY12 to FY16	FY07 to FY16
Domestic passenger traffic	17.6%	29.0%
Domestic ATM traffic	11.3%	18.6%

11.4. The Authority has noted that the increase in annual passenger and ATM traffic at other major international airports in Delhi and Mumbai has reached saturation levels. This might lead to a healthy diversion of traffic to CHIAL. However, the traffic increase may not be as high as the 5-year and 10-year historical CAGR figures in the table above, due to restrictions on flying (as CHIAL is built on a civil enclave) and rising fuel costs. Accordingly, after considering the above, the Authority has proposed the following revised increase for Passenger and ATM traffic:

11.4.1. The annual increase in Domestic passenger traffic shall be considered at 12% p.a. throughout the first control period and for International passenger traffic at 5% p.a. from FY19 to FY21.

11.4.2. The annual increase in Domestic ATM traffic shall be considered as per the submissions by CHIAL and annual increase for International ATM traffic shall be considered at 2% p.a. from FY19 to FY21.

Table 42: Revised Passenger traffic projections using revised growth rates during control period

Financial Year	Domestic	Y-o-Y growth (Domestic)	International	Y-o-Y growth (International)
FY16	15,34,058	-	-	-
FY17	1,718,145	12%	89,100	-
FY18	1,924,322	12%	2,19,000	146%
FY19	2,155,241	12%	2,29,950	5%
FY20	2,413,870	12%	2,41,448	5%
FY21	2,703,534	12%	2,53,520	5%

Table 43: Revised ATM traffic projections using revised traffic growth rates during control period

Financial Year	Domestic	Y-o-Y growth (Domestic)	International	Y-o-Y growth (International)
FY16	13,130	20%	-	-
FY17	14,180	8%	594	-
FY18	15,315	8%	1,460	146%
FY19	16,234	6%	1,489	2%
FY20	17,208	6%	1,519	2%
FY21	18,240	6%	1,549	2%

Proposal No. 7 Regarding Traffic Forecast

- 7.a. The Authority has proposed to consider annual increase in domestic passengers at 12% p.a throughout the first control period and at 5% p.a. from FY19 to FY21 for international passengers.**
- 7.b. The Authority has proposed to accept CHIAL's submission regarding Domestic ATM traffic and consider an increase of 2% p.a. for international ATM traffic from FY19 to FY21.**
- 7.c. True up decision shall be based on the actual traffic during the control period.**

12. ANNUAL TARIFF PROPOSAL

12.1. CHIAL vide its submission proposed the following tariff(s) (excluding taxes/levies) for the control period starting from 01.04.2016 till 31.03.2021.

12.1.1. Parking charges:

Weight of the Aircraft	PROPOSED RATES (IN INR)
Up to 40 MT	1.80 per hour per MT
Above 40 MT up to 100 MT	72.00 + 3.40 per hour per MT in excess of 40 MT
Above 100 MT	276.00 + 5.20 per MT per hour in excess of 100 MT

12.1.2. Night parking charges

Weight of the Aircraft	PROPOSED RATES (IN INR)
Up to 40 MT	0.90 per hour per MT
Above 40 MT up to 100 MT	36.00 + 1.70 per hour per MT in excess of 40 MT
Above 100 MT	138.00 + 2.60 per MT per hour in excess of 100 MT

Night parking charges have been waived off for all domestic scheduled operators, because the State Government has already brought down the rate of tax (VAT) on ATF to 4%. 50% rebate in Parking & Housing Charges between 2200 hrs to 0600 hrs at airport.

12.1.3. Fuel throughput charges

Particulars	FY17	FY18	FY19	FY20	FY21
INR Per KL	143	149	155	161	167

12.1.4. Passenger service fee (Facilitation)

PSF (Facilitation) of Rs 77 per embarking PAX will be continued to be charged till the revised UDF levy is implemented

12.1.5. UDF (throughout the control period)

Particulars	PROPOSED RATE (INR)
Domestic Passenger (Up to 165 Nautical Miles)	250 per embarking passenger
Domestic Passenger (Above 165 Nautical Miles)	650 per embarking passenger
International Passenger	1,500 per embarking passenger

12.1.6. Cargo rates as per CHIAL's submission are placed at [Annexure II](#).

13. REVENUE FROM AERONAUTICAL SERVICES

13.1. As per section 2(a) of the AERA act, aeronautical services include services for Landing, Housing or Parking, Ground handling services, services for Cargo facility, and services for supplying fuel to the aircraft at an airport.

13.2. CHIAL has submitted details and basis for each of the revenue item excluding UDF under Aeronautical services in its submission which have been considered for calculating UDF and shortfall in ARR. The details of the assumptions made by CHIAL for each revenue item of Aeronautical services are given below:

Table 44: Assumptions made by CHIAL for each revenue item of Aeronautical services

S. No.	Item	Assumption	Basis for assumption
1	Growth rate for Parking Revenue	Growth rates for Parking Revenue are assumed at 13% for FY 2016-17, 14% for 2017-18, 5% for FY 2018-19 and 6% for 2019-20 and 2020-21.	The growth rates for Parking Revenue are assumed as that for the average of Domestic and International aircraft movements as indicated above.
2	Growth rate for Passenger Service Fee (Facilitation)	Growth rates for PSF (F), Domestic Passengers are assumed at 10% from FY 2016-17 to FY 2017-18 and at 8% from FY 2018-19 to FY 2020-21. The PSF (F) for International PAX has been assumed as 146% for FY 2017-18 and 0% for 2019-20 onwards.	Increase is based on projected growth in Domestic and International pax movements for the control period.
3	Throughput Charges	Growth rates for fuel upliftment have been considered at 13% for FY 2016-17, 14% for FY 2017-18, 5% for FY 2018-19 and at 6% from FY 2019-20 to FY 2020-21.	Growth in Fuel upliftment is as per the average growth rate in Domestic and International aircraft movements as indicated above.
4	Cargo Charges	Growth rates for Cargo Income have been considered at 15% from FY 16-17 to FY 17-18 and at 12% from FY 2018-19 to FY 2020-21.	The increase in Cargo Movements has been considered as per CPMS projections.
5	Ground Handling Services	Growth rates for Ground Handling Charges are assumed at 13% for FY 2016-17, 14% for FY 2017-18, 5% for FY 2018-19 and at 6% from FY 2019-20 to FY 2020-21.	The growth rates for Ground handling Charges are assumed as that for an average of Domestic and International aircraft movements as indicated above.

13.3. Revenue from Aeronautical Services for the first control period submitted by CHIAL are as follows:

Table 45: Revenue from Aeronautical services - actual/projected as furnished by CHIAL for first control period (in ₹ lakhs)

Particulars	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Parking & Housing	1	4	5	5	5	6
Throughput Charges	27	56	61	67	74	81
Cargo Charges	17	55	63	70	79	88
Ground Handling Charges	30	74	80	84	89	94
Cute Charges	59	148	158	169	182	195
PSF (Facilitation)	262	640	-	-	-	-

Particulars	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
UDF	-	-	6190	6554	6947	7371
Total	396	977	6557	6950	7375	7834

Authority's Examination

13.4. After careful examination of the various assumptions relating to aeronautical revenues, the Authority has proposed the following:

13.4.1. Parking & Housing charges, Ground Handling Charges, CUTE Charges and UDF shall be recalculated based on the revised traffic numbers as shown in *Table 42* and *Table 43*.

13.4.2. Revenue from Extension of Watch Hours as per CHIAL's submission shall be included in revenue from Aeronautical services

13.4.3. Lease rental from refueling station as discussed in para 8.5.1 shall be included in revenue from Aeronautical services.

13.5. Total revised revenue from Aeronautical services after considering the above changes is provided in the table below:

Table 46: Revised aeronautical revenues as per the Authority (in ₹ lakhs)

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Parking & Housing	4	5	5	5	6
Throughput Charges	56	59	62	66	69
Cargo Charges	55	63	71	79	89
Ground Handling Charges	74	84	89	94	100
CUTE Charges	138	163	182	202	225
Extension of Watch Hours	42	45	47	50	53
Lease rental from refueling station	338	364	400	440	484
PSF (Facilitation) (excluding collection charges)	696	-	-	-	-
UDF	-	6,357	7,005	7,725	8,525
Total	1,403	7,140	7,861	8,661	9,550

Proposal No. 8 Regarding Aeronautical Revenues

8.a. The Authority has proposed to consider the Aeronautical Revenue as given in *Table 46* for determination of aeronautical tariffs for the first control period.

8.b. The Authority has proposed to true up the Aeronautical Revenue based on actual revenue during the Control Period.

14. COMPARISON OF ARR WITH PROJECTED AERONAUTICAL REVENUE

14.1. Shortfall as per CHIAL for the first control period is as follows:

Table 47: Shortfall as per CHIAL for the first control period (in ₹ lakhs)

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	Total
Total Projected Aeronautical Revenues (including UDF)	977	6,557	6,950	7,375	7,834	29,694
Discount Rate	1.14	1.00	0.88	0.77	0.67	
Present Value of Projected Aeronautical Revenues	1,114	6,557	6,097	5,675	5,288	24,731
Σ PV(Projected Aeronautical Revenues)		24,731				
Aggregate Revenue Requirement	16,281	18,684	18,765	18,511	18,217	90,458
Discount Rate	1.14	1.00	0.88	0.77	0.67	
Present Value of ARR	18,561	18,684	16,461	14,244	12,296	80,244
Σ PV(ARR)		80,244				
Add: Present Value of Shortfall of 1st Control Period		8,527	88,771			
Total Present Value of Projected Aeronautical Revenues			24,731			
Difference			64,040			

Authority's Examination

14.1. While calculating shortfall for the current control period, CHIAL has considered ₹8,527 lakhs as shortfall pertaining to operations during the period prior to 1 April 2016. The Authority has proposed to exclude losses in the prior period from shortfall calculations since CHIAL became a major airport only from 1 April 2016.

14.2. Revised shortfall as per the Authority is as follows:

Table 48: Revised shortfall as per the Authority for the first control period (in ₹ lakhs)

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	Total
ARR	9,849	10,244	10,449	10,123	9,724	50,389
Discount factor	1.00	0.88	0.77	0.67	0.59	
Discounted ARR	9,849	8,986	8,040	6,830	5,755	39,461
Σ PV(ARR)		39,461				
Revised Aeronautical Revenues as per Table 46	1,403	7,140	7,861	8,661	9,550	34,616
Discounted Aeronautical Revenues	1,403	6,263	6,049	5,844	5,652	25,212
Σ PV(Projected Aeronautical Revenues)		25,212				
Shortfall		14,249				

Proposal No. 9 Regarding Annual Tariff Proposal

- 9.a. It has been observed that there is a shortfall between the ARR and the projected aeronautical revenue during the control period and therefore the Authority has proposed to accept CHIAL's Tariff submissions as in para 12.**
- 9.b. The Authority has proposed to consider 1 April 2017 as the date of implementation of the proposed Tariff rates.**

15. QUALITY OF SERVICE

15.1. As per NCAP 2016, AAI will continue to modernize its existing airports, upgrade quality of services and maintain an ASQ rating of 4.5 or more across its major airports. Such norms shall apply to CHIAL as well. CHIAL has achieved a CSI rating of 4.86. ASQ rating for CHIAL is currently awaited. The Authority will review and examine the Quality of Service parameters upon release of ASQ rating for CHIAL.

16. ANNUAL COMPLIANCE STATEMENT

- 16.1. The Airport Guidelines issued by the Authority have laid down the error correction mechanism with reference to the adjustment to the Estimated Maximum Allowed Yield per passenger, calculated using the error correction term of Tariff Year t-2 and the compounding factor. The error correction calculated as per the Airport Guidelines indicated the quantum of over-recovery or under-recovery due to increase or decrease respectively of the Actual Yield per passenger with respect to Actual Maximum Allowed Yield per passenger in the Tariff Year.
- 16.2. Accordingly, any under recovery/ over recovery during the first control period will be accounted for in the second control period.
- 16.3. Further, the Authority notes that in view of all the corrections/truing up to be carried out at the end of the control period, CHIAL may submit Annual Compliance Statements for the tariff years FY17 to FY21 of the first control period.

Proposal No. 10 Regarding Annual Compliance

- 10.a. CHIAL shall submit the Annual Compliance Statements as per the Guidelines for all the tariff years from FY17 to FY21 of the first control period along with the MYTP for the next Control Period.**

17. SUMMARY OF PROPOSALS

Proposal No. 1 Regarding RAB..... 19

- 1.a. The Authority has proposed to remove land cost from RAB. 19
- 1.b. The Authority has proposed to accept the cost of the Terminal Building, Apron and Taxiways as submitted by CHIAL since they are within a reasonable range of the rates prescribed in the Normative Capital Cost Order of the Authority on capital cost. 19
- 1.c. The Authority has proposed to allocate the common area in the Terminal Building into Aeronautical and Non-aeronautical in the ratio of 90.5 to 9.5 based on CHIAL submissions. 19
- 1.d. The Authority has proposed to allocate the project cost and additions to project cost between Aeronautical and Non-Aeronautical as per revised allocation ratio of 90.5 to 9.5. 19
- 1.e. The Authority has proposed to consider ₹43,690 lakhs as opening RAB as on 1 April 2016 for the First Control Period as shown in Table 22. 19
- 1.f. The Authority has proposed to consider additions to RAB during the control period as ₹5,650 lakhs as shown in Table 14. 19
- 1.g. The Authority has proposed to adopt a rate of 3.33% based on useful life of 30 years for taxiway and apron (added during the first control period), depreciation rates as specified under the Companies Act 2013 shall be provided on the other assets till the Authority revises its depreciation rates based on the study commissioned to determine depreciation rates. 19
- 1.h. The Authority has proposed to provide depreciation on additions during the control period for half year in the year of addition and for full year in the subsequent years during the control period. 19
- 1.i. The Authority has proposed to consider depreciation on RAB as shown in Table 20. 19
- 1.j. The Authority has proposed to consider revised average RAB during the control period for calculation of ARR as shown in Table 22. 19
- 1.k. The Authority has proposed to true up the average RAB to be based on the actual date of capitalization.20
- 1.l. The Authority has proposed to true up the depreciation, as and when the decision to revise the depreciation rates is taken. 20

Proposal No. 2 Regarding FRoR..... 21

- 2.a. The Authority has proposed to consider the Cost of Equity at 14% p.a. and FRoR at 14% p.a. for CHIAL for the first control period considering that it would have sufficient internal accruals to fund proposed additions to RAB during the control period and consequently no debt will be required. 21
- 2.b. The FROR will be trued up based on the actual debt-equity ratio and the cost of debt and equity as determined at the time of next tariff determination. 21

Proposal No. 3 Regarding Operation and Maintenance expenditure..... 25

- 3.a. The Authority has proposed to consider the operational and maintenance expenditure as given in Table 28, for the purpose of determination of aeronautical tariffs for the first Control Period. 25
- 3.b. The Authority has proposed to true up the Operating expenses based on the actual expenditure during the Control Period. 25

Proposal No. 4 Regarding Non Aeronautical Revenues..... 29

- 4.a. The Authority has proposed to consider the Non Aeronautical Revenue as given in Table 34 for determination of aeronautical tariffs for the first control period. 29

4.b. The Authority has proposed to true-up the Non Aeronautical Revenue based on the actual Non Aeronautical Revenue earned during the Control Period. 29

Proposal No. 5 Regarding Taxation..... 31

5.a. The Authority has proposed to consider tax as given in Table 36. 31

5.b. The true up amount shall be based on actual tax paid during the control period 31

Proposal No. 6 Regarding ARR..... 33

6.a. The Authority has proposed to consider the ARR as determined in Table 38 for determination of aeronautical tariffs for the first control period. 33

6.b. True up of all the building blocks shall be considered in the next control period 33

Proposal No. 7 Regarding Traffic Forecast 36

7.a. The Authority has proposed to consider annual increase in domestic passengers at 12% p.a throughout the first control period and at 5% p.a. from FY19 to FY21 for international passengers. 36

7.b. The Authority has proposed to accept CHIAL's submission regarding Domestic ATM traffic and consider an increase of 2% p.a. for international ATM traffic from FY19 to FY21. 36

7.c. True up decision shall be based on the actual traffic during the control period. 36

Proposal No. 8 Regarding Aeronautical Revenues..... 39

8.a. The Authority has proposed to consider the Aeronautical Revenue as given in Table 46 for determination of aeronautical tariffs for the first control period. 39

8.b. The Authority has proposed to true up the Aeronautical Revenue based on actual revenue during the Control Period.39

Proposal No. 9 Regarding Annual Tariff Proposal..... 41

9.a. It has been observed that there is a shortfall between the ARR and the projected aeronautical revenue during the control period and therefore the Authority has proposed to accept CHIAL's Tariff submissions as in para 12. 41

9.b. The Authority has proposed to consider 1 April 2017 as the date of implementation of the proposed Tariff rates.41

Proposal No. 10 Regarding Annual Compliance..... 43

10.a. CHIAL shall submit the Annual Compliance Statements as per the Guidelines for all the tariff years from FY17 to FY21 of the first control period along with the MYTP for the next Control Period. 43

18. **STAKEHOLDERS' CONSULTATION TIMELINE**

- 18.1. The Aggregate Revenue Requirement determined by the Authority is being put up for Stakeholder Consultation along with the ATP submitted by CHIAL.
- 18.2. In accordance with the provision of Section 13(4) of the AERA Act, 2008, the proposals mentioned in the Section – Summary of proposals (Para 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 of this Authority. The Authority shall pass an order, in the matter, only after considering the submissions of the Stakeholder's in response hereto and by making such decisions fully documented and explained in terms of the provisions of the Act.
- 18.3. The Authority welcomes written evidence- based feedback, comments and suggestions from Stakeholder's on the proposal made in (Para 17 above), latest by **07.03.2017** at the following address.

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Chairperson

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