File No. AERA/20010/MYTP/AAI-GUWAHATI/2011-12

Consultation Paper No.20/2013-14

Airports Economic Regulatory Authority of India

Determination of Aeronautical Tariffs in respect of Lokpriya Gopinath Bordoloi International Airport, Guwahati for the first Control Period (01.04.2011 – 31.03.2016)

New Delhi: 08th October, 2013

AERA Building
Administrative Complex
Safdarjung Airport
New Delhi – 110 003

Contents

1. **Introduction** 3
2. **AERA (Airport Economic Regulatory Authority of India)** 5
3. **Lokpriya Gopinath Bordoloi International Airport (LGBIA)** 7
4. **LGBIA Multi Year Tariff Proposal submitted by AAI** 9
5. **Airport Services at LGBIA - Regulatory Approach** 11
6. **Regulatory Building Blocks** 12
7. **Initial Regulatory Asset Base (RAB)** 14
8. **Project Details** 15

User Consultation 20

9. **Depreciation** 22
10. **Roll Forward of RAB** 25
11. **Traffic Forecast** 27
12. **Cargo, Ground Handling and Supply of Fuel to Aircraft Services (CGF)** 31

12.1. Cargo Services at LGBIA: 31

12.2. Ground Handling Services at LGBIA 31

12.3. Supply of Fuel to Aircraft: 32

13. **Revenue from services other than aeronautical services:** 35
14. **Operation and Maintenance Expenditure** 38
15. **Taxation** 41
16. **Cost of Equity, Cost of Debt, Leverage, and Weighted Average Cost of Capital** 43
17. **Quality of Service** 48
18. **Matters regarding Error Correction and Annual Compliance Statement** 51
19. **Aggregate Revenue Requirement for LGBIA** 53

20. **Annual Tariff Proposal....................55**

21. **Proposed Privatisation of LGBIA under PPP model....................62**

22. **Summary of Tentative Decisions....................63**

23. **Stakeholders' Consultation Timeline....................66**

24. **List of Tables....................67**

25. **List of Annexures....................68**

1. Introduction

1.1. Airports Authority of India (AAI) was constituted under the Airports Authority of India Act 1994 ("AAI Act") and came into being on 1st April 1995 by merging erstwhile National Airports Authority and International Airports Authority of India. The merger brought into existence a single Organization entrusted with the responsibility of creating, upgrading, maintaining and managing civil aviation infrastructure, both on the ground and air space in the country.

1.2. AAI has informed the Authority that it manages 16 International Airports, 8 Customs Airports, 76 Domestic Airports, and 25 Civil Enclaves, totalling to 125 airports. AAI provides Air Navigation Services (ANS) over 2.8 million square nautical miles of air space. During the year 2011- 12, AAI handled 1.5 million aircraft movements, comprising of 0.3 million international and 1.2 million domestic movements. Passenger throughput at AAI airports was 68 million (13 million international and 55 million domestic); and during that year the cargo handled at all AAI Airports was 0.7 million (0.4 million International and 0.3 million domestic).

1.3. The functions of AAI as laid down under Section 12 of the AAI Act, *inter alia*, includes:

- 1.3.1. Design, Development, Operation and Maintenance of international and domestic airports and civil enclaves;
- 1.3.2. Control and Management of the airspace extending beyond the territorial limits of the country, as accepted by ICAO;
- 1.3.3. Construction, Modification and Management of passenger terminals;
- 1.3.4. Development and Management of cargo terminals at international and domestic airports;
- 1.3.5. Provision of passenger facilities and information system at the passenger terminals at airports;

1.3.6. Expansion and strengthening of operation area, viz. Runways, Aprons, Taxiway etc. and Provision of visual aids; and

1.3.7. Provision of Communication and Navigation aids, viz. ILS, DVOR, DME, Radar etc.

2. AERA (Airport Economic Regulatory Authority of India)

2.1. The Airports Economic Regulatory Authority of India (the Authority) was established under the Airports Economic Regulatory Authority of India Act, 2008, (AERA Act) to regulate tariff and other charges for aeronautical services rendered at airports and to monitor performance standards of airports. The AERA Act, 2008 came in to force w.e.f. 01.01.2009. The Authority was established in May, 2009 and its regulatory functions were notified with effect from 01.09.2009. Pursuant thereto, the Authority has set in motion an open and transparent process, involving extensive stakeholder consultation, to establish its regulatory philosophy and approach as well as to evolve detailed procedures and systems for determination of tariff and monitoring of performance standards.

2.2. The Authority, vide its Order No. 13/2010-11 dated 10.01.2011 (Airport Order) finalized its approach in the matter of Regulatory Philosophy and Approach in Economic Regulations of Airport Operators. Further, the Authority vide its Direction No. 5/2010-11 dated 28.02.2011, decided the Airports Economic Regulatory Authority of India (Terms and Conditions for Determination of Tariff for Airport Operators), Guidelines 2011 (Airport Guidelines).

2.3. As per section 2(i) of AERA Act Major Airport means “any airport which has, or is designated to have, annual passenger throughput in excess of one and half million or any other airport as the central government may, by notification, specify as such”. The operator of these Major Airports have to follow the “Airport Guidelines”, 2011 which were issued by AERA vide direction no. 05/2010-11 dated 28/02/2011.

2.4. As per the Airport Guidelines, the Authority shall determine tariff for the aeronautical services on the basis of a Multi-Year Tariff Proposal (MYTP) made by the Airport Operator for a control period of 5 years. The Authority will initially determine yield per passenger under the tariff determination process and subsequently the detailed Annual Tariff Proposal(s) (ATP) from Airport Operators (pertaining to the approved yield per passenger) will be reviewed for approval.

2.5. As per the Airport Guidelines, all airport Operator(s) shall within four months of the date of issue of the Airport Guidelines, submit to the Authority for its consideration, a MYTP for the 1st Control Period, i.e., 5 year period commencing from 2011-12 in the form and manner specified in the Airport Guidelines. The last date for submission of the MYTP in terms of the Airport Guidelines was 30.06.2011.

2.6. The Authority was conscious about the fact that in the nature of the timelines specified in the Airport Guidelines, it would not be possible to determine the tariff in respect of any of the major airports before 01.04.2011. In this light, the Authority had proposed to permit the concerned airport operators to continue charging the tariffs for aeronautical services provided by them, at the existing rates, in the interim period for which a separate order was issued after suitable Consultation.(Order No. 15/2010-11 dated 24.03.2011)

3. Lokpriya Gopinath Bordoloi International Airport (LGBIA)

3.1. The Lokpriya Gopinath Bordoloi International Airport is one of the airports owned and managed by AAI.

3.2. LGBIA is the only International Airport of north-eastern states of India, located in Guwahati, Assam major hub for flights to north eastern India, popularly known as Seven Sisters. LGBIA also serves as the Indian Air force Base. Section 25 of the AAI Act, 1994 authorises AAI to charge fee or rent for the landing, housing or parking of the aircraft or any other service or facility offered in connection with aircraft operations at any airport, heliport or airstrip. Explanation to the above Section provides that the "aircraft" does not include an aircraft belonging to any armed force of the union and "aircraft operations" does not include operations of any aircraft belonging to the said force.

3.3. Guwahati is one of the fast developing cities in India and is a major city in Eastern India often referred as Gateway of North Eastern Region of the country. It is the major commercial and educational hub of North Eastern India. It is also home to world class institutions such as the Indian Institute of Technology Guwahati and other premier institutions like Guwahati University and Cotton College. The city is not only the nerve centre for the administrative and political activities of Assam but also the head of cultural and major sports activities in the North-Eastern States. The city is also important regional hub for transportation.

3.4. The area of Terminal building is 14,395 SQM, with the provision of 14 check-in counters, 4 immigration and 1 customs counter for arrival passengers, 4 immigration and 1 customs counters for departure passengers and 4 security counters. The proposed area of terminal building is likely to be 15,445 SQM by the end of 2014-15 and 16,400 SQM by the end of 2015-16.

3.5. The Annual capacity, peak hour capacity and Passenger Throughput at LGBIA for 2012-13, as provided by AAI in their latest submission are given in Table 1.

Table 1: Annual Capacity, Peak hour Capacity and Passenger Throughput (2012-13)

Capacity	Annual Passenger Capacity (in millions)			Peak Hour Capacity (In no's)		
	Domestic	International	Total	Domestic	International	Total
Arrival	0.87	0.07	**0.94**	594	50	**644**
Departure	0.87	0.07	**0.94**	594	50	**644**
Total	**1.74**	**0.14**	**1.88**	**1188**	**100**	**1288**
Passenger Throughput (Actual 2012-13)	**2.06**	**0.02**	**2.08**			

3.6. The LGBIA, Guwahati is a major airport as per the definition given in AERA Act. Accordingly, AERA Guidelines are applicable to this Airport.

4. LGBIA Multi Year Tariff Proposal submitted by AAI

4.1. AAI submitted that they had already initiated the process of formulation of MYTP in respect of its Major Airports and some systematic and administrative changes were being carried out simultaneously for capturing information/data related to regulatory matters and also furnished the status/progress of certain key activities. The Authority considered the aforesaid request of AAI and extended timeline for submission of MYTP in respect of LGBIA up to 30.09.2011. AAI made its MYTP submissions in respect of LGBIA vide letter dated 30.09.2011 and its later submission dated 29th May 2013.

4.2. As a part of MYTP submission (Annex I), AAI submitted key assumptions in respect of LGBIA for its Airport Services, including growth rates assumed for various Revenue and Expenditure heads. Based on those assumptions the Projected Profit and Loss Account, Balance sheet and Cash Flow Statement were prepared.

4.3. The tariff proposal in respect of the airport tariff does not consider the revenues and expenditures on account of the Communication, Navigation, Surveillance / Air Traffic Management (CNS/ATM) services at the airport.

4.4. Airport Guidelines do not include aeronautical services of navigation, surveillance and supportive communication thereto for air traffic management. Separate guidelines for these are under consideration of the Authority.

4.5. AAI has submitted clarification on the depreciation policy, traffic forecasting methodology and details of the capital expenditure incurred/projected for the first control period. AAI has also furnished breakup of the revenue and expenditure and a brief note justifying the growth rates assumed and details of the project cost. Similarly the expected date of completion of each component and its means of finance in respect of LGBIA are also given.

4.6. AAI has also informed that the accounts of AAI are audited by C&AG of India as mandated by the AAI Act. The C&AG's resident audit parties audit the financial records and statements of AAI's airports, regional/field offices. However C&AG issue the final Audit Certificate for the AAI as a whole.

4.7. The Authority had requested AAI to appoint a Consultant for the purpose of assisting the Authority in the tariff determination process of Major AAI Airports. The Consultant assisted the Authority in its deliberations.

5. Airport Services at LGBIA - Regulatory Approach

5.1. The Authority had issued its order No. 13 of 2011 dated 12th January 2011 (Airport Order) and Direction No. 5 of 2011 dated 28th February 2011 (Guidelines) in respect of its approach towards determination of Aeronautical tariffs. AAI have submitted their MYTP for LGBIA in line with the Airport Order and Guidelines.

6. Regulatory Building Blocks

6.1. The Authority has analysed and determined the Regulatory Building Blocks for calculation of ARR in respect of LGBIA for the current Control Period.

6.2. The ARR for the current Control Period has been calculated based on the following Regulatory Building Blocks with reference to the submissions made by AAI:

6.2.1. Fair Rate of Return applied to the Regulatory Asset Base (FRoR x RAB)

6.2.2. Operation and Maintenance Expenditure (O)

6.2.3. Depreciation (D)

6.2.4. Taxation (T)

6.2.5. Revenue from services other than aeronautical services (NAR). Revenue from services other than aeronautical services (NAR) is meant to include revenues in the hands of the airport operator from services other than those under aeronautical revenue.

6.3. The ARR under Single Till for the Control Period (ARR) will be calculated as under:

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

$$ARR_t = (FRoR\ \times RAB_t) + D_t + O_t + T_t - NAR_t$$

Where

6.3.1. t^{th} is the Tariff Year in the Control Period

6.3.2. ARR_t is the Aggregate Revenue Requirement for year t

6.3.3. FRoR is the Fair Rate of Return for the control period

6.3.4. RAB_t is the Regulatory Asset Base for the year t

6.3.5. D_t is the Depreciation corresponding to the RAB for the year t

6.3.6. O_t is the Operation and Maintenance Expenditure for the year t, which include all expenditures incurred by the Airport Operator(s) including expenditure incurred on statutory operating costs and other mandated operating costs

6.3.7. T_t is the Taxation for the year t, which includes payments by the Airport Operator in respect of corporate tax on income from assets/ amenities/ facilities/ services taken into consideration for determination of ARR for the year t

6.3.8. NAR_t is the Revenue from services other than aeronautical services for the year t

6.4. The detailed submissions made by AAI in respect of the initial RAB, project cost, Roll Forward Regulatory Asset Base (RAB), and other items of the Regulatory Building Blocks have been discussed in the subsequent sections.

7. Initial Regulatory Asset Base (RAB)

7.1. As per clause 5.2.4 of Airport Guidelines, the initial RAB is to be calculated taking into consideration the original cost of fixed asset, accumulated depreciation, accumulated capital receipts, subsidies or user contribution and adjustment for value of the land, excluded from the scope of RAB.

Table 2 : Calculation of initial RAB as on 1st April 2011 as per AAI Submission (Rs. In crore)

S.no.	Particulars	Amount	Amount
1	Original Cost of Fixed Assets		204.58
2	NEC Grants		(30.10)
3	Cost Less NEC Grants[(1)-(2)]		174.48
4	Accumulated Depreciation	(96.33)	
5	Accumulated Capital Receipts of the nature of contribution from stakeholder	(NIL)	
6	Assets Value Adjustment for assets excluded from the scope of RAB	(NIL)	
7	Land Value Adjustment for assets excluded from the scope of RAB	(NIL)	
8	Total(4+5+6+7)		(96.33)
	Initial RAB[(3)-(8)]		**78.15**

7.2. AAI further clarified that the opening RAB indicated in the Form 7 (Direction no 5 dated 28th February 2011) includes the airport assets only and does not include any ANS (CNS/ATM) assets. The Authority observes that AAI in its submission indicated the total cost of fixed asset in respect of LGBIA and reduced the amount of assets funded through NEC Grants. AAI further considered depreciation only on such net value of fixed assets (arrived after deducting NEC Grants from total assets). The details of calculation are given in Table 2. The Authority proposes to consider the same for determination of aeronautical tariff for the first control period.

Proposal No. 1. Regarding initial RAB

1.a. **The Authority proposes to consider the initial RAB at the beginning of the control period as of 01-04-2011 at Rs.78.15 crore for LGBIA as per Table 2.**

8. Project Details

8.1. Project Cost–The Proposed Project at LGBIA includes expansion and modernization of Terminal Building, Development of Land, construction of Apron, strengthening of road area, modification related to temporary building and residential building, Other Allied Capital Works related to Plant and Machinery and Tools and Equipment and Electrical Installations. The Total Project Cost amounts to Rs.136.43 crore including Grants of North Eastern Council (NEC), a body constituted by an Act of Parliament, for securing a balanced economic and social development of the North Eastern States.

8.2. The Authority has noted that the above project cost includes Rs.20.82 crore towards expansion and modification of existing terminal building, Rs.33.64 crore towards construction of hangars and new fire station, Rs.20.10 crore towards residential building, Rs.28.81 crore towards filling of low lying areas and Rs.20 crore towards boundary wall and Rs.13.06 crore towards other allied works. The details are below:-

Table 3: Cost of the Project and allied Capital works at LGBIA showing the contribution by AAI and through NEC Grants (As given by AAI) (Rs in crore)

S. no.	Project Name	Year of Capitalisation	Funding through NEC grants	Funding through AAI Sources	Total
1	Expansion and Modification of Terminal Building	2015-16		20.82	20.82
2	Construction of Hangars and New Fire Station	2014-15	20.18	13.46	33.64
3	Expansion related to Residential Building	2015-16		20.10	20.10
4	Construction related to Temporary Building	2013-14	0.30	0.91	1.21
5	Expenditure related to Land for filling of low lying Areas	2011-12		28.81	28.81
6	Construction of Apron	2011-12		0.83	0.83
7	Construction of shoulder on periphery road connecting old and new Apron and other associated works	2013-14		2.03	2.03
8	Operational Boundary wall	2014-15	9.00	11.00	20.00
9	Plant and Machinery and Tools and	2011-12		2.10	2.10

S. no.	Project Name	Year of Capitalisation	Funding through NEC grants	Funding through AAI Sources	Total
	Equipments				
10	Electric Installation	2011-12		6.01	6.01
11	Other Operation Allied works	2011-12		0.88	0.88
	Total Project Cost		**29.48**	**106.95**	**136.43**

Entire grant from Ministry of DoNER (NEC) is for airport purposes and none for CNS/ATM facilities.

8.3. Extensive discussions were held with AAI, regarding the justification of the major capital works, proposed to be undertaken by AAI during the current control period. During the course of these discussions AAI clarified as under:

8.3.1. **Expansion and Modification of existing Terminal Building:** The area of the terminal building at the beginning of the current control period is 14,395 SQM. The design of this terminal building was based on the concept of 12 model airports that was envisaged quite some time back. AAI had adopted a norm of 12 SQM per passenger. Based on the formula that is adopted by AAI for designing the terminal building, this works out to peak hour capacity of 1,288. It was found that in the beginning of the current control period, the passenger throughput was 1.93 million against the airport's annual passenger capacity of around 1.88 million. Hence at the beginning of the current control period, the airport appears to be running more than its full capacity.

Need for expansion of the capacity was, therefore, acutely felt. It was proposed to have expansion of the area of the terminal building by an additional 2000 SQM so that by the end of 2015-16 (the end of the control period), the total area of the terminal building would be 16,400 SQM. Even with this expansion, with the norm of 12 SQM per passenger, the peak hour capacity of the airport will be 1,367. At the end of 2012-13 (as of 01-04-

2013), the passenger throughput was 2.08 million. Hence even after the proposed expansion, Guwahati airport would remain as a somewhat congested airport.

8.3.2. Further expansion at the existing terminal site appears unlikely. This is on account of the physical and geographical limitations of the existing site. On one side of the existing terminal building, there is a control tower and on the other side there is a hangar. Scope of the expansion of the current terminal building is, therefore, restricted. The additional area of 2,000 SQM, as mentioned above, consists primarily of the area abutting the additional 2 aerobridges so as to reduce the dwell time of the departing passengers. Hence after expansion the total number of aerobridges would be 4 instead of the current 2. In peak hours, the number of flights on ground at a given point is 7 to 8. In addition to the 2 aerobridges, AAI has proposed to increase the capacity of the Security Hold Area (SHA) in the first floor as well as check-in-area. This would address the concern of BCAS that there is no proper segregation of domestic and international passengers at the departure and arrival areas. This will also meet the security and functional requirements for which certain expansion and modification needs in the departure and arrival areas are planned.

8.3.3. In view of these physical and geographical constraints, some adverse impact on maintenance and proper quality standards may be considered as inevitable. AAI has also planned around 2018-19 a separate terminal building of 77,500 SQM, about 1½ KM from the existing terminal building. It is expected that by that time the issues arising out of congestion will be fully met. AAI plans to design this terminal building as an integrated one having current norms of 24 SQM per passenger for domestic and 27 SQM per passenger for international.

8.3.4. **Construction of Hangar for A-321**: There is a proposal to develop Guwahati airport as Inter Regional Hub. In order to facilitate Night Halt of aircrafts, maintenance hangars are essential. With night halt the early morning departure and late night arrivals can increase which in-turn will improve the connectivity and passenger convenience, particularly with respect to Metro/Major airports. Accordingly, AAI had made plans for constructing three numbers of maintenance hangars (two nos. for A-321 and one no. to accommodate the ATR-72 type of aircrafts) so that at least three airlines can make use of the facility. This work has already been taken up with 60% Grant-in-Aid from DoNER. Once the hangars are constructed, it is expected that there will be increase of night and early morning operations, which will be a boon for making the airport an Inter-Regional Hub.

8.3.5. **Construction of New Fire Station:** The existing Fire Station is small and both the approach funnels are not easily accessible from the Fire Station. Accordingly proposal made for a New Fire Station to remove these constraints.

8.3.6. **Construction of Quarters for AAl's Staff:** More than 50 % of the residential quarters at Guwahati airport are semi-permanent single-storied construction and were constructed more than 30 years ago. Having regard to the condition of the construction and the age of this building as well as to optimally utilise the land, AAI has felt it necessary to redesign the quarters into multi storied building. However before removal of these quarters, new quarters meeting the area norms and standard specifications of multi-storied type buildings are to be constructed in order to reduce the land requirement. With this it will be possible to make available, the land for commercial use or land for additional quarters in the future.

8.3.7. **Construction of Boundary wall and levelling of Ground:** At present for a major length of the Runway, the width requirement for the Basic strip has not been met. AAI had requested state Govt. to acquire and provide land to AAI for meeting this operational requirement. State Govt. has handed over land for this purpose in April 2012 and the work of effecting necessary mutation entries and fixing boundary stones will be completed soon. In order to increase the Basic strip the levelling of low laying land Ground and construction of new operational wall is required.

8.3.8. **Construction of compound wall surrounding acquired land:** For construction of New ATC tower, Cargo Complex, etc AAI had requested State Government to acquire and provide land. State Govt. had handed over land for this purpose in April 2012 and the work of effecting necessary mutation entries and fixing boundary stones will be completed soon. In order to protect the land from encroachment the boundary wall needs to be constructed.

8.3.9. **Extension of Runway (Phase-II) and strengthening of runway, taxiway apron and ancillary works:** At present Airport runway is suitable only for A-321 type of aircrafts. There is a proposal to upgrade the airport as Inter Regional Hub. As a part of this proposal, the runway and other pavements have to be made suitable for B-747 aircrafts. After the extension of runway and other allied works the pavement strength will be increased and suitable to fly B-747 type of aircrafts. With this, it will be possible to accommodate long haul aircrafts, and the connectivity and operational efficiency at the airport can be improved.

Authority's Examination

8.4. The Authority notes that an amount of Rs.20.10 crore has been indicated by AAI as expansion related to residential building. This amount includes Rs.13.32 crore towards CNS/ATM staff. Hence the expenditure apportionable to airport's requirement works out to be Rs.6.78 crore. This is the amount that has been reckoned for inclusion towards RAB of LGBIA. Apart from the amount of Rs.13.32 crore disallowed for reason mentioned above, the Authority does not propose to make any other disallowances from the capital expenditure of Rs.136.43 crore (including DoNER grant of Rs.29.48 crore) leaving the additional capital expenditure of Rs.93.63 crore (Rs.136.43 crore minus Rs.29.48 crore minus Rs.13.32 crore) that will be counted towards additions to RAB during the current control period (subject to capitalisation), as explained in Para 10, viz. "Roll forward RAB".

User Consultation

8.5. The Authority had in Clause A1.3.1 of its Airport Guidelines stated that the Airport Operator shall undertake user consultation with Airport Users Consultative Committee (AUCC) on major capital projects planned at the airport. The major capital projects is defined as capital investment projects that may represent more than 5% of the value of the RAB at the beginning of the control period or Rs.50 crore, whichever is lower. Further, major projects have been classified under following two categories, for the effectiveness of the consultation process:

Table 4: User Consultation as per Airport Guidelines

Project Category	Lower Value Limit	Upper Value Limit
Category 1	Minimum of (5% of opening RAB value for first year of the Control Period, Rs.50 crore)	Minimum of (10% of opening RAB value for first year of the Control Period, Rs.500 crore)
Category 2	Minimum of (10% of opening RAB value for first year of the Control Period, Rs.500 crore)	No Upper Limit

8.6. Some of the projects listed in Table 3 falls under category 1 as per above guidelines therefore needs User Consultation. It has been clarified by AAI that the projected capital expenditure at Guwahati Airport has been recommended by the Members concerned and approved by the Chairman AAI. AAI has also stated that before execution user consultation will be carried out, where ever required as per Airport Guidelines.

Proposal No. 2. Regarding Project Cost

2.a. **The Authority proposes to consider allowable project cost of Rs. 123.11 crore (Rs.136.43 crore minus Rs.13.32 crore) comprising of Rs.93.63 crore**

to be funded by AAI and the balance of Rs.29.48 crore to be met from NEC grants. The Authority therefore proposes to reckon the amount of Rs.93.63 crore as additions to RAB in the current control period. (Refer Table 3 above along with para 8.4),

2.b. **The Authority also notes that AAI has confirmed to undertake user consultation before execution of the projects, as per the Airport Guidelines.**

Truing Up: 1. **Correction / Truing up for Proposal No. 2**

1.a. The Authority also proposes that 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.

9. Depreciation

9.1. As per Clause 5.3.3 of the Airport Guidelines, the minimum residual value of the asset shall be considered as 10% and depreciation shall be allowed up to a maximum of 90% of the original cost of the asset.

9.2. As per clause 5.2.5(e) of the Airport Guidelines, for projecting Depreciation on forecast of assets to be commissioned or disposed-off during a control period, it shall be 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.

9.3. AAI have stated that the assets are reflected in the proposal part of the Initial RAB and the accumulated depreciation of these assets are as per the figures reflected in the audited accounts of LGBIA, which are subject to the scrutiny of C&AG. It has been stated that AAI is following the straight line method for depreciation and depreciation rate applied to various assets is as per AAI's approved accounting policy considering the useful life of the assets. The salient aspects of AAI's depreciation policy being followed are as under:

9.3.1. Method of Depreciation- Straight Line Method;

9.3.2. Charging of Depreciation at 100% in case asset(s) 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 will be charged at 50%. This policy is effective from the financial year 2012-13. Up to 2011-12, for addition to fixed assets, depreciation was provided for full year irrespective of month of capitalization and no depreciation was provided in the year, the asset is disposed off; and

9.3.3. Residual value for each asset to be taken as Re.1 balance to be provided by way of depreciation as per prescribed rates. AAI have amended the Depreciation policy in F.Y 2012-13 made effective from F.Y 2012-13.

9.4. In this regard it is observed that the AAI's accounts are maintained as per the provisions of the Section 28 (1) of the AAI Act, which states that

> *"The Authority shall maintain proper accounts and other relevant records and prepare an annual statement of accounts including the profit and loss account and the balance-sheet in such form as may be prescribed by Central Government in consultation with the Comptroller and Auditor-General of India"*

9.5. Further as per Section 28(4) of the AAI Act,

> *"The accounts of the Authority as certified by the Comptroller and Auditor-General of India or any other person appointed by him in this behalf together with the audit report thereon shall be forwarded annually to the Central Government and that Government shall cause the same to be laid before both Houses of Parliament."*

9.6. AAI has stated that historically, AAI's financials have been prepared and maintained at a consolidated level across all the airports operated by it. AAI, for the purpose of submission of current MYTP for the first control period, have re-casted their historical balance sheet and historical Profit and Loss account and cash flow statements. Further, AAI have also clarified that the books of accounts of AAI are audited by C&AG of India as mandated under the AAI Act. The C&AG's resident audit parties audit financial records and statements of AAI's airports, region/field offices. However, C&AG issue the Audit Certificate for the AAI as whole.

9.7. The Authority notes that the Depreciation Policy of AAI (depreciation to be provided for full year, if the assets are used for 180 days or more. 50% depreciation to be provided if the asset are used for less than 180 days in a year. The residual value for each asset to be Rs.1) is not in accordance with the Airport Order and Airport Guidelines. However, AAI is a statutory body established under the AAI Act. The Board of AAI has approved the Depreciation policy that has been adopted by AAI. AAI's format of accounts have been formulated in consultation with the C&AG, who also conducts audit of the books of accounts of AAI as mandated under the AAI Act. The C&AG have not commented adversely on the depreciation methodology adopted by AAI. Further, accounts of the AAI, certified by the C&AG, together with the audit report are laid before the Parliament. The Audited final Accounts of AAI for the FY 2011-12 including the AAI's Accounting Policy and the Audit Report of the C&AG is available on the website of AAI (www.aai.aero).

9.8. In light of the above, the Authority proposes to consider the depreciation policy of AAI for depreciation being calculated for determination of tariffs for aeronautical services at LGBIA.

9.9. The Authority noted that the assets capitalized during the financial year 2012-13 onwards have been assumed to be used for more than 180 days.

Proposal No. 3. Regarding treatment of Depreciation

3.a. **The Authority proposes to consider the approved depreciation policy of charging 100% depreciation by AAI.**

3.b. **The residual value for each asset is proposed to be taken as Re.1.**

3.c. **For the year 2011-12, the Authority in consideration of the depreciation policy of AAI proposes to charge full depreciation, irrespective of the month of capitalization. Furthermore the Authority proposes not to consider any depreciation in the year 2011-12 if that particular asset(s) was disposed off/ retired in 2011-12.**

3.d. **From the year 2012-13 onwards, the Authority in consideration of the depreciation policy of AAI proposes to follow charging of full depreciation, in case of asset(s) are used in a financial year for 180 days or more, and if the asset(s) are used for less than 180 days the depreciation will be equivalent to 50% depreciation of the financial year.**

Truing Up: 2. **Correction / Truing up for Proposal No. 3**

2.a. The Authority also proposes to true up the depreciation considered during the present aeronautical tariff determination exercise, 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.

10. Roll Forward of RAB

10.1. For the purpose of arriving at the forecast and Roll forward RAB for LGBIA for the first Control period and the Average RAB, the following has been considered by AAI in the tariff proposal:

10.1.1. Initial RAB (book value of the assets at the beginning of control period i.e. as on 01.04.2011) Rs.78.15 crore

10.1.2. Total project cost, net of NEC grants of Rs.29.48 crore, i.e. of Rs.106.95 crore in a phased manner for Airport Services.

10.1.3. Depreciation calculated in accordance with the depreciation policy of AAI

10.2. Accordingly, the summary of the initial and Roll forward RAB in AAI's proposal for LGBIA (Airport Services) is as under:

Table 5: Summary of Forecast and Roll Forward RAB and Depreciation for LGBIA (Airport Services): As per AAI Submission (Rs. In crore)

	Details	2011-12	2012-13	2013-14	2014-15	2015-16
A	Opening RAB	78.15	100.85	88.06	83.21	87.92
B	Additional Assets capitalized during the year	36.97	0.74	9.78	19.46	40.00
C	Disposals/Transfers	0	0	0	0	0
D	Depreciation	14.27	13.52	14.63	14.75	17.04
E	Closing RAB(A+B-C-D)	100.85	88.06	83.21	87.92	110.88
	Average RAB (A+E)/2	**89.50**	**94.46**	**85.64**	**85.57**	**99.40**

10.3. The Authority examined the details of the asset capitalisation projected by AAI. It noted that according to AAI submission an amount of Rs.20.10 crore pertains to the projected additions to fixed assets on account of Residential Quarters for CNS/ATM and for airport staff. In this regard it noted that the Authority in the present determination process, is considering tariff in respect of Aeronautical services other than CNS/ATM servicers. Hence, additions to fixed assets on account of CNS/ATM Services need to be excluded from RAB for the present exercise of aeronautical tariff determination of LGBIA. It has been indicated by AAI that out of existing 166 quarters at Guwahati Airport only 56 quarters are occupied by Airport staff and the remaining are occupied by ANS (CNS/ATM) staff. Thus out of the project cost of Rs.20.10 crore for Residential Quarters, the cost of Rs.6.78 crore is attributable to airport services and Rs.13.32 crore for CNS /ATM services. The Authority notes that this will impact the consequential depreciation also. Accordingly the summary of forecast and Roll forward RAB for LGBIA are as under:

Table 6: Summary of the forecast and Roll forward RAB for LGBIA (Airport Services) as per the Authority (Rs. In crore)

	Details	2011-12	2012-13	2013-14	2014-15	2015-16
A	Opening RAB	78.15	100.85	88.00	83.16	87.87
B	Additional Assets capitalized during the year	36.97	0.67	9.78	19.46	26.75
C	Disposals/Transfers	0.00	0.00	0.00	0.00	0.00
D	Depreciation	14.27	13.52	14.62	14.75	16.38
E	Closing RAB(A+B-C-D)	100.85	88.00	83.16	87.87	98.24
	Average RAB (A+E)/2	**89.50**	**94.43**	**85.58**	**85.51**	**93.05**

Proposal No. 4. Regarding Roll forward RAB

4.a. **Authority proposes to consider Roll Forward RAB during the Control Period as given in Table 6 above for the purpose of determination of tariffs for aeronautical services at LGBIA in the current control period.**

Truing Up: 3. **Correction / Truing up for Proposal No. 4**

3.a. The Authority also proposes to true up the average RAB in the next control period based on the actual capitalized assets in the current 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 turns out to fall outside the prescribed bands with the upper and lower band percentages being 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 Airport Guidelines (Clause 6.15.2), any variation outside these bands will be shared equally between the Airport Operator and users.

11.2. AAI has submitted a note on traffic forecast methodology. As per their submission, passenger growth rates assumed is as per the forecast made by Corporate Planning and Management System (CPMS) department of AAI taking into account econometric analysis, regression analysis pertinent economic factors and policy framework etc. The forecast has been moderated taking into account other factors contributing to the traffic growth like the fleet of an airline, subjective factors like increase in oil prices, safe and secure air travel, business and economic environment and other competing infrastructure like road and rail connectivity, hotels and tourist places of attraction. The growth rate as submitted by AAI in the tariff proposal for LGBIA is as follows:

Table 7: Traffic Growth rates assumed by AAI

Particulars	Growth rates adopted (%)
ATM(Air Traffic Movement)	Aircraft movement (both domestic and international) is projected with 8% increase p.a. from 2013-14 onwards.
Passenger Growth	From 2013-14 onwards 10% growth is projected.

Particulars	Growth rates adopted (%)
Cargo	Cargo handled (Domestic) 12% increase p.a. from 2013-14 onwards.

11.3. The Authority also observed that AAI in its submission considered the following growth rate in respect of ATM, Passenger and Cargo.

Table8: Projected Growth Rate as per AAI submission

Year	ATM		Passengers		Cargo
	Domestic	International	Domestic	International	Domestic
2013-14	8%	9%	10%	10%	12%
2014-15	8%	8%	10%	10%	12%
2015-16	8%	7%	10%	10%	12%

11.4. As per the traffic statistics available on the website of AAI, the percentage change in traffic for the period April 2012-March 2013 as compared to the corresponding period April 2011- March 2012 is as follows:

Table 9: Actual Traffic Statistics as per the website of AAI

Particulars	April 2012-March 2013			April 2011- March 2012			Actual Growth Rate (%)
	Intl	Dom	Total	Intl	Dom	Total	
Total Aircraft Movement (No's)	416	26522	26938	452	27636	28088	-4.09%
Total Passenger (No's)	21810	2055128	2076938	26864	2217820	2244684	-7.47%
Cargo (Tonnes)	94	5919	6013	0	7761	7761	-22.52%

11.5. The Authority notes that historically, LGBIA caters only to Domestic Cargo and that there is hardly any International Cargo movement at this airport. Further the authority observed that the historical Cargo movement data submitted by AAI as part of its tariff proposal had some variation vis-à-vis the information available on AAI website i.e. the published results.

11.6. AAI submitted vide e-mail dated 5th July 2013 that the data /information available in its website may be considered by the Authority the purpose of determination of Tariffs. The Authority calculated CAGR (Compounded Annual Growth Rate) for ATM, Freight and Passenger movements over the period 2003-04 to 2012-13 (10years CAGR) for LGBIA is as under:

Table 10: CAGR 2003-04 to 2012-13 for LGBIA (10 years) (in %)

CAGR 2003-04 TO 2012-13	International	Domestic	Total
ATM	29.7%	7.9%	8.1%
Passenger	19.6%	16.1%	16.1%
Cargo	-2.0%	3.7%	3.6%

11.7. It is noted that the percentage decrease in traffic forecast factored in by AAI in the tariff proposal for ATM is lower than the CAGR for LGBIA over the period 2003-04 to 2012-13. Similarly, in case of passenger growth the forecast factored in by AAI is lower than the CAGR for LGBIA over the period of 10 years. However, the total percentage increase considered by AAI in Cargo traffic forecast is higher than CAGR for LGBIA over the period 2003-04 to 2012-13.

11.8. The Authority has noted that according to its general method of forecasting of traffic, it takes the last 10 years average growth and makes a forecast for the next five years taking the mean of the CAGR of the past 10 years and the forecast as provided by the Airport operator. The Authority also notes that according to this method the forecast for the passenger growth during the current control period would be around 13% (refer Table 11). The Authority further notes that Guwahati Airport has in fact witnessed a negative passenger growth at the rate of (-)7.47% in 2012-13. Furthermore, during the first three months of 2013-14 the growth rate of passengers has been (-)1.6% over the corresponding months of 2012-13. Having regard to these circumstances, the Authority feels that taking 13% growth rate would be inappropriate. Hence, the Authority proposes to consider the growth rate as projected by AAI for LGBIA for the purpose of determination of aeronautical tariff for LGBIA. The Authority notes that in case of ATM, the AAI forecast very closely matches that which would be arrived by adopting the Authority methodology discussed above. As far as Cargo is concerned the Authority notes that the forecast submitted by AAI (12%) is more aggressive than 7.8% that would have been arrived at by the Authority's methodology. It would appear that AAI would make special efforts to increase cargo throughput at Guwahati and the Authority proposes to accept AAI's forecast in this regard.

11.9. The Authority therefore proposes to adopt growth forecast of 10% for passenger, 8% for ATM and 12% for cargo including the separation proposed by AAI with respect to domestic and international sectors. Various forecasts and estimates are given in Table 11

Table 11: Traffic Growth Rate- calculated as the Average of growth projected in MYTP and 10 year CAGR

Year	ATM			PAX			Cargo		
	AAI Forecast	CAGR 10Y	Avg. of AAI and CAGR	AAI Forecast	CAGR 10Y	Avg. of AAI and CAGR	AAI Forecast	CAGR 10Y	Avg. of AAI and CAGR
Domestic	8%	7.91%	7.96%	10%	16.0%	13.0%	12%	3.71%	7.86%
International	8%	29.7%	18.8%	10%	19.5%	14.7%		-2.02%	
Combined	8%	8.06%	8.03%	10%	16.1%	13.0%	12%	3.59%	7.80%

11.10. Further, the traffic projection may be considered for truing up based on actual growth.

Proposal No. 5. Regarding Traffic Forecast

5.a. **To consider the growth rates proposed by AAI for the balance period of 2013-14 to 2015-16 in the current control period (as per Para 11.9 above).**

Truing Up: 4. **Correction / Truing up for Proposal No. 5**

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

12. Cargo, Ground Handling and Supply of Fuel to Aircraft Services (CGF)

12.1. Cargo Services at LGBIA:

12.1.1. As per the provisions of the AERA Act, the Authority considers the services rendered in respect of cargo, as the aeronautical services.

12.1.2. The Authority notes that as per AAI, at LGBIA the cargo services is provided by the airlines themselves, through various agencies as indicated in Table 12 and AAI has considered the revenue from such activities as non-aeronautical revenue in the MYTP.

Table 12: List of Cargo Handling Agencies

S.no	Airlines	Cargo Handling Agencies
1.	Spice Jet	J P Aviation Pvt Ltd
2.	Go Air	Sovika

12.1.3. In view of MoCA letter No.AV.20036/19/2013-AD dated 24.09.13 (Annex II), the Authority proposes to consider the revenue from Cargo as Aeronautical Revenue irrespective of the providers of such Aeronautical Services.

12.2. Ground Handling Services at LGBIA:

12.2.1. As per the provisions of the AERA Act, the Authority considers the services rendered in respect of Ground Handling relating to aircraft, passenger and cargo, as the aeronautical services.

12.2.2. The Authority notes that as per AAI, at LGBIA the Ground Handling services is provided by Airlines themselves through various agencies as indicated in Table 13 below and that in its submissions AAI has considered the revenue from such activities as non-aeronautical revenue.

Table 13: List of Ground Handling Agencies

S. no	Airlines	Ground Handling Agencies
1	Air India	Self
2	Indigo	Janus Aviation Pvt Ltd

S. no	Airlines	Ground Handling Agencies
3	Spice Jet	Janus Aviation Pvt Ltd
4	Jet Airways	Neherbs
5	Jet Lite	Neherbs
6	Go Air	Janus Aviation Pvt Ltd
7	Druk Air	Janus Aviation Pvt Ltd
8	Pawan Hans	Gautam Ground Services Pvt Ltd
9	McLeod Russel India Ltd	Gautam Ground Services Pvt Ltd

12.2.3. In view of MoCA letter No.AV.20036/19/2013-AD dated 24.09.13, the Authority proposes to consider the revenue from Ground Handling Services as Aeronautical Revenue irrespective of the providers of such Aeronautical Services.

12.3. **Supply of Fuel to Aircraft:**

12.3.1. AAI has considered the throughput fee received from oil marketing companies as aeronautical revenues for the purpose of current tariff determination, which is in line with the Authority's approach. In this regard, AAI, had stated that the revision of fuel throughput charges at AAI's airports is through a commercial agreement between AAI and Oil companies which covers many airports including those which are not under the purview of the AERA Act, 2008 and that these agreements have been entered into with the Oil companies in the year 2005 based on the outcome of a competitive tendering process. As per Minutes of the meeting dated 12.03.2010 held with oil companies AAI raises bill at the rate of Rs.106.75 per KL with effect from 01.04.2009 provisional with an escalation at the rate of 5% on 1st April every year and approved the fuel throughput charges at LGBIA as Rs.112.10 per KL with effect from 1st April 2010. There is no proposal for further increase (beyond Rs.112.10 per KL) in the fuel throughput charges in ATP for the current control period submitted by AAI. The Authority vide its order No. 07/2010-11 dated 4th Nov 2010 had approved the fuel throughput charges of Rs.112.10 per KL for LGBIA. No further increase in the charges has been made or approved by the Authority. Hence for the current control period the fuel throughput charges at LGBIA are taken at Rs.112.10 per KL.

12.4. The Authority had commented on the issue of FTC in its Airport Order as well as in the DIAL and MIAL Tariff Determination Order. The Authority gives hereunder its analysis and reasoning of treating Fuel Throughput Charge as aeronautical revenue in the hands of Airports Authority of India.

12.5. The Authority's observations with respect to FTC:

12.5.1. Different parts of the aircraft fuel supply chain are serviced by different entities at the airport.

12.5.2. This aircraft fuel supply chain consists of various phases starting from the point of production of the fuel by the Oil Companies, its transportation to the airport and finally culminating in the supply of fuel to the aircraft at the airport.

12.5.3. The production of fuel for aircrafts is not an aeronautical activity. Hence, this is not under the regulatory ambit of the Authority.

12.5.4. The Fuel supply chain at an airport begins from entry of fuel into the airport premises and extends up to fuelling the aircraft. The service towards entry of fuel into the airport is provided by the Airport Operator (i.e. AAI), who has a monopoly over this service. The Airport Operator under an agreement with the Oil Marketing Companies charges for this service. These charges are termed as FTC. In the view of the Authority, it is a charge for providing aeronautical service of supply of fuel to an aircraft. Merely calling it by the name of "fuel concession fee" or any other nomenclature does not change the nature of the service namely, aeronautical service and as this part is provided by the Airport Operator, the revenues arising from such aeronautical service in the hands of the Airport Operator are reckoned as aeronautical revenues in the hands of the Airport Operator.

12.5.5. Once fuel is inside the airport premises, it can be supplied to the aircraft either through fuel farm facility or through the oil tankers, which will depend upon the infrastructure available at the airport. Some airports may have Into-Plane (ITP) service for fuelling the aircraft.

12.5.6. In the case of Guwahati Airport, the fuel is supplied to the aircraft directly by the Oil Marketing Companies through Oil Tankers. AAI charges FTC from these Oil Marketing Companies, under an agreement, towards the entry/supply throughput/ of fuel into the airport.

Proposal No. 6. Regarding Revenue from Cargo, Ground Handling Services and Supply of fuel to aircraft

6.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 as aeronautical revenue irrespective of the providers of such Aeronautical Services.**

6.b. **The Authority also proposes to treat Fuel Throughput into the airport as an integral part of supply of fuel to aircraft and accordingly proposes to consider the revenue from Fuel Throughput Charges as aeronautical revenue in the hands of AAI.**

6.c. **Furthermore the Authority notes that the approved fuel throughput charges at LGBIA is Rs.112.10 per KL with effect from 1st April 2010 and AAI has not proposed any increase in the Fuel Throughput Charges during the balance period of the current control period.**

13. Revenue from services other than aeronautical services:

13.1. AAI has submitted the forecasts of various components of non-aeronautical revenue streams along with their respective areas as well the assumptions underlying the forecast. The historical and projected revenue generating area in respect of LGBIA, as submitted by AAI is as given below:

Table 14: Historical and Projected Revenue generating area at LGBIA (in Sq. Mts)

S.no.	Particulars of Area	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
1	Retail	1116.78	1169.29	1169.29	1169.29	1169.29	1169.29
2	Commercial Offices	883.15	958.19	958.19	958.19	958.19	958.19
3	Advertisement	898.60	949.82	949.82	949.82	949.82	949.82
4	Ticketing	144.78	154.78	154.78	154.78	154.78	154.78
5	Car Parking	9414	9414	9414	9414	9414	9414

13.2. Further, the assumptions taken by AAI for projection of each source of non-aeronautical revenue and the basis of the assumptions are as under:

Table 15: Assumptions taken by AAI for each item of Non Aeronautical Revenue at LGBIA

S no.	Item	Assumption	
1	Restaurant/ Snack Bar/ Flight Kitchen	10% increase per annum in 2013-14 onwards	It is based on normal annual escalation in the contracts
2	Flight Catering	8% increase per annum in 2013-14 onwards	Growth rate in-flight catering is linked with Aircraft movement
3	Hording/ Display	10% increase per annum in 2013-14 onwards	It is based on normal annual escalation in the contracts
4	Rent and Services(Land Rent/ Lease and Hangar Building non-residential)	Flat increase of 7.5% (Land Lease) and 10% p.a. on other items for 13-14 onwards.	Normal annual escalation allowed in license fee in the land.
5	Car Parking	10% increase per annum in 2013-14 onwards	It is based on normal annual escalation in the contracts
6	Admission Tickets	10% increase per annum in 2013-14 onwards	It is based on normal annual escalation in the contracts
7	Other Misc. items/interest income	5-10% increase per annum in 2013-14 onwards	Growth rate of Misc. Income is expected to increase nominally or normal escalation.

13.3. As per AAI submissions, the growth in non-aeronautical revenue has been worked out by applying the above growth rate to historical revenues and establishing the relationship with available commercial area.

13.4. AAI have projected the revenue from non-aeronautical services as follows:

Table 16: Revenue from Non Aeronautical Sources actual/projected by AAI (Rs. In crore)

	Details	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A	Trading Concessions	2.65	3.21	3.42	3.74	4.10	4.49
B	Rent and Services	3.95	4.33	4.75	5.21	5.72	6.27
C	Car parking	0.72	1.07	1.17	1.29	1.42	1.56
D	Public Admission Fees	0.31	0.42	0.46	0.51	0.56	0.62
E	Other Misc. Revenue	1.35	2.00	1.53	1.64	1.76	1.89
	Total Revenues	**8.99**	**11.03**	**11.34**	**12.40**	**13.56**	**14.83**
	Total Non-Aeronautical Revenue during the current control period						**63.16**

Authority's examination

13.5. The Authority notes that the Table 16 incorporates the revenues that AAI receives or is expected to receive from the third party concessionaires providing aeronautical services of CGF and that AAI in their submission have considered the revenue from Ground Handling Services as Non-Aeronautical Revenues. The Authority considers the revenue from Ground Handling Services as referred to in Para 12.2.3 as Aeronautical revenue.

13.6. As far as the revenues from non aeronautical services are concerned (non-aeronautical revenues), AAI has made certain projections based on its assessment given in Table 15. The Authority has given careful consideration to the various assumptions in Table 15. During the current control period the Authority feels that there is a need to assess the actual non aeronautical revenue against the projections made by AAI. The Authority thus proposes to true up the non-aeronautical revenues in the current control period.

13.7. The Summary of Non-Aeronautical revenue assessed by Authority is as per Table 17

Table 17: Revenue from Non Aeronautical Sources assessed by Authority (Rs. In crore)

	Details	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A	Trading Concessions	2.06	2.44	2.68	2.95	3.25	3.57
B	Rent and Services	3.95	4.33	4.75	5.21	5.72	6.27
C	Car parking	0.72	1.07	1.17	1.29	1.42	1.56
D	Public Admission Fees	0.31	0.42	0.46	0.51	0.56	0.62
E	Other Misc. Revenue	1.35	2.00	1.53	1.64	1.76	1.89
	Total Revenues	**8.40**	**10.26**	**10.60**	**11.60**	**12.70**	**13.91**
	Total Non-Aeronautical Revenue during the current control period						**59.07**

Proposal No. 7. Regarding Non Aeronautical Revenues

7.a. **The Authority proposes to consider the Non Aeronautical Revenue as given in Table 17 for determination of aeronautical tariffs for the current control period.**

Truing Up: 5. **Correction / Truing up for Proposal No. 7**

5.a. 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.

14. Operation and Maintenance Expenditure

14.1. 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.

14.2. Operation and Maintenance expenditure submitted by AAI is segregated into

14.2.1. Payroll related Expenditure

14.2.2. Administration and General Expenditure

14.2.3. Repair and Maintenance Expenditure

14.2.4. Utilities and Outsourcing Expenditure

14.2.5. Other Miscellaneous Expenditure

14.3. AAI has submitted details and basis for each of the above proposed expenditure in their submission. The details of the assumptions made by AAI for each item of Operation and Maintenance Expenditure are given in Table 18 below:

Table 18: Assumptions made by AAI for each item of Operation and Maintenance Expenditure

S no.	Item	Assumption
1	Pay roll Expenses	Combined effect of annual increments, promotions, increase in DA, perks and allowances comes around 9% approx. Hence the payroll expenses have been assumed to increase at the rate of 9% from 2013-14 onwards. This does not cater for any increase due to increase in the staff strength.
2	Repair and Maintenance Expenses	An increase of 10% p.a. has been considered in case of civil works, electrical work, vehicle, equipment & furniture. An increase of 11-13% has been considered in case of computers /electronics peripherals from 2013-14 onwards.
3	Utility and outsourcing Expenditure	6-7% p.a. increase in the expenditure on account of increased consumption for utilities has been considered. However there is no change in the unit rate in the power.
4	Administration and General Expenditure	Overall increase of 9% from the year 2013-14. Other expenses of CHQ are proportionately apportioned to airports based on revenue of the airports as per existing methodology of AAI.
5	Other Miscellaneous Expenditure	Other Expenses mainly include PSF collection charges and discount on landing charges have been increased by 10% from the year 2013-14 onwards.

14.4. A Summary of costs proposed by AAI for the control period is detailed below:

Table 19: Summary of O&M expenditure actual/projected by AAI (Rs. in crore)

Particulars	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Pay roll Expenses	17.00	22.07	23.81	25.69	27.73	29.94
Administrative and General Expenditure	8.22	10.97	11.54	12.18	12.89	13.64
Repairs and Maintenance Expenditure	3.55	5.40	4.49	4.64	5.10	5.61
Utility and Outsourcing Expenditure	2.60	2.74	2.91	3.13	3.36	3.60
Other Miscellaneous Expenditure (PSF collection charges and Landing discount)	1.43	0.98	0.18	0.14	0.16	0.17
Total	**32.80**	**42.16**	**42.93**	**45.78**	**49.24**	**52.97**

14.5. AAI has included the discount on landing charges for year 2010-11 to 2012-13 under the sub-heading miscellaneous expenditure, whereas no discount on landing charges has been considered from the year 2013-14 onwards. The Authority has disallowed the landing discount from the sub-heading miscellaneous expenditure for the year 2010-11 to 2012-13. The operational and maintenance expenditure after disallowance is as below:

Table 20: Summary of O&M expenditure assessed by Authority (Rs. crore)

Particulars	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**
Pay roll Expenses Cost	17.00	22.07	23.81	25.69	27.73	29.94
Administrative and General Expenditure	8.22	10.97	11.54	12.18	12.89	13.64
Repairs and Maintenance Expenditure	3.55	5.40	4.49	4.64	5.10	5.61
Utility and Outsourcing Expenditure	2.60	2.74	2.91	3.13	3.36	3.60
Other Miscellaneous Expenditure **(Excluding landing discount)**	0.19	0.12	0.13	0.14	0.16	0.17
Total	**31.56**	**41.29**	**42.88**	**45.78**	**49.24**	**52.97**

14.6. The Authority notes that as per AAI's submission, the operational and maintenance expenditure in respect of LGBIA are excluding expenditure on CNS/ATM services. AAI have also stated that the actual expenditure have been considered for 2011-12 and 2012-13 being the first two tariff years of the first control period.

14.7. The Authority, in its Airport Order, had stated that it will follow a bottom-up approach for assessment of operation and maintenance expenditure, which will include a review of the operation and maintenance expenditure forecast submitted by the Airport Operator.

14.8. The Authority has considered the issue of operating expenses and their projections submitted by AAI. It is conscious of the fact that the issue of efficient operating and maintenance costs is important in price cap determination. In this light it is seen that the C&AG is the auditor of all the accounts of AAI – including the expenditures incurred. The audit of the accounts by C&AG is comprehensive and the Audit report thereof is placed before the Parliament of India. The Audit Report of the C&AG is not only on the mathematical accuracy of accounts or their incurrence in accordance with the set procedure, but also on the propriety of such expenditure.

14.9. In the light of above the Authority proposes to consider the Operation and Maintenance Expenditure as given in the Table 20.

Proposal No. 8. Regarding Operation and Maintenance expenditure

8.a. **The Authority proposes to consider the operational and maintenance expenditure as given in Table 20 above, for the purpose of determination of aeronautical tariffs for the first Control Period.**

15. Taxation

15.1. 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."*

15.2. It is clarified in the Airport Guidelines that any interest payments, penalty, fines and other such penal levies associated with corporate tax, shall not be taken into consideration as expenditure or cost.

15.3. As per Clause 35 of the AAI Act, for the purpose of income Tax Act 1961, or any other enactment for the time being in force relating to income tax or any other tax on income, profit or gain, the AAI shall be deemed to be a Company within the meaning of the income Tax act 1961 and shall be liable to tax accordingly on its income, profit and gain.

15.4. Further, the companies with annual income of more than Rs.1 crore are subject to tax @ 30%, surcharge @ 5% on their taxes and education cess @ 3%. The effective income tax rate works out to 32.445%

15.5. AAI have in their submissions, considered corporate tax @ 32.445%.

15.6. Taxation is one of the building blocks for computation of ARR. Therefore, if the actual tax paid in any of the years (in the control period) is lower than the tax forecast to have been paid (and accordingly included in the target revenue calculation), it would lead to a situation wherein AAI would be unjustly enriched. In view of this, the Authority proposes to consider the actual tax paid by the LGBIA at the time of truing up. Since this number would be available only after finalization of AAI's Annual Accounts the difference between the forecasted and the taxes actually paid is proposed to be trued up after review in the next control period.

Proposal No. 9. Regarding Taxation

9.a. **The Authority proposes to consider tax as actually paid towards calculations of Aeronautical Tariff determination. Accordingly Authority proposes to take taxes actually paid by AAI for F.Y 2011-12 and 2012-13.**

9.b. **The Authority proposes to consider corporate income tax @ 32.445%, for the remaining period of the current control period to estimate the taxes that are likely to be paid by AAI.**

Truing Up: 6. **Correction / Truing up for Proposal No. 9**

6.a. 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, the Authority proposes that this truing up will be done in the next control period commencing 01.04.2016.

16. Cost of Equity, Cost of Debt, Leverage, and Weighted Average Cost of Capital

16.1. AAI have in their submissions stated that they had engaged KPMG to determine the Fair Rate of Return (FRoR) for its airport operation business. AAI have forwarded KPMG report wherein KPMG have stated that historically AAI's Financial Accounts have been prepared and maintained at consolidated level across all the airports operated by it and that currently it is very difficult to apportion funds and prepare the financial statements for each individual airport. Hence KPMG worked with the assumption that the gearing ratio and cost of debt for the airport operation business at each airport of AAI is the same as that for AAI as a whole.

16.2. Gearing and Cost of Debt

16.2.1. As per the Airport Guidelines, the Authority shall determine a weighted average gearing in the control period for the purpose of determination of FRoR. The determination of such weighted average gearing shall have reference to actual and such projected quantum of debt submitted by the Airport Operator. The calculation of such weighted gearing shall be based on the forecast quantum of debt and equity for each Tariff Year in a Control Period. The Gearing is the level of an entity's debt compared with its equity component and is calculated as $Gearing = \frac{Debt}{(Debt+Equity)}$.

16.2.2. The weighted average cost of existing debt of AAI as a whole is 8.03%. KPMG have assumed that AAI will be able to raise the incremental debt requirement in the first control period on similar terms. In the tariff proposal for LGBIA, AAI assumed that future capital funding requirement will be met in similar Debt-Equity proportion for AAI as a whole at the current levels and projected the expected gearing to be 8.84% (Debt of Rs.675 crore and Equity of Rs.6,966 crore equivalent to debt/equity ratio) in the first control period as also stated by KPMG. It has been informed by AAI that at present no loan is apportioned to the LGBIA.

16.3. Weighted Average cost of Capital (WACC) or Fair Rate of Return (FRoR) on Investment. This is comprised of the cost of debt and that of equity.

16.3.1. **Cost of Equity-** In the report of KPMG, submitted by AAI, the cost of equity for AAI has been computed using the Capital Asset Price Model (CAPM) and the expected cost of equity for AAI's airport operations business is projected to be 15.64%. KPMG, in their report, have stated that "on applying the above mentioned values of various parameters to the FRoR methodology prescribed by AERA, the Fair Rate of Return for AAI's airports operations business works out to 14.96%, i.e., 15%". However, AAI have adopted 14% to determine the return on RAB and in discounting Target Revenue to arrive at the NPV.

16.4. It is also observed that vide its letter AV. 24032/037/2011-AD dated 12.03.2012, the Ministry of Civil Aviation (MoCA) forwarded report of SBI Capital Market Ltd (i.e. SBI CAPS) in the matter of "Fair Rate of Return of Equity for Indian Airport Sector" and had stated that

> *"Airports Authority of India got a study conducted through a Financial Advisor namely M/s SBI Capital Markets Ltd. (SBI CAPS). The Financial Advisor has since submitted its report and has opined that a return on the Equity in the range of 18.5% to 20.5% would be reasonable for airport sector in India. A copy of the report of the Financial Advisor is enclosed.*
>
> *……*
>
> *3. The report of the Financial Advisor may kindly be considered in taking decision in this regard………"*

16.5. In this report, forwarded by MoCA, the consultant i.e. SBI CAPS had stated that FRoR in respect of aviation sector in India is 18.5% to 20.5%.

16.6. The building blocks and detailed methodology of calculation of WACC (FRoR) are laid down in the Authority's Airport Order and Airport Guidelines. Further, the Authority had given an exhaustive analysis of the building blocks of WACC (FRoR) in its Order No.03/2012-13 dated 24.04.2012 (DIAL Tariff Order) in the matter of tariff determination of IGI Airport, New Delhi, and Order No.32/2012-13 dated 15.01.2013 (MIAL Tariff Order) in the matter of tariff determination of CSI Airport, Mumbai, taking into consideration academic literature, practices adopted by other regulators, report of several consultants including the Authority's Consultant, the National Institute of Public Finance and Policy (NIPFP) and stakeholder consultation responses. Particularly in its order No. 03/2012-13 dated 24th April 2012, (DIAL Tariff order), the Authority has given detailed consideration to the report of SBI CAPS and had concluded for reasons contained in the DIAL tariff order that in view of, inter alia, the specific risk mitigating measures put in place by the Authority, the relative riskiness of Delhi Airport has been substantially lowered. This along with the analysis of NIPFP, led the Authority to conclude that the band of 18.5% to 20.5% as fair rate of return on equity proposed by SBI would not be applicable for Delhi Airport. Similar risk mitigating measures are now proposed to be put in place in respect of LGBIA. Hence the Authority does not consider the band as suggested by SBI CAPS in its report as appropriate for LGBIA. The Authority also notes en passant that neither the KPMG nor the AAI have based their submissions on this band.

16.7. The Authority had also given an analysis on the WACC (FRoR) in its Order No. 35/2012-3 and 38/2012-13 while determining the aeronautical tariffs in respect of the AAI Airports at Kolkata and Chennai respectively. These are relevant for determination of WACC (FRoR) for LGBIA as well. The report of the Authority's Consultant, NIPFP, is annexed as Annexure-I to the DIAL Tariff Order. The report of SBI CAPS has also been uploaded by this Authority on the AERA website vide Public Notice No.01/2012-13 dated

12.04.2012. Both these documents may be accessed from the Authority's website www.aera.gov.in. For the sake of brevity these are not reproduced here. However, the key operative conclusions on the methodology are as under:

16.7.1. Selection of Comparator set of estimation of Asset Beta. The Authority has stated that the comparator set should not be restricted to only the developing/emerging countries.

16.7.2. The KPMG comparator set is limited to countries like China, Mexico and Malaysia. The Authority had concluded in its tariff determinations orders of DIAL and MIAL that such an approach is not appropriate and a wider set of airports may provide a more meaningful basis for estimation of Asset beta as advised by NIPFP.

16.7.3. Determination of Asset beta of the airport based on the appropriately chosen comparator set both in developing and developed countries.

16.7.4. The asset beta of the airport to be re-levered using the notional Debt – Equity ratio of 1.5 (equivalent to gearing of 60%). This was also the approach indicated by SBI Caps.

16.7.5. WACC calculation to be made based on the book values of Debt and Equity.

16.8. The Authority has noted that the basis of the comparator set used by National Institute of Public Finance and Policy (NIPFP) which contained airports of the developing regions (emerging markets) and developed regions, average asset beta for LGBIA can be taken at 0.61 without taking into account any risk mitigating factors.

16.9. The Authority has in this Consultation Paper proposed the following risk mitigating measures as under:

16.9.1. Truing up of Traffic: The Authority has proposed for truing up the volumes of traffic.

16.9.2. Truing up of non-aeronautical revenue: The Authority has proposed to true up the non-aeronautical revenue in this Control Period.

16.10. The Authority expects that these measures would give a downward push to the asset beta of LGBIA, Guwahati. The Authority would thus regard 0.61 as the upper bound of the asset beta. According to the submissions of AAI, no loan has been apportioned to the LGBIA.

16.11. The Authority had already discussed in sufficient detail the impact of high gearing on re-levering of asset beta and consequently its impact on WACC, both in the Delhi and Mumbai Tariff Determination Orders (Order No.03/2012-13 dated 24.04.2012 and Order No.32/2012-13 dated 15.01.2013, respectively). Applying the same gearing ratio of 60:40 to re-lever the asset beta, in the instant case and also applying the various parameters of CAPM as recommended by NIPFP, the WACC for LGBIA is calculated as 14.72%**.** The authority has already noted that the asset beta of 0.61 can be regarded as the upper bound. AAI have in their revised submission dated 29.05.2013, considered WACC at 14% at par with the decision taken by the Authority in Chennai and Kolkata airports. The Authority regards this figure of WACC as reasonable for AAI. The authority has also suggested that AAI should gradually attempt over time to move from all equity financed structure to a more efficient capital structure of 60:40 as debt/equity ratio. Inasmuch as the cost of debt is lower than the cost of equity, this would result in lowering of WACC thereby benefitting the passengers.

16.12. AAI has not apportioned any debt for LBGIA. Guwahati has separate capital structure as financing activities are located centrally at the corporate office of AAI. Therefore, the cost of capital to be applied to the airports other than JV airports should be estimated based on the capital structure of AAI as a whole.

16.13. In view of the above analysis, the Authority proposes to consider WACC at the rate of 14% for LGBIA, Guwahati for the first control period as considered in the tariff determination process in respect of Chennai and Kolkata Airport.

Proposal No. 10. Regarding WACC (FRoR)

10.a. **The Authority proposes to consider the WACC at 14% for Lokpriya Gopinath Bordoloi International Airport for the first control period.**

17. Quality of Service

17.1. In the scheme of the AERA Act, the Authority has two mandates relating to quality of service – First, to consider the quality of service for determination of tariff and secondly, to monitor the set performance standards relating to quality of service. These are two distinct functions - one relates to determination of tariff whereas the other relates to monitoring of the set performance standards.

17.2. The Authority in its Airport Order had stated that while it will discharge its other functions under the AERA Act with respect to monitoring the set performance standards as may be specified by the Central Government (Section 13 (1) (d) of the Act), it will in accordance with the provisions of Section 13(1)(a)(ii) of the Act, take into consideration the quality of service provided by Airport Operators on specified parameters and measures while determining tariffs.

17.3. The specific Objective Quality of Service Parameters and Benchmarks and the Subjective Quality of Service Parameters and Benchmarks to be measured at the major airports have already been adopted by the Authority in the Airport Guidelines (Appendix 2 and Appendix 3 of the Airport Guidelines).

17.4. The Authority has also adopted a mechanism to consider reduced tariffs for under-performance vis-a-vis specified benchmarks on quality of service to adequately protect the interest of users. Under such a mechanism, the calculated level of rebate for a year will be passed on to users of airport services in the form of reduced tariffs in the following year(s). The Authority had specified that under-performance with respect to specified benchmark for each objective service quality measure will have a monthly rebate incidence of 0.25% of aeronautical revenue, subject to an overall cap of 1.5%. As regards the subjective service quality parameters, the Authority has adopted an overall benchmark of 3.5 on the Airports Council International's Airport Service Quality (ACI ASQ) survey, which is to be undertaken by all major airports. The Authority believed that in order to progressively ensure better service quality performance within the control period, it would be appropriate to prescribe a higher overall benchmark for fourth and fifth tariff years of the first control period. Accordingly the Authority has decided that the overall benchmark for subjective quality requirements for the fourth and fifth tariff years of the first control period shall be 3.75 on the ACIASQ survey. The Authority however notes that LGBIA has already exceeded ASQ rating in the first and second quarter of 2013, with ASQ rating of 4.11.

17.5. The Authority also considered the issue of specifying a transition period for implementation of the scheme of quality of service measurement and determination of any rebates as relevant for LGBIA and feels that a period of one year from the date of tariff determination would be a reasonable time for AAI to appropriately align their processes/ procedures and make any other required interventions.

17.6. Currently, in determination of aeronautical tariff(s) for LGBIA, a period of about two and half years of the first control period have already elapsed and given the transition period of one year, for implementation of the above scheme (quality of service measurement and determination of any rebates) would be applicable only from the fifth tariff year of the Control period i.e., 2015-16. The Authority notes that it will be possible to calculate the rebate for the year 2015-16 only in the tariff year t+2, viz., in 2017-18, which is the second tariff year of the next control period. In this light the Authority proposes to use the rebate mechanism as indicated in the Airport Order and the Airport Guidelines dated 28.02.2011 for AAI.

17.7. The Authority, for the purposes of this consultation paper proposes to apply the same quality of service (QoS) parameters, including the rebate mechanism in respect of LGBIA. The Authority is however cognizant of the physical and geographical limitations at Guwahati as indicated in Para 8.3.1. Hence the Authority would expect reasoned stakeholders' comments as to various parameters that would be appropriate at Guwahati at least during the first control period.

Proposal No. 11. Regarding Quality of Service

11.a. **The Authority proposes to use the rebate mechanism as indicated in the Airport Order and the Airport Guidelines for LGBIA.**

11.b. **The implementation of the rebate scheme is proposed to be made applicable from the 5th Tariff year of the Current Control period i.e., 2015-16. Rebate for year 2015-16 is proposed to be carried out in 2017-18, which is the second tariff year of the next control periods.**

11.c. **The Authority may consider different parameters of QoS for LGBIA after receiving stakeholders' comments (refer para 17.7)**

18. Matters regarding Error Correction and Annual Compliance Statement

18.1. The Airport Guidelines issued by the Authority has 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.

18.2. However, this is the first control period in which a period of two and half year has already elapsed, therefore the tariff being determined, is to be recovered in the balance period of about two and half years of the current control period.

18.3. In the case of LGBIA, the Authority has proposed to make appropriate adjustments to the RAB at the beginning of the next control period in respect of actual investments. It has also proposed to consider the depreciation policy of AAI the depreciation calculated in accordance thereof and Roll Forward RAB during the Control Period for the purpose of determination of tariffs for aeronautical services at LGBIA. The Authority has also proposed to true up the traffic projection based on actual growth. It has also proposed that the non-aeronautical revenue would be trued up after the completion of the current control period.

18.4. Further, the Authority also proposes that in view of all the corrections/truing up to be carried out at the end of the control period there may not be any requirement for LGBIA to submit Annual Compliance Statements etc. as per the timelines indicated in the Airport Guidelines. Instead, LGBIA should submit the Annual Compliance Statements along with the MYTP for the next Control Period.

Proposal No. 12. Regarding Error Correction and Annual Compliance Statement

12.a. **The Authority proposes that LGBIA should submit the Annual Compliance Statements for the individual tariff years of the first control period along with the MYTP for the next Control Period.**

19. Aggregate Revenue Requirement for LGBIA

19.1. The Aggregate Revenue Requirement (ARR) computed by AAI for LGBIA and the Yield per passenger (YPP) is as follows:

Table 21: ARR and Yield as per AAI (Rs. in crore)

Details Rs in Crore	Tariff Year 1 2011-12*	Tariff Year 2 2012-13*	Tariff Year 3 2013-14	Tariff Year 4 2014-15	Tariff Year 5 2015-16
Average RAB	89.50	94.46	85.64	85.57	99.40
Return on Average RAB @14%	12.53	13.22	11.99	11.98	13.92
Operating Expenditure	42.16	42.93	45.78	49.24	52.97
Depreciation	14.28	13.52	14.63	14.75	17.04
Corporate Tax @32.445%	0	0	13.40	25.96	31.39
Less- Revenue from Services other than Regulated Services	11.03	11.34	12.40	13.56	14.83
ARR	57.93	58.34	73.40	88.37	100.49
No. of Passengers (as per actual)	2,244,684	2,076,938	2,284,632	2,513,095	2,764,405
Yield (Rs./ Passenger) (as per actual)	258.10	280.88	321.27	351.64	363.53
PV of ARR for the Control period as on 01-04-2013					**370.04**
Total Passengers during the Control Period					**11,883,754**
Yield per Passenger for the Control Period (PV of ARR for control period /Total Passengers during the control period (in Rs)					**311.38**
*** Actuals**					

19.2. As per Authority Guidelines, the ARR is calculated on present value (PV) basis as of beginning of the control period. However the Authority notes that the yield per passenger calculated by AAI in the MYTP is based on the calculation of the Present Value of ARR as on 01-04-2013. Since the control period starts from 01-04-2011, the Present Value of ARR is to be calculated as of 01-04-2011. With the above changes the Yield per passenger as per MYTP gets revised from Rs.311.38 (as on 01-04-2013) to Rs. 239.60 (as on 01-04-2011) based on the numbers as given by AAI. The Authority has reworked the different elements that go into calculation of ARR, the results thereof are given in Table 22.

Table 22: ARR and Yield as per Authority **(Rs. in crore)**

Details	Tariff Year 1 2011-12*	Tariff Year 2 2012-13*	Tariff Year 3 2013-14	Tariff Year 4 2014-15	Tariff Year 5 2015-16
Average RAB	89.50	94.43	85.58	85.51	93.05
Return on Average RAB @14%	12.53	13.22	11.98	11.97	13.03
Operating Expenditure	41.29	42.88	45.78	49.24	52.97
Depreciation	14.28	13.52	14.62	14.75	16.38
Corporate Tax @32.445%	0	0	0	4.39	6.33
Less- Revenue from Services other than Regulated Services	10.26	10.60	11.60	12.70	13.91
ARR	57.85	59.01	60.78	67.65	74.80
No. of Passengers (as per actual)	2,244,684	2,076,938	2,284,632	2,513,095	2,764,405
Yield (Rs./ Passenger) (as per actual)	257.71	284.13	266.05	269.18	270.58
PV of ARR for the Control period as on 01-04-2011					**246.33**
Total Passengers during the Control Period (No.)					**11,883,754**
Yield per Passenger for the Control Period (PV of ARR for control period /Total Passengers during the control period (in Rs)					**207.28**
*** Actuals**					

20. Annual Tariff Proposal

20.1. During the course of various discussions, AAI submitted that it would like to submit ATP(s) for all the years of the First Control Period for various categories of aeronautical services provided by it at LGBIA. In this regard it was observed that there are only about two and a quarter year left in the current control period. The Authority also noted that at LGBIA, AAI has proposed tariff for Landing, Housing and Parking, Passengers Services Fee (facilitation), Throughput Charges, User Development Fee (UDF) for the year 2013-14 (effective from 1st July, 2013), 2014-15 and 2015-16. Having regard to the time period required for stakeholders' consultation, analysis of their comments and issue of final tariff order, the Authority estimates that tariff increases can be given effect from 1st January, 2014. Further, it was also noted that AAI indicated to effect an upfront increase in the aeronautical charges during financial year 2013-14 (effective from 1st July, 2013), followed by a (WPI – X) based annual increases w.e.f. 1st April of each tariff year during the rest of the control period. In their tariff proposal, AAI have considered a WPI of 6% based on the long term forecast of WPI as available in the RBI website. Further, AAI have considered an X factor of 0.1% in their tariff calculations. Hence the Authority has also taken increase per year at 5.9%.

20.2. 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.

20.2.1. Children (under age of 2 years);

20.2.2. Holders of Diplomatic Passport;

20.2.3. 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);

20.2.4. Persons travelling on official duty on aircraft operated by Indian Armed Forces;

20.2.5. Persons travelling on official duty for United Nations Peace Keeping Missions;

20.2.6. 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”; and

20.2.7. Passengers departing from the Indian airports due to involuntary re-routing i.e. technical problems or weather conditions.

20.3. Passenger Service Fee (PSF) being collected at LGBIA is comprised of two components [PSF Security component (SC) – Rs.130 and Facilitation Component (FC) - Rs.77]. While proposing the levy of UDF for passengers at LGBIA, AAI have included the facilitation component of the Passenger Service Fee i.e., Rs.77 in the proposed UDF levy. AAI, presently, have not proposed any increase in the PSF Security component at LGBIA and the same shall remain at Rs.130 per passenger.

20.4. Accordingly AAI have submitted the ATP(s) for the balance period of the Control period in respect of LGBIA vide their letter dated 29.05.2013.The ATPs submitted by AAI for the remainder period of the Control Period are annexed herewith for stakeholder consultation.

20.5. AAI submitted that the shortfall in ARR (PV as on 01-04.2013) for the first control period due to lower recovery of aeronautical charges amounting to Rs.164 crore approx as on 01-04-2013 may be allowed to be recovered by AAI in the next control period.

20.6. AAI have proposed the following revision in the tariff(s) (excluding taxes/any levies):

20.6.1. Increase of 10% in International landing charges and 80% in Domestic landing charges.

20.6.2. Uniform increase of 135% in parking and housing charges

20.6.3. Uniform increase of 172% in extension of service hours charges

20.6.4. Introduction of User Development Fees-

20.6.4.a. Per Domestic Departing Passenger-Rs.295

20.6.4.b. Per International Departing Passenger-Rs.295

20.6.5. As per AAI, there is no proposed increase in the fuel throughput charges at LGBIA (currently at Rs.112.10 per KL).

20.6.6. For the ensuing tariff years 2014-15 and 2015-16 of the current control period, annual escalation @ 6% p.a. w.e.f. 1st April of each tariff year proposed on Landing, Housing, Parking and UDF.

20.7. The Authority has noted the AAI's submission that the proposed tariff structure is to recover the computed ARR during the Control Period and in case UDF is not levied as proposed, the other components of aeronautical charges including Landing and Parking as well as Fuel Throughput Charge will have to be increased. The Authority also notes that once the quantum of ARR is determined, its recovery depends on how it is proposed to be recovered from different components of revenue accruing to the airport operator, the passenger charge of UDF being one of them.

20.8. The Authority has noted that there is a shortfall (under recovery) in ARR as of 01-04-2011 on account of charging of lesser UDF by AAI.

Table 23: Calculation of Shortfall during the control period (Rs. in crore)

S.no	Particulars	Tariff Year 1 2011-12	Tariff Year 2 2012-13	Tariff Year 3 2013-14	Tariff Year 4 2014-15	Tariff Year 5 2015-16	Total
A	Required Revenue as per ARR as per the building blocks	57.85	59.01	60.78	67.65	74.80	**320.09**
B	Aeronautical Revenue in the year- Actual	21.64	20.28				**41.92**
C	Aeronautical Revenue in the year- with proposed revised rates			30.55	64.82	74.96	**170.33**
D	Shortfall in ARR (A-B) for 2011-12 and 2012-13 and (A-C) for the rest of the years	36.21	38.73	30.23	2.83	(-)0.16	**107.84**
E	PV of shortfall as of 01-04-2011	36.21	33.97	23.26	1.91	(-)0.09	**95.26**

20.9. AAI has in its submission stated that their proposed aeronautical charges (noted UDF) are not adequate to give it fair rate of return on its assets (existing as well as proposed) over the current control period. The Authority has therefore calculated the under recovery of the ARR as above. This under recovery is calculated as of 01-04-2011 and comes to Rs.95 crore. AAI have stated that it proposes to attempt to recover this shortfall during the next control period.

20.10. The Authority notes that Table 23, row D indicates the value of shortfall/excess of ARR in each of the years of the current control period over what AAI should have obtained based on the different regulatory building blocks. It is noted that the total ARR works out to Rs.320.09 crore. Against this ARR, as per row B and C of Table 23, the total aeronautical revenue actually realised/projected to be realised works out to Rs.212.25 crore. Thus, the ARR shortfall/excess over the current control period (without taking into account the time value of the money) is Rs.107.84 crore (row D of Table 23).

20.11. The Authority further notes in this regard that the tariff card as proposed by AAI, is to be made effective from 1st Jan 2014. As indicated in Table 22, the present value of ARR for the current control period as on 01-04-2011 is Rs.246 crore. As indicated in Table 23 row E, the shortfall in ARR will be Rs.95 crore (approx.) (PV as on 01-04-2011) which AAI has requested to be carried forward to the next control period for recovery. The Authority also notes that in case the calculated ARR of Rs.246 crore (PV as on 01-04-2011) is allowed to be recovered in the balance period of two and a quarter years of the current control period, the Authority has estimated that the UDF to be charged per passenger would work out to Rs.954 (approx.) if the other aeronautical tariffs are maintained as proposed by AAI. If this level of UDF is charged to the passengers then there will be no under recovery of ARR for the current control period. In the next control period, therefore, the tariff calculations can be based on the building blocks without the requirement of adding any under recovery for recoupment in the next control period.

20.12. The Authority does not regard this level of UDF as practical at LGBIA. The Authority, therefore, considers the alternative of charging a much lower UDF of Rs.295

per departing passenger (both, domestic and international) as proposed by AAI and smoothening the incidence of UDF over a larger period (that includes the next control period), noting however that this would leave the above shortfall.

20.13. The Authority notes that AAI has projected passenger growth rate at 10%, Cargo growth at 12% and ATM growth at 8%. The Authority also notes that the incidence of UDF would normally be available for five years for next control period as against the period of two and a quarter years during the current control period. As against these positive factors, the Authority also notes that addition to RAB of Rs.106.95 crore would be made during the current control period. This capitalized expenditure would attract depreciation that is likely to be higher than the current levels of depreciation. The Authority has also noted that in the last year of the current control period there does not appear to be any under recovery in the ARR for that year. The depreciation on the proposed additional investment of Rs.106.95 crore has also been factored into the ARR calculations of the last year of the current control period. Having regard to these factors, AAI's expectation that it would be able to recoup the under recovery of Rs.95 crore as of 01-04-2011 with carrying cost during the next control period may be plausible. The Authority therefore notes that the above shortfall needs to be factored at the time of tariff determination with respect to LGBIA for the next Control Period.

20.14. Based on, inter alia, WACC at 14% and all other factors remaining constant, the actual/proposed return to AAI for each year of the current control period works out as under:

Table 24: Actual/Proposed Return during the current control period

Tariff Year 1 2011-12	Tariff Year 2 2012-13	Tariff Year 3 2013-14	Tariff Year 4 2014-15	Tariff Year 5 2015-16
(-)26%	(-)27%	(-)21%	11%	14%

20.15. Table 24 depicted the calculation made as percentage of profit after tax (PAT) to equity. For LGBIA, the Authority has noted that AAI has not apportioned any debt component to LGBIA (refer Para 16.12). Hence for LGBIA WACC is the same as the return on equity. It could be seen that for the first three years of the current control period AAI has not been able to generate adequate income to give it equity return (or what is the same thing for LGBIA as WACC). It is only in the last year of the current control period that it would earn the return on equity (or WACC) of 14% that has been taken into account by the Authority as being reasonable.

20.16. As noted in Para 20.10 above, the total of the ARR shortfall/excess over the control period (without taking into account the time value of the money) is Rs.107.84 crore. The Authority further notes that the shortfall figure of Rs.36.21 crore in the first year (2011-12) of the current control period and Rs.38.73 crore in the second year (2012-13) are actual figures based on the audited statements of AAI. These include elements like depreciation and taxes actually charged or paid respectively in these two years. The Shortfall figures for the remaining three years (2013-14, 2014-15, and 2015-16) are estimates of the shortfall that would arise if the new tariffs (and particularly the UDF) are made effective w.e.f. 01st Jan 2014. If these shortfall figures are to be computed taking into account the time value of money at 14% viz. that of WACC (that is termed as "carrying cost"), the value of shortfall at the end of the current Control Period with carrying cost @ 14% is estimated at around Rs.183 crore calculated as of 01st April 2016. This also includes elements like depreciation, taxes etc. which would need to be trued up on actual and to that extent this figure may undergo change.

20.17. Depending on the traffic obtaining at the end of the control period and AAI submissions regarding tariff determination for the next control period, the Authority will consider, if and to what extent, the calculated shortfall may be reckoned as additional revenue requirement during the next Control Period (over and above what would be required on the basis of calculations only for the next Control Period).

Proposal No. 13. Regarding tariff rate card and short recovery of ARR

13.a. **The Authority proposes to determine the aeronautical tariff as per the tariff rate card as per Annex III, to be effective from 1st January 2014.**

13.b. **The Authority notes that the tariff card would result in short recovery of Rs.95 crore approx as on 01-04-2011 for the current control period as**

compared to what AAI should get based on the building blocks (AAI should get ARR of Rs.246 crore as on 01-04-2011 during the current control period).

13.c. **Depending on the traffic obtaining at the end of the control period and AAI submissions regarding tariff determination for the next control period, the Authority proposes to consider, if and to what extent, the calculated shortfall may be reckoned as additional revenue requirement during the next Control Period (over and above what would be required on the basis of calculations only for the next Control Period).**

21. Proposed Privatisation of LGBIA under PPP model

21.1. The Authority notes that Airport Authority of India has already released an advertisement for “Request for Qualification for Operation, Management and Transfer of Guwahati Airport through Public Private Partnership Model”. The proposal is to select a private entity to which the project may be awarded for undertaking operation, Management and development of Guwahati Airport. The details of which are available on the AAI website at http://www.aai.aero/tenders/RFQ_Guwahati_18092013.pdf

22. Summary of Tentative Decisions

Proposal No. 1. Regarding initial RAB 14

1.a. The Authority proposes to consider the initial RAB at the beginning of the control period as of 01-04-2011 at Rs.78.15 crore for LGBIA as per Table 2. 14

Proposal No. 2. Regarding Project Cost 20

2.a. The Authority proposes to consider allowable project cost of Rs. 123.11 crore (Rs.136.43 crore minus Rs.13.32 crore) comprising of Rs.93.63 crore to be funded by AAI and the balance of Rs.29.48 crore to be met from NEC grants. The Authority therefore proposes to reckon the amount of Rs.93.63 crore as additions to RAB in the current control period. (Refer Table 3 above along with para 8.4),......20

2.b. The Authority also notes that AAI has confirmed to undertake user consultation before execution of the projects, as per the Airport Guidelines. 21

Truing Up: 1. Correction / Truing up for Proposal No. 2 21

1.a. The Authority also proposes that 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. 21

Proposal No. 3. Regarding treatment of Depreciation 24

3.a. The Authority proposes to consider the approved depreciation policy of charging 100% depreciation by AAI. 24

3.b. The residual value for each asset is proposed to be taken as Re.1. 24

3.c. For the year 2011-12, the Authority in consideration of the depreciation policy of AAI proposes to charge full depreciation, irrespective of the month of capitalization. Furthermore the Authority proposes not to consider any depreciation in the year 2011-12 if that particular asset(s) was disposed off/ retired in 2011-12. 24

3.d. From the year 2012-13 onwards, the Authority in consideration of the depreciation policy of AAI proposes to follow charging of full depreciation, in case of asset(s) are used in a financial year for 180 days or more, and if the asset(s) are used for less than 180 days the depreciation will be equivalent to 50% depreciation of the financial year. 24

Truing Up: 2. Correction / Truing up for Proposal No. 3 24

2.a. The Authority also proposes to true up the depreciation considered during the present aeronautical tariff determination exercise, 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. 24

Proposal No. 4. Regarding Roll forward RAB 26

4.a. Authority proposes to consider Roll Forward RAB during the Control Period as given in Table 6 above for the purpose of determination of tariffs for aeronautical services at LGBIA in the current control period. 26

Truing Up: 3. Correction / Truing up for Proposal No. 4 26

3.a. The Authority also proposes to true up the average RAB in the next control period based on the actual capitalized assets in the current control period. 26

Proposal No. 5. Regarding Traffic Forecast 30

5.a. To consider the growth rates proposed by AAI for the balance period of 2013-14 to 2015-16 in the current control period (as per Para 11.9 above). 30

Truing Up: 4. Correction / Truing up for Proposal No. 5 30

4.a. To true up the traffic volume (Passengers, ATM and Cargo) based on actual growth during the current control period while determining aeronautical tariffs for the next control period commencing w.e.f. 01.04.2016. 30

Proposal No. 6. Regarding Revenue from Cargo, Ground Handling Services and Supply of fuel to aircraft 34

6.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 as aeronautical revenue irrespective of the providers of such Aeronautical Services. 34

6.b. The Authority also proposes to treat Fuel Throughput into the airport as an integral part of supply of fuel to aircraft and accordingly proposes to consider the revenue from Fuel Throughput Charges as aeronautical revenue in the hands of AAI. 34

6.c. Furthermore the Authority notes that the approved fuel throughput charges at LGBIA is Rs.112.10 per KL with effect from 1st April 2010 and AAI has not proposed any increase in the Fuel Throughput Charges during the balance period of the current control period. 34

Proposal No. 7. Regarding Non Aeronautical Revenues 37

7.a. The Authority proposes to consider the Non Aeronautical Revenue as given in Table 17 for determination of aeronautical tariffs for the current control period. 37

Truing Up: 5. Correction / Truing up for Proposal No. 7 37

5.a. 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. ...37

Proposal No. 8. Regarding Operation and Maintenance expenditure 40

8.a. The Authority proposes to consider the operational and maintenance expenditure as given in Table 20 above, for the purpose of determination of aeronautical tariffs for the first Control Period. 40

Proposal No. 9. Regarding Taxation **42**

9.a. The Authority proposes to consider tax as actually paid towards calculations of Aeronautical Tariff determination. Accordingly Authority proposes to take taxes actually paid by AAI for F.Y 2011-12 and 2012-13. .... *42*

9.b. The Authority proposes to consider corporate income tax @ 32.445%, for the remaining period of the current control period to estimate the taxes that are likely to be paid by AAI. *42*

Truing Up: 6. Correction / Truing up for Proposal No. 9 .... **42**

6.a. 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, the Authority proposes that this truing up will be done in the next control period commencing 01.04.2016. .... *42*

Proposal No. 10. Regarding WACC (FRoR) **47**

10.a. The Authority proposes to consider the WACC at 14% for Lokpriya Gopinath Bordoloi International Airport for the first control period. *47*

Proposal No. 11. Regarding Quality of Service **50**

11.a. The Authority proposes to use the rebate mechanism as indicated in the Airport Order and the Airport Guidelines for LGBIA. *50*

11.b. The implementation of the rebate scheme is proposed to be made applicable from the 5th Tariff year of the Current Control period i.e., 2015-16. Rebate for year 2015-16 is proposed to be carried out in 2017-18, which is the second tariff year of the next control periods. *50*

11.c. The Authority may consider different parameters of QoS for LGBIA after receiving stakeholders' comments (refer para 17.7) *50*

Proposal No. 12. Regarding Error Correction and Annual Compliance Statement **52**

12.a. The Authority proposes that LGBIA should submit the Annual Compliance Statements for the individual tariff years of the first control period along with the MYTP for the next Control Period. *52*

Proposal No. 13. Regarding tariff rate card and short recovery of ARR **60**

13.a. The Authority proposes to determine the aeronautical tariff as per the tariff rate card as per Annex III, to be effective from 1st January 2014. .... *60*

13.b. The Authority notes that the tariff card would result in short recovery of Rs.95 crore approx as on 01-04-2011 for the current control period as compared to what AAI should get based on the building blocks (AAI should get ARR of Rs.246 crore as on 01-04-2011 during the current control period). *60*

13.c. Depending on the traffic obtaining at the end of the control period and AAI submissions regarding tariff determination for the next control period, the Authority proposes to consider, if and to what extent, the calculated shortfall may be reckoned as additional revenue requirement during the next Control Period (over and above what would be required on the basis of calculations only for the next Control Period). *61*

23. Stakeholders' Consultation Timeline

23.1. The Aggregate Revenue Requirement and Maximum Yield reworked by the Authority are also being put up for stakeholder Consultation along with the ATP submitted by AAI in respect of LGBIA.

23.2. In accordance with the provisions of Section 13(4) of the AERA Act 2008, the proposal contained in the Section – Summary of Tentative views (Para 22 above) read with the relevant discussion in the other Sections of the paper is hereby put forth for stakeholder consultation. To assist the stakeholders in making their submissions in a meaningful and constructive manner, necessary documents are enclosed (**Annexure I to III**). 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 stakeholders in response hereto and by making such decision fully documented and explained in terms of the provisions of the Act.

23.3. The Authority welcomes written evidence-based feedback, comments and suggestions from stakeholders on the proposal made in (Para 22 above), latest by Tuesday, 12th November 2013 at the following address:

Capt. Kapil Chaudhary
Secretary
Airports Economic Regulatory Authority of India
AERA Building,
Administrative Complex,
Safdarjung Airport,
New Delhi- 110003
Email: kapil.chaudhary@aera.gov.in
Tel: 011-24695040
Fax: 011-24695039

Yashwant S. Bhave
Chairperson

24. List of Tables

Table 1: Annual Capacity, Peak hour Capacity and Passenger Throughput (2012-13) 8
Table 2 : Calculation of initial RAB as on 1st April 2011 as per AAI Submission (Rs. In crore)...... 14
Table 3: Cost of the Project and allied Capital works at LGBIA showing the contribution by AAI and through NEC Grants (As given by AAI) (Rs in crore) 15
Table 4: User Consultation as per Airport Guidelines 20
Table 5: Summary of Forecast and Roll Forward RAB and Depreciation for LGBIA (Airport Services): As per AAI Submission (Rs. In crore) 25
Table 6: Summary of the forecast and Roll forward RAB for LGBIA (Airport Services) as per the Authority (Rs. In crore) 26
Table 7: Traffic Growth rates assumed by AAI 27
Table8: Projected Growth Rate as per AAI submission 28
Table 9: Actual Traffic Statistics as per the website of AAI 28
Table 10: CAGR 2003-04 to 2012-13 for LGBIA (10 years) (in %) 29
Table 11: Traffic Growth Rate- calculated as the Average of growth projected in MYTP and 10 year CAGR 30
Table 12: List of Cargo Handling Agencies.. 31
Table 13: List of Ground Handling Agencies.. 31
Table 14: Historical and Projected Revenue generating area at LGBIA (in Sq. Mts) 35
Table 15: Assumptions taken by AAI for each item of Non Aeronautical Revenue at LGBIA 35
Table 16: Revenue from Non Aeronautical Sources actual/projected by AAI (Rs. In crore)...... 36
Table 17: Revenue from Non Aeronautical Sources assessed by Authority (Rs. In crore)......... 37
Table 18: Assumptions made by AAI for each item of Operation and Maintenance Expenditure 38
Table 19: Summary of O&M expenditure actual/projected by AAI (Rs. in crore).................... 39
Table 20: Summary of O&M expenditure assessed by Authority (Rs. crore)............................... 39
Table 21: ARR and Yield as per AAI (Rs. in crore)... 53
Table 22: ARR and Yield as per Authority (Rs. in crore).. 54
Table 23: Calculation of Shortfall during the control period (Rs. in crore) 57
Table 24: Actual/Proposed Return during the current control period 59

25. List of Annexures

Annexure I	MYTP Submission and additional Clarification furnished by AAI
Annexure II	Letter No. AV.20036/19/2013-AD from Ministry of Civil Aviation Dated: 24-09-2013
Annexure III	ATP Submitted by AAI