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Consultation Paper No. 16/2014-15

सत्यमेव जयते

Airports Economic Regulatory Authority of India

Determination of Aeronautical Tariffs in respect of Indira Gandhi International Airport, Delhi for the Second Control Period (01.04.2014 – 31.03.2019)

New Delhi: 28th January, 2015

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1. Brief facts

1.1. In the year 2003, the Airports Authority of India Act, 1994, was amended to enable setting up of private airports and the leasing of existing airports to private operators. The Amendment Act of 2003 was brought into effect on 01.07.2004. In pursuance thereof, the Government of India (GoI) had approved the modernization, up-gradation and development of the Delhi and Mumbai Airports through private sector participation. Thereafter, Airports Authority of India (AAI) initiated the process of selecting a lead partner through competitive bidding for executing the modernization projects.

1.2. As far as Indira Gandhi International (IGI) Airport, New Delhi is concerned, a consortium led by the GMR Group was awarded the bid for operating, maintaining, developing, designing, constructing, upgrading, modernising, financing and managing the Airport. Post selection of the private consortium, a special purpose vehicle, namely Delhi International Airport Private Limited (DIAL), was incorporated on 1st March 2006 with AAI retaining 26% equity stake and balance 74% of equity capital acquired by members of consortia. The GMR consortia comprised GMR Group entities, Fraport AG, Malaysia Airports Holdings Bhd and India Development Fund (which exited the consortium subsequently). On 4th April 2006, DIAL signed the Operation, Management and Development Agreement (OMDA) with AAI and took over the operations of IGI Airport on 3rd May 2006.

1.3. DIAL entered into various agreements with AAI, GoI and Government of National Capital Territory of Delhi (GoNCT) to give effect to the transaction. As indicated in para 1.2 above, the OMDA was executed between DIAL and AAI on 4th April 2006, whereby AAI granted DIAL the exclusive right and authority, during the term of agreement, to undertake some of the functions of AAI, namely the functions of operations, maintenance, development, design, construction, up-gradation, modernizing, finance and management of the IGI Airport and to perform services and activities constituting aeronautical services and non-aeronautical services (but excluding Reserved activities) at the airport. The OMDA has a term of 30 years, with DIAL having a right to extend the agreement for a further period of 30 years, subject to its satisfactory performance under the various provisions governing the arrangement between DIAL and AAI. In addition to OMDA, DIAL also entered into the State Support Agreement (SSA) with GoI on 26th April 2006 which outlined the support from GOI. Besides OMDA and SSA, Lease Deed Agreement, State Government Support Agreement (SGSA), Shareholders Agreement (SHA), CNS/ATM Agreement, etc., were also entered into between DIAL and relevant parties.

1.4. Provisions regarding “Tariff and Regulation” have been made in Chapter XII of OMDA and Clause 3.1 read with Schedule 1 of the SSA.

1.5. Clause 3.1 of SSA states that GOI intended to establish an independent economic regulatory authority (Economic Regulatory Authority) having the responsibility of regulation of aeronautical charges, and till such time as the Economic Regulatory Authority commences regulating Aeronautical Charges, the same shall be approved by GOI. Accordingly, pursuant to setting up of Airports Economic Regulatory Authority (AERA) of India vide the AERA Act, 2008 and notification of the powers and the functions of the Authority on 01.09.2009, DIAL submitted its Multi-year Tariff Proposal (MYTP) to the Authority for its consideration and approval, on 20th June 2011. DIAL, in that submission, had considered the first regulatory period as a 5 year period commencing FY 2009-10 and up to FY 2013-14.

1.6. Pursuant to their submission, a series of discussions / meetings / presentations were held on the proposal, including discussions in respect of the financial model developed by DIAL for this purpose. Subsequently Consultation Paper No. 32 / 2011-12 dated 03.01.2012 in respect of Determination of Aeronautical Tariff in respect of IGI Airport, New Delhi for the 1st Control Period from 01.04.2009 to 31.03.2014 (subsequently referred to as DIAL Consultation Paper 32 / 2011-12 in this document) was put up by the Authority and a stakeholder consultation was held to discuss the views of various stakeholders on this Paper.

1.7. The Authority carefully considered and analysed the views of various stakeholders on the proposals of the Authority on various building blocks in respect of determination of aeronautical tariff for the 1st control period in respect of IGI Airport, Delhi. The Authority determined the aeronautical tariff vide its Delhi Tariff Order 03/2012-13 dated 24.04.2012 in the matter of Determination of Aeronautical Tariff in respect of IGI Airport, New Delhi for the 1st Control Period from 01.04.2009 to 31.03.2014 (subsequently referred to as DIAL Tariff Order 03 / 2012-13 in this document).

1.8. DIAL has now submitted a proposal for revision of tariffs for aeronautical services at IGI Airport, New Delhi, for the Authority's consideration and approval for the second Control Period starting 1st April 2014 (01.04.2014 to 31.03.2019).

1.9. Briefly stated, DIAL has filed their multi-year tariff proposal (MYTP) seeking a one-time increase of 18.79% in the X Factor for determination of aeronautical tariffs (for the 5 year tariff period FY 2014-15 to 2018-19, and considered tariff revision from 01.04.2014), with an annual CPI correction. DIAL subsequently revised its MYTP vide its submission dated 23.07.2014, based on availability of audited numbers for FY 2013-14. In the revised submission dated 23.07.2014, DIAL sought a one-time increase of 42.6% in the X Factor for determination of aeronautical tariffs (for the 5 year tariff period FY 2014-15 to 2018-19, and considered tariff revision from 01.11.2014), with an annual CPI correction.

1.10. A Consultant was engaged to assist the Authority in the review of the financial model prepared and submitted by DIAL as a part of its tariff application. Scope of the assignment included assistance in review and assessment of the models' arithmetic accuracy, check for logical and calculation integrity of the models, and assistance in undertaking sensitivity analyses. The Consultant is required to assist the Authority in cell-by-cell inspection and sheet-by-sheet review of the arithmetic accuracy of formulae and calculations contained in the model, including tracing items through the various interlinked sheets and calculations back to the input data; verifying the correct application of addition, subtraction, multiplication and division, based on standard business and financial logic; verifying that the links within the model are working accurately; assessing that any macros that govern calculations in the model are running as intended; assessing that the model is logically constructed, internally consistent with respect to calculations and formulae and is fit for the purpose of undertaking analyses of relevant aspects for tariff determination by the Authority; assessing that assumptions in the Financial Model are at one place and that there are no hard coded numbers in calculations in the Financial Model that might influence calculation results in unexpected ways and checking whether the assumptions listed in the assumption sheet are getting correctly reflected in the various others sheets of the financial model.

1.11. Further, the Consultant is also required to assist the Authority in ensuring that the Financial Model accurately reflects the Authority's decisions towards various provisions under the concession offered by the Central Government with respect to the key agreement(s), and financial documents as also the provisions in the AERA Act 2008.

1.12. The Consultant is further required to assist the Authority in identifying such elements that may need to be certified from Auditors / Chartered Accountants of DIAL and also assist the Authority in reviewing the implications / change in results through sensitivity analysis of various factors as directed by the Authority.

1.13. During the course of the review and clean-up of the financial model, DIAL was requested to furnish to the Authority, certifications from its Statutory Auditors in support of figures taken as the base for their projections/ forecast as well as other inputs / clarifications.

1.14. DIAL has made submissions dated 10.11.2013, 16.01.2014, 03.03.2014, 11.04.2014, 14.04.2014, 20.04.2014, 15.05.2014, 10.07.2014, 23.07.2014, 20.08.2014, 12.09.2014, 20.09.2014, 13.10.2014, 21.11.2014, 01.12.2014, 11.12.2014 and 15.12.2014, in response to the clarifications / information desired by the Authority. The Authority has addressed these submissions under respective sections of this Consultation Paper.

1.15. Ministry of Civil Aviation vide their letter dated 15.01.2015 have forwarded the AAI's letter dated 31.12.2014 and DIAL's letter dated 06.01.2015. The Authority has dealt with these issues in the various sections of this Consultation Paper as highlighted in section 26 below.

1.16. The Authority has also undertaken several discussions with DIAL to understand and reconcile their submissions. These submissions have been examined and based on the adequacy of response, have been considered by the Authority towards its review of the MYTP. Wherever required, the Authority has requested for additional information, further to the clarifications submitted by DIAL. Upon receipt of those clarifications the Authority may give appropriate consideration at the time of determination of the aeronautical tariff for the second Control Period.

1.17. The Authority has also determined the development fee for DIAL and the details are provided in Para 5 below.

1.18. The Authority's examination of the DIAL submissions and its proposals with respect to various building blocks has been presented in the subsequent and respective sections.

2. DIAL Appeal against Delhi Tariff Order No. 03/2012-13

2.1. The Authority notes that DIAL has appealed against the Authority’s Delhi Tariff Order 03 / 2012-13. DIAL, in this regard, has submitted as below:

> *“We had got the approval of our entitlement for the first control period vide tariff Delhi Tariff Order 03/2012-13 (Determination of Aeronautical Tariff in respect of IGI Airport, New Delhi for the 1st Regulatory Period 01.04.2009-31.03.2014) vide order dated 20th April 2012. However being aggrieved by the aforesaid order we have filed an appeal vide Appeal No. 10/2012.*
>
> *We reserve our right to amend the true up computation based on the legal outcome of the aforesaid or any other legal proceeding in this regard.”*

2.2. In this regard, the Authority notes the following:

2.2.1. The Authority's Delhi Tariff Order 03/2012-13 was challenged by DIAL before the Ld. AERAAT by way of statutory Appeal No. 10/2012-13. The grounds of appeal considered by DIAL are as follows:

2.2.1.a. Non-aeronautical revenues: Use of projections/ forecast for non-aeronautical revenues;

2.2.1.b. Non-aeronautical revenues: Treatment of revenue from area disallowed as per respondent's order No. 28/ 2011-12 dated 08.11.2011 CGF Order;

2.2.1.c. Calculation of hypothetical regulatory asset base (HRAB): Non-inclusion of revenue from cargo services, cargo screening and CUTE counter charges in the HRAB; and

2.2.1.d. Calculation of hypothetical regulatory asset base (HRAB): Overlap of man power for the purpose of HRAB.

2.2.1.e. Classification of revenues as aeronautical or non-aeronautical: Common User Terminal Equipment (CUTE) counter charges (as aeronautical or non-aeronautical service)

2.2.1.f. Classification of revenues as aeronautical or non-aeronautical: Treatment of bridge mounted equipment (as aeronautical or non-aeronautical service);

2.2.1.g. Calculation of regulatory asset base (RAB): Asset allocation mix (between aeronautical and non- aeronautical)

2.2.1.h. Calculation of regulatory asset base (RAB): Future capital expenditure and future maintenance capital; and

2.2.1.i. Calculation of regulatory asset base (RAB): Return on equity during the construction period.

2.2.1.j. Decision regarding adjustment of corporate tax;

2.2.1.k. Adjustment in respect of bad debts;

2.2.1.l. Lack of return on Refundable security deposit (RSD);

2.2.1.m. Rate of Return on equity;

2.2.1.n. Methodology for calculation of X factor;

2.2.1.o. Operating expenses and allocation mechanism and efficiency factor: Treatment of manpower cost of inline baggage screeners;

2.2.1.p. Operating expenses and allocation mechanism and efficiency factor: Issues relating to development fee (DF):

2.2.1.q. Operating expenses and allocation mechanism and efficiency factor: Collection charges; and

2.2.1.r. Operating expenses and allocation mechanism and efficiency factor: Interest on DF Loan.

2.2.1.s. Issue of increase of the aeronautical charges by 10% of base airport charges (BAC).

2.2.1.t. Treatment of Cargo, Ground handling and Fuel Throughput Revenue

2.2.2. Similar cross appeals were also preferred by the Federation of Indian Airlines, Lufthansa German Airlines and lATA. The said appeals were accompanied by an application for stay of Delhi Tariff Order 03 / 2012-13 which were not pressed/not granted by the Ld. AERAAT.

2.2.3. DIAL, in December 2013, also preferred IA No. 35 of 2013 inter-alia seeking a direction that the Authority shall not proceed to decide tariff for the Second Control Period until Appeal No. 10/2012 is disposed of by the Ld. AERAAT. Notice was issued thereon by the Ld. AERAAT's order dated 05.12.2013. The said application was not specifically pressed thereafter and the appeals continued to be heard from time to time.

2.2.4. DIAL then filed Writ Petition (Civil) NO.5476/2014 before the Hon'ble Delhi High Court inter-alia praying as under:

" i) The Appeal No.10 of 2012 should be decided as expeditiously as possible in a time bound manner;

ii) the existing status quo in respect of the Aeronautical Tariff for IGI Airport, New Delhi dated 20.04.2012 should continue till final disposal of the Appeal, in line with the extensions granted by the Respondent No.2 on 26.03.2014 and 02.05.2014"

2.2.5. The Hon'ble High Court of Delhi passed an Order dated 03.09.2014 an extract of which is reproduced below:

"In the given circumstances, it is expected that either the tariff fixed earlier would continue or a fresh arrangement would be made after 31.10.2014 for a further period after 31.10.2014. If no such arrangement is made or order is passed by any authority i.e. AERA or AERAAT, the order passed on 21.04.2014 shall continue till further orders are passed by any competent authority."

2.2.6. In response, DIAL preferred an LPA No. 670/2014 which came up on 29.09.2014 on which the Hon'ble High Court of Delhi passed the interim order an extract of which is reproduced below:

"The tariff determined by the Respondent No.2 for the First Regulatory Period shall be continued until further orders.

However, this shall not preclude the Respondent No.2 to determine the tariff for the Second Regulatory Period following due process of law."

2.3. The Authority in its Order No. 13/2014-15 dated 15.10.2014 stated that:

2.3.1. It is in the process of determining the tariff for the second Control Period and is cognizant of the fact that the issue of Consultation Paper is likely to take some time. Hence in the interest of avoidance of a regulatory vacuum and further to the above order of the Hon'ble Delhi High Court, that pending a fresh determination for the Second Regulatory Period, the present tariff Order dated 20.04.2012 (issued on 24.04.2012) shall continue.

2.3.2. The Authority had extended the operation of Tariff Order dated 20.04.2012 (issued on 24.04.2012) up to 31.01.2015 or until the final determination of the tariffs for the second Control Period (i.e. 2014-2019), whichever is earlier; subject to above quoted order dated 29.09.2014 passed by the Hon'ble Delhi High Court in LPA670/2014.

2.4. The Authority is in receipt of the Delhi High Court Order dated 22.01.2015 in respect of the above appeal. The Hon'ble High Court in its judgement has directed as under,

"Accordingly, the order under appeal is set aside and the appeal shall stand disposed of with the following directions:

(i) The Union of India, Ministry of Civil Aviation shall take the necessary steps to finalize the selection and appointment of the Chairperson and members of AERAAT and to make it functional at the earliest, within four weeks here from.

(ii) We further direct AERAAT to decide the appeals aforesaid within eight weeks therefrom i.e. latest within twelve weeks here from.

(iii) The tariff determined by AERA for the First Control Period vide Tariff Order No.03/2012-13 dated 20.04.2012 shall continue till the disposal of the appeals pending against the said Tariff Order, by the AERAAT."

2.5. The Authority is accordingly issuing a separate public notice to inform all concerned about the continuation of the tariff as determined by the Authority for the first Control Period vide its Delhi Tariff Order No. 03/2012-13 dated 24.04.2012 as directed by the Hon'ble High Court.

2.6. The Authority has also noted that the Hon'ble High Court in its judgement has inter alia observed as under,

> *"It may be made clear that this Court never restrained AERA from discharging its statutory functions of determination of tariff for the Second Control Period. In fact, in the interim order dated 29.09.2014 itself it was made clear that the AERA is not precluded to determine the tariff for the Second Control Period following due process of law. Therefore, the question of restraining the AERA from discharging its statutory function does not arise at all."*

2.7. In view of the observations of the Hon'ble High Court (refer para 0 above) the Authority has decided to go ahead with the tariff determination process for the second Control Period and issue the Consultation Paper in order to commence the consultation process.

2.8. The Authority also proposes that the revenue so collected by the airport operator (DIAL) during the intervening period till the implementation of the tariff determined by the Authority for the second Control Period shall be accounted towards the ARR for the second Control Period staring w.e.f 01.04.2014.

3. Principles for Determination of Aeronautical Tariff

a. DIAL Submission on Principles of Determination of Aeronautical Tariff

3.1. DIAL has submitted its philosophy for computation of Tariff and X factor. DIAL has proposed its principles as below:

"The current tariff filing is based on the principles laid down in the concession documents of DIAL.

SSA authorizes DIAL, under Article 3.1.2 and Schedule 6, to levy Aeronautical Charges for various Aeronautical Services at the rates set forth in Schedule 8 of SSA. Further, the same schedule requires, from the 4th year after the Effective Date, Aeronautical Charges will be set by Economic Regulatory Authority/GoI in accordance with the formula set forth in Schedule 1 of the SSA.

1. Target Revenue Determination:

Target Revenue (TR) is determined by aggregating the formula:

RABi X WACCi + OMi + Di + Ti – Si

Where;

- ***RAB:*** *Regulated Asset Base pertaining to Aeronautical assets only. The assets other than Aeronautical Assets will be excluded from the scope of RAB.*
- ***WACC:*** *Weighted average cost of capital*
- ***OM:*** *Efficient Operating and Maintenance costs pertaining to aeronautical services.*
- ***D:*** *Annual Depreciation charged on aeronautical assets based on depreciation reference rates prescribed as per the Companies Act*
- ***T:*** *Corporate Income taxes pertaining to aeronautical services only.*
- ***i:*** *Number of year in the regulatory control period*
- ***S:*** *Subsidy to the extent of 30% of the Gross Revenue generated from the Revenue Share Assets, which are defined to include:*

a. Non Aeronautical Assets (defined in greater detail in following Para.)

b. Assets required for provision of aeronautical related services not including in the Non-Aeronautical Assets

However, Gross Revenue from assets other than Aeronautical and Non-Aeronautical i.e. revenues from ***Non-Transfer Assets*** *are not included for the purpose of determining the revenue base on which cross subsidy is calculated.*

OMDA defines such assets as below:

"Non Transfer Assets" *shall mean all assets required or necessary for the performance of Non Aeronautical services as listed in Part II of Schedule 6 hereof as located at the Airport Site (irrespective of whether they are owned by the JVC or any third entity provided the same are not Non Aeronautical Assets).*

2. Determination of Equalisation Factor (X):

*The methodology of calculating '****X'*** *factor has been given in the SSA. The value of 'X' is derived by equating the sum of present value of the target revenue with the sum of present value of the Project aeronautical revenues, applying the forecasted traffic volume.*

The following equation is used to solve the value of 'X' Where;

AC_{ij}: *Average aeronautical charge for the Jth category of aeronautical revenue in the ith year*

T_j *= volume of the Jth category of aeronautical traffic in the ith year*

X *= escalation factor*

n = *number of years considered in the regulatory period*

m *= number of categories of aeronautical revenue e.g. landing charges, parking charges, housing charges, Facilitation Component etc.*

The price path shall be set by considering the value of X, derived from the following equation, and the projected CPI inflation index for arriving at the charges for the subsequent years in the regulatory control period.

$$AC_i = AC_{i-1} \; x \; (1 + CPI - X)$$

CPI *= average annual inflation rate as measured by change in the All India Consumer Price Index (Industrial Workers) over the regulatory period.*

As such inflationary increase over and above tariff increase will be allowed while determining the aeronautical charges. In our current filing, we have not considered any inflationary increase and it has been assumed that the regulator will adjust the charges annually based on the actual CPI data."

3.2. Referring to its request for inflationary increase over and above the tariff increase, DIAL has also submitted a report on CPI inflation by RBI, as an annexure, as a part of their filing. DIAL stated as under,

"

Inflation:

In addition to the value of 'X' determined by equating the NPV of the Target and the Actual revenues, CPI Inflation will be added to the tariff. Accordingly, it is understood that the regulator will give an allowance towards inflation (CPI) over and above the target revenue being submitted herewith based on actual CPI numbers.

RBI Forecast of CPI:

RBI has forecasted a growth rate of 7.7% (Mean growth) for the next five year.

Table A.7: Annual Average Percentage Change

	Annual average percentage change over the next five years				Annual average percentage change over the next ten years			
	Mean	Median	Max	Min	Mean	Median	Max	Min
Real GDP	6.9	6.75	8.0	6.3	7.2	7.25	8.5	6.0
WPI Inflation	6.1	6.20	8.0	4.7	5.6	5.90	6.5	4.0
CPI-IW Inflation	7.7	7.50	10.0	6.0	6.8	6.50	8.5	4.5

The relevant extract from RBI Forecast is reproduced here, (Results of the Survey of Professional Forecasters on Macroeconomic Indicators – 24th Round (Q1:2013-14)

(Source: rbidocs.rbi.org.in/rdocs/Publications/PDFs/01MSPF270713.pdf)

Pricing Strategy for aeronautical charges:

SSA has laid down determination of tariff based on price cap formula. DIAL has the flexibility to develop its own tariff structure and innovatively design the *tariff structure in line with market positioning and marketing objectives. The current proposal is for the approval of a MYTP. We would submit the proposed tariff structure to Authority at a later date that may be a combination of various aeronautical charges."*

3.3. With regards to the issue of consideration of non-aeronautical revenue in the determination of ARR, DIAL stated as under,

"Cross Subsidy from Non-Aeronautical Income:

As envisaged in the SSA, DIAL need to offset 30% from the total of non-aeronautical income as contribution from non-aeronautical revenue towards setting aeronautical charges. As a corollary, any non-aeronautical income accruing from investment disallowed as part of Project Cost is not to be used for cross subsidization.

The SSA states that only the gross revenue from the 'Revenue Share Assets' will be considered while determining the total subsidy contribution.

The Revenue Share Assets below SSA are:

Non Aeronautical Assets; and

Assets required for provision of aeronautical related services arising at the airport and not considered in revenue from Non Aeronautical Assets.

OMDA lays down the following:

"Non-Aeronautical Assets" shall mean:

1. all assets required or necessary for the performance of Non-Aeronautical Services at the Airport as listed in Part I of Schedule 6 and any other services mutually agreed to be added to the Schedule 6 hereof as located at the Airport (irrespective of whether they are owned by the JVC or any third Entity); and

2. All assets required or necessary for the performance of Non-Aeronautical Services at the Airport as listed in Part II of Schedule 6 hereof as located at the Airport (irrespective of whether they are owned by the JVC or any third Entity), to the extent such assets (a) are located within or form part of any terminal building; (b) are conjoined to any other Aeronautical Assets, asset included in paragraph (i) above and such assets are incapable of independent access and *independent existence; or (c) are predominantly servicing/ catering any terminal complex/cargo complex and shall specifically include all additional land (other than the Demised Premises), property and structures thereon acquired or leased during the Term, in relation to such Non-Aeronautical Assets.*

Therefore cross subsidy of 30% shall be computed on gross revenue from Part I of Schedule 6 of OMDA as well as that from Part II of Schedule 6 to the extent these latter assets:

a. form part of terminal building; or

b. are conjoined to an aeronautical asset and such assets are incapable of independent access and independent existence; or

c. Predominantly servicing/catering any Terminal complex/ Cargo complex.

***Non Transfer Assets**: Non Transfer Assets have been defined in OMDA as below:*

"Shall mean all assets required or necessary for the performance of Non-Aeronautical Services as listed in Part II of Schedule 6 hereof as located at the Airport Site (irrespective of whether they are owned by the JVC or any third entity), provided the same are not Non-Aeronautical Assets."

Therefore, Non Transfer Assets are those that are not Non-Aeronautical Assets. The gross revenue from Non-Transfer Assets shall not contribute towards (30% or any other percentage) for cross-subsidisation while determining the target revenue.

Cargo, Ground Handling:

In accordance with the provisions of SSA and OMDA, Cargo and Ground Handling are explicitly stated as Non-Aeronautical services and therefore would entail contribution to the extent of 30% of their respective earnings while determining the Aeronautical Charges.

While Schedule 5 of OMDA earmarks Fuel Farm Infrastructure as aeronautical services, treatment of fuel throughput charge has not been mentioned. Fuel

Throughput charge is akin to royalty/profit share and thus should be treated as non-aeronautical. However the Authority has treated fuel throughput as aeronautical charge in the first control period. Without prejudice to our right to consider the fuel throughput as non-aeronautical, for the purpose of this filing, the fuel throughput charge has been considered as aeronautical charge."

b. Authority's Examination of DIAL's submission on Principles of Determination of Aeronautical Tariff

3.4. The Authority has carefully examined the submissions of DIAL with respect to the principles of determination of aeronautical tariff. The Authority's examination of these submissions is as under:

Legislative Policy Guidance and Principles

3.5. The legislature has provided policy guidance to the Authority regarding the determination of tariff for the aeronautical services under the provisions of the AERA Act. The Authority is required to adhere to this legislative policy guidance in discharge of its functions in respect of the major airports. These functions are indicated in Section 13 (1) of the AERA Act, which reads as under:

3.5.1. To determine the tariff for the aeronautical services;

3.5.2. To determine the amount of the development fees in respect of major airports;

3.5.3. To determine the amount of the passenger service fee levied under rule 88 of the Aircraft Rules, 1937 made under Aircraft Act, 1934;

3.5.4. To monitor the set performance standards relating to quality, continuity and reliability of service as may be specified by the Central Government or any authority authorised by it in this behalf;

3.5.5. To call for such information as may be necessary to determine the tariff under Clause 13 (1) (a)

3.5.6. To perform such other functions relating to tariff, as may be entrusted to it by the Central Government or as may be necessary to carry out the provisions of this Act.

3.6. Further to the functions to be performed by the Authority, the AERA Act 2008 also provides policy guidance on the factors, which are to be considered by the Authority in performing these functions. As per section 13 (1) (a) of the AERA Act, the legislature requires the Authority to determine tariff for the aeronautical services taking into consideration the following factors:

3.6.1. The capital expenditure incurred and timely investment in improvement of airport facilities;

3.6.2. The service provided, its quality and other relevant factors;

3.6.3. The cost for improving efficiency;

3.6.4. Economic and viable operation of major airports;

3.6.5. Revenue received from services other than the aeronautical services;

3.6.6. Concession offered by the Central Government in any agreement or memorandum of understanding or otherwise;

3.6.7. Any other factor which may be relevant for the purposes of the Act

3.7. As per Section 13 (1) (a) of the Act, the Authority is to determine the tariff for the aeronautical services taking into consideration, inter-alia, *"(vi) the concession offered by the Central Government in any agreement or memorandum of understanding or otherwise".* Insofar as IGI Airport, Delhi is concerned, the principles of tariff fixation and mechanism thereof have been laid down in Clause 3.1 read with Schedule 1 of the SSA.

3.8. Insofar as the submission of DIAL regarding the flexibility to design the tariff structure is concerned, the Authority has carefully examined the provisions of OMDA and SSA and has not found specific reference to any such provision on flexibility of tariff structuring by DIAL. As per Clause 3.1 of SSA, the Government has shown its intention to establish an independent economic regulatory authority for regulation of aeronautical charges. Under the provisions of the AERA Act, 2008 the Government has accordingly set up AERA and given it the power to determine tariff in respect of major airports including IGI Airport, Delhi. Therefore the contention of DIAL that SSA provides it the flexibility to design the tariff structure is without any merit.

3.9. The Authority vide its Order No. 13/2010-11 dated 12.01.2011 (Airport Order) had laid down the overall approach which it would adopt for regulation of aeronautical services provided by the Airport Operators. In para 17.5.13 of the Airport Order, the Authority had indicated that:

"The Authority proposes to operationalise the regulatory philosophy and approach as decided above through detailed guidelines. A draft of "The Airports Economic Regulatory Authority of India (Terms and Conditions for Determination of Tariff for Airport Operators) Guidelines, 2011" is being issued separately for stakeholder consultation before being finalised."

3.10. Accordingly after appropriate stakeholder consultations, the Authority finalized its Airport Guidelines, which was issued on 28.02.2011. Para 1.4 of these Guidelines contain provisions with respect to Indira Gandhi International Airport, New Delhi and Chhatrapati Shivaji International Airport, Mumbai as under:

"These Guidelines shall be applicable to the Indira Gandhi International Airport, New Delhi, Chhatrapati Shivaji International Airport, Mumbai and the Civil Enclaves at Goa and Pune in such form and manner as the Authority may by a separate order determine."

3.11. Accordingly the Authority issued the Tariff Determination Orders in respect of IGI Airport, New Delhi, on 24.04.2012 – DIAL Tariff Order 03 / 2012-13 after analysing the provisions of SSA as well as other relevant documents viz. OMDA etc. The Authority had carefully examined the covenants of SSA and OMDA in respect of DIAL and MIAL for its implications on principles and mechanics of tariff fixation and has accordingly considered these provisions while determining the aeronautical tariff in respect of these airports for the 1st control period. The Authority's examination of these covenants has been detailed in its Delhi Tariff Order 03 / 2012-13 'in the matter of Determination of Aeronautical Tariff in respect of IGI Airport, New Delhi' and Order No 32 / 2012-13 dated 15.01.2013 'in the matter of Determination of Aeronautical Tariff in respect of CSI Airport, Mumbai' for the 1st Regulatory Period (01.04.2009-31.03.2014).

3.12. In line with the above approach, the Authority proposes to determine the Target Revenue (TR) by aggregating terms in the following formula:

$$TR_i = RB_i \times WACC_i + OM_i + D_i + T_i - S_i$$

Where;

- TR = target revenue
- RB = regulatory base pertaining to Aeronautical Assets and any investments made for the performance of Reserved Activities etc. which are owned by DIAL. The Assets other than Aeronautical Assets will be excluded from the scope of RAB.

$$RB_i = RB_{i-1} - D_i + I_i$$

- Where: for the first regulatory period would be the sum total of
  - the Book Value of the Aeronautical Assets in the books of DIAL and
  - the Hypothetical Regulatory Base computed using the then prevailing tariff and the revenues, operation and maintenance cost, corporate tax pertaining to Aeronautical Services at the Airport, during the financial year preceding the date of such computation
- WACC = nominal post-tax weighted average cost of capital, calculated using the marginal rate of corporate tax
- OM = efficient operation and maintenance cost pertaining to Aeronautical Services
- D = Annual Depreciation charged on aeronautical assets based on depreciation reference rates prescribed as per the Companies Act, 1956 and now amended under the Companies Act, 2013
- T = Corporate taxes on earnings pertaining to Aeronautical Services
- S = Subsidy to the extent of 30% of the Gross Revenue generated from the Revenue Share Assets, which are defined to include:
  - Non-Aeronautical Assets; and
  - Assets required for provision of aeronautical related services arising at the Airport and not considered in revenues from Non-Aeronautical Assets (e.g. Public admission fee etc.)
- i = Number of year in the regulatory control period

3.13. Based on its reading of the provisions of SSA and DIAL submissions (refer Paras 3.1 and 3.2 above), it appears to the Authority that the principles laid out in the SSA are broadly consistent with the Authority's regulatory philosophy and approach as stated in its Airport Order and Airport Guidelines. It is noted that the draft of the SSA formed part of the bid documents in respect of IGI Airport. It has been a consistent view of the Authority that the provisions of the SSA should be taken on board, as far as these are consistent with the provisions of the Act. Further, the provisions of SSA should also be reconciled to the extent possible with the provisions of the Act. It is only where the provisions of the SSA are not consistent with the Act and cannot be reconciled thereto, a deviation from the provisions of SSA may need to be made to the extent of repugnancy to the express provisions of the Act. There are certain important provisions in Schedule 1 of SSA, which are at variance with the approach decided by the Authority in respect of other airports, which can be summarised as below:

3.13.1. Shared Till – 30% of the gross revenue generated by the JVC from revenues share assets shall be used to subsidize Target Revenue. The costs in relation to such revenue shall not be included while calculating aeronautical charges.

3.13.2. Hypothetical RAB – The opening RAB for the first regulatory period would be the sum total of the Book Value of the Aeronautical Assets in the books of the JVC and the hypothetical regulatory base computed using the then prevailing tariff and the revenues, operation and maintenance cost, corporate tax pertaining to Aeronautical Services at the Airport, during the financial year preceding the date of such computation.

3.13.3. No cost pass through – (read with Clause 3.1.1 of SSA)-the Upfront Fee and the Annual Fee paid/payable by the JVC to AAI under the OMDA shall not be included as part of costs for provision of aeronautical services and no pass through would be available in relation to the same.

3.14. The Authority has also noted the difference between the provisions of the Act and those of OMDA in treating certain services as aeronautical or non-aeronautical. For example, the Act mentions services provided for ground handling services relating to aircraft, passengers and cargo at an airport as well as services provided for cargo facility at an airport as aeronautical services, whereas OMDA mentions cargo handling, cargo terminals, and ground handling services under non-aeronautical services. The Authority has extensively deliberated on its treatment of these services in paras 20.8 to 20.29 below and proposes to treat the revenue from cargo and ground handling services as non-aeronautical revenue.

3.15. The above principles (Paras 3.12, 3.13 and 3.14 above), including the variances, have been considered by the Authority in its determination of aeronautical tariff in respect of IGI Airport, Delhi for the first Control Period from 01.04.2009 till 31.03.2014. The Authority proposes to consider the same principles for its determination of aeronautical tariff for the current Control Period from 01.04.2014 till 31.03.2019.

3.16. The Authority has noted the submission from DIAL that “any non-aeronautical income accruing from investment disallowed as part of Project Cost is not to be used for cross subsidization”. The Authority, however, notes that DIAL, in its submissions, has not highlighted that it has either generated certain revenue from such disallowed area, or projects to generate certain revenue from such area in the future. The Authority had disallowed a non-aeronautical area of 8,652 sq.m. while determining the allowable project cost and DF with respect to the IGI Airport, Delhi. The Authority had also sought stakeholder comments on this matter in its Consultation Paper No. 32/2011-12 dated 03.01.2012 and discussed the same in detail. In view of the fact that the assets built in this 8,652 sq.m were considered as over and above the requirement in respect of the airport project, they were disallowed from the project cost. The Authority had elaborated that nonetheless these assets were created and used by the airport operator. The Authority has further added that it has neither prohibited the airport operator from utilising such assets nor was the airport operator asked to decommission such assets. Furthermore, it was added that neither the SSA nor the OMDA provide for any exclusions from non-aeronautical revenue for cross subsidy purpose wherever such non-aeronautical revenue is arising from such area or space the project cost of which has been excluded by the Regulator. Thus, the Authority had, vide Decision no. 21 of its Delhi Tariff Order 03 / 2012-13, decided that though an area of 8,652 sq.m. was disallowed in the DF Order, the total non-aeronautical revenue would still be reckoned towards the determination the aeronautical tariff without the exclusion proposed by DIAL. Accordingly the Authority is not persuaded to accept DIAL's submission of not considering the revenue generated from such disallowed area.

3.17. The Authority also refers to the submission by DIAL that *"In addition to the value of 'X' determined by equating the NPV of the Target and the Actual revenues, CPI Inflation will be added to the tariff. Accordingly, it is understood that the regulator will give an allowance towards inflation (CPI) over and above the target revenue being submitted herewith based on actual CPI numbers"*. The Authority notes that X-factor is determined based on the Target Revenue determined by it and the projected aeronautical revenue for a Control Period. The Target Revenue is determined by aggregating various regulatory building blocks as presented in para 3.12 above. The Authority appropriately considers inflationary increase in the components of building blocks. For the purpose of clarity, the Authority considers an inflationary increase in the operating expenses while considering it towards the determination of Target Revenue. The Authority considers the projected capital investments during the control period including the inflationary adjustment in the same. The Authority considers inflation while projecting the non-aeronautical revenue for a control period. The Authority also notes that depreciation and taxes do not require any inflationary adjustment. Thus the Authority appropriately considers the inflationary adjustment in the regulatory building blocks itself. The regulatory building blocks, so determined, are aggregated to determine the Target Revenue. This target revenue is then compared based on its NPV with the NPV of the projected aeronautical revenue to determine the required X-factor increase. As a matter of structuring the aeronautical tariff over the period of a control period in line with the provisions under Schedule 1 of SSA, the Authority considers an inflationary increase in the aeronautical tariff on year-on-year basis. Thus the question of granting an inflationary increase over and above the Target Revenue does not arise.

Treatment of certain expenses incurred by DIAL on account of security related requirements

3.18. The Authority has noted from DIAL submissions under the current MYTP that it proposes to incur certain expenses on account of security related requirements. The

Authority has also noted DIAL's request that such expenditure be considered by the Authority towards determination of aeronautical tariff, provided the same will not be considered towards determination of PSF Security Charge.

3.19. The Authority has had reference to DIAL submissions on the expenses pertaining to security related requirements under the first Control Period. The Authority had noted that during its determination of aeronautical tariff for the first Control Period, DIAL had requested the Authority to allow the manpower cost of Inline Baggage screeners as an operating cost in the tariff determination or provide a direction to allow the same as operating cost while determining the PSF Security charge. The Authority had in its Consultation Paper 32 / 2011-12 clarified that the O&M expenditure related to mandated security expenditure as laid down by the Government/ Bureau of Civil Aviation Security (BCAS) were to be considered in determination of the Passenger Service Fee Security Charge (PSF (SC)). In accordance with this clarification, the Authority did not consider the manpower cost of Inline Screeners under aeronautical operating costs for the purpose of determination of aeronautical tariff for the first Control Period.

3.20. Vide its submission dated 21.11.2014, DIAL submitted as under,

"The total number of inline screeners employed at terminals at the end of respective financial years and cost thereof shown as below:

	Number of Inline Screeners	*Manpower Cost (Rs. in Cr)*
FY 2011 -12	*217*	*5.69*
FY 2012 -13	*236*	*5.84*
FY 2013 -14	*225*	*6.59*

We would like to confirm that manpower cost of inline screeners has been captured in DIAL Financials and are not included in PSF expenses."

3.21. The Authority, in this regard, has had reference to the Financial Statements of DIAL, which states as under,

"Ministry of Civil Aviation ("MoCA") had issued a Standard Operating Procedure ("SOP") for Accounting / Audit of Passenger Service Fee (Security Component) [PSF (SC)] according to which amounts collected towards PSF (SC) are held in fiduciary capacity by the Company on behalf of the Government of

India. PSF (SC) so collected is required to be kept separately in an escrow account and is to be utilized to meet the security related expenses of the Airport. It is also stipulated in the Escrow Account Agreement that MoCA will have supervening powers to direct the Escrow Bank on the issues regarding operations as well as withdrawals from the escrow account. The PSF (SC) accounts are required to be maintained separately in accordance with the procedures laid down in SOP and are subject to audit by the Comptroller & Auditor General of India ("CAO"). Accordingly, these financial statements exclude the following PSF (SC) balances, which have not been audited by the Statutory auditors of the Company:"

3.22. The Authority notes from the DIAL submissions that the costs for inline baggage screening have been incurred by DIAL and have been included in DIAL's financials and not in the PSF Accounts. The Authority then had reference to the provisions made by Central Government towards consideration of expenses for security related requirements to accord appropriate treatment of such expenses towards the tariff determination.

3.23. The Authority has had reference to the Aircraft Rules, 1937. The Authority has noted that the Aircraft Rules, 1937 has been amended by insertion of Rule no 88 A on 05.03.2014 in the said Rules. This Rule No 88 A, dealing with the subject of "Aviation Security Fees" reads as under,

"Aviation security fees - (1) The Central Government, or any other authority designated by it in its behalf, may levy and collect aviation security fees on:

(a) embarking passengers;

(b) cargo transported out of an airport;

(c) departing private aircrafts of general aviation;

(d) chartered aircraft operations; and

(e) any other dedicated civil aviation operations,

at such rate or rates, as the Central Government may specify from time to time, and different rates may be specified for different categories specified herein, to meet the expenditure on aviation security.

3. The aviation security fee shall be regulated and utilized in the manner as may be specified by the Central Government.

4. For the purposes of this rule -

(a) the expression "Civil Aviation Security" shall mean the protection of the civil aviation operations against the acts of unlawful interference;

(b) the expression "expenditure on aviation security" means any expenditure incurred on—

(i) deployment of any security agency designated by the Central Government for providing the 'Civil Aviation Security'; and

(ii) such other expenditure as may be decided by the Central Government from time to time."

3.24. The Authority notes that meaning of expression "expenditure on aviation security" is to be decided by the Central Government. As and when the Central Government comes up with the SOP / Guidelines pertaining to these Rules, wherein the expression "expenditure on aviation security" is clarified, the Authority would consider these for an appropriate treatment to capital expenditure and operating expenditure incurred by DIAL on account of security related requirements.

3.25. Meanwhile, the Authority has noted from DIAL submission that MOCA has issued an Order AV 13024/03/2011-AS (Pt.I) dated 18.02.2014 regarding Expenditure out of Passenger Service Fee (Security Component) Escrow Accounts, which states as under,

"As per the respective Operation, Management and Development Agreements (OMDAs) and State Support Agreements (SSAs), the private operators/JVCs are responsible for procuring and maintaining at its own cost, security systems and equipments (except arms and ammunition) as required by Government of India/Bureau of Civil Aviation Security (BCAS) or its designated nominee(s)/representative(s) from time to time... It has been observed by this Ministry that Private/JV airport operators are meeting their Capital expenditure out of PSF(SC) funds which is improper, as these airport operators are not endowed with authority to do so as per the provisions of OMDAs/SSAs.

2. The aforesaid issue has been examined in this Ministry at length and it has now been decided that since PSF(SC) funds are meant only for meeting revenue expenditure on deployment of CISF and other security forces at the airports, the total capital expenditure incurred by the airport operators out of the PSF(SC) Escrow account opened and maintained by the respective airport operators in fiduciary capacity, together with the interest, has to, be reimbursed back to the respective Escrow accounts. Accordingly, all the airport operators are hereby directed that they shall reverse/reimburse back to the respective PSF(SC) Escrow account, within a period of one month, the total amount spent (on account of capital costs/expenditure) so far towards procurement and maintenance of security systems/equipment and on creation of fixed assets out of the PSF(SC) Escrow Account, together with the interest that would have accrued in normal course had the said amount not been debited against the PSF(SC) Escrow account.

3.26. The Authority notes that *"PSF (SC) funds are meant only for meeting revenue expenditure on deployment of CISF and other security forces at the airports".* The Authority infers from this that the operating expenses pertaining to inline baggage screening, which are of the nature of revenue expenditure, are not to be covered under PSF (SC) funds and accordingly are to be considered towards determination of aeronautical tariff.

3.27. In line with the above, the Authority proposes to now allow expenses pertaining to inline baggage screening to be considered as part of aeronautical operating expenses for determination of aeronautical tariff. Accordingly, the expenses pertaining to inline baggage screening for the first Control Period, which were not allowed by the Authority at that stage, are now proposed to be considered under the true-up exercise. Further the Authority proposes to consider the projections made by DIAL towards expenses pertaining to inline baggage screening for the second Control Period towards determination of Target Revenue for the second Control Period.

3.28. The Authority has also noted from submission of DIAL that as per a recent circular by BCAS on minimum standard for Civil Aviation Security Equipment, inline baggage screening is to be done on a 100% basis rather than on random basis as was the practice earlier and due to this requirement DIAL will have to enhance the strength of its security screeners by 92 nos. The Authority proposes to consider such expenditure towards determination of Target Revenue for the second Control Period.

3.29. The Authority has further noted that DIAL has projected capital expenditure for security related requirements (Rs. 93.11 crore for the second Control Period) and requested consideration of such expenditure towards determination of aeronautical tariff, provided these are not allowed under PSF (Security Charge). The Authority notes from the MOCA Order in para 3.25 above that the creation of fixed assets is to be considered towards determination of aeronautical tariff. Accordingly, the Authority proposes to consider the capital expenditure on security related activities projected by DIAL (Rs. 93.11 crore) for the second Control Period towards determination of aeronautical tariff.

3.30. As regards the capital expenses incurred by DIAL towards security related requirements during the first Control Period, the Authority notes from DIAL submissions that DIAL has recorded these expenses under the PSF (SC) Accounts. MoCA, vide its Order AV 13024/03/2011-AS (Pt.I) dated 18.02.2014, has required that *"all the airport operators … shall reverse/reimburse back to the respective PSF(SC) Escrow account … the total amount spent (on account of capital costs/expenditure) so far towards procurement and maintenance of security systems/equipment and on creation of fixed assets out of the PSF(SC) Escrow Account, together with the interest that would have accrued in normal course had the said amount not been debited against the PSF(SC) Escrow account*". The Authority has noted the DIAL has filed an appeal in the Hon'ble High Court against the Order AV 13024/03/2011-AS (Pt.I) dated 18.02.2014. The Authority would appropriately consider the final outcome of the appeal towards determination of tariff for the second Control Period in case the outcome of the appeal is available before the finalization of the Order, else the same will be given effect to at the time of determination of tariff for the third Control Period.

3.31. The Authority has presented the above details to bring to the attention of MoCA on the Authority's inclusion / exclusion of certain expenses under MYTP expenses. Were these expenses to be covered entirely by MoCA under Aviation Security fees, these would be removed from the MYTP expenses.

Issue of 10% increase in Base Airport Charges

3.32. The Authority has noted the DIAL submission on provision related to 10% increase in Base Airport Charges as per Schedule 6 of SSA. DIAL has stated as under,

> *"The SSA provides for a minimum of 10 per cent Increase as per clause 2 of schedule 6 of SSA in the Tariff for the second control period to fulfil the objective behind clause 2 of schedule 6. The Authority is requested to please consider the same at the time of final tariff determination."*

3.33. The Authority notes that it has examined in detail the provision of 10% increase in Base Airport Charges in respect of IGI Airport, Delhi as per Schedule 6 of SSA. The Authority's examination is presented in para 30 to 38 of Consultation Paper No 32 / 2011-12 dated 03.01.2012 as well as in paras 25.1 to 25.5 of Delhi Tariff Order 03 / 2012-13. Based on the detailed examination and consideration of views of the stakeholders, the Authority, vide Decision no 28 of its Delhi Tariff Order 03 / 2012-13, had decided that its Order was in consonance with the requirement of the SSA. The Authority does not find any fresh grounds in the submissions of DIAL for reconsideration of its earlier decision. If DIAL makes any fresh submission to this effect, the Authority proposes to consider the same at the time of finalization of the Tariff Order for the second Control Period.

Normative Approach of the Building Blocks of AERA Economic Regulations

3.34. The Authority has issued Consultation Paper No. 05/2014-15 dated 12.6.2014, in the matter of Normative Approach of Building Blocks in Economic Regulations of Major Airports. Stakeholders' consultation was held on the above matter on 26.06.2014 and the last date for submission of the evidence-based feedback and comments from stakeholders on the proposal was 07.07.2014 which was subsequently extended at the request of the Stakeholders vide Authority Public Notice no 12 / 2014-15 is by 08.12.2014.

3.35. In the Consultation Paper No. 05/2014-15 dated 12.06.2014, the Authority has dealt with the following matter extensively:

3.35.1. Debt Equity Ratio and WACC

3.35.2. Equity Return

3.35.3. Rate of Depreciation for Regulatory Purpose

3.35.4. Asset allocation between aeronautical and non-aeronautical assets

3.35.5. Operation and Maintenance cost allocation between aeronautical and non-aeronautical.

3.35.6. Operation and Maintenance Expenditure

3.35.7. Incentivising based on the efforts of the airports operators to increase non-aeronautical revenues.

3.35.8. Norms for incurring expenditure on capital nature and its allowable ceiling cost.

Note: The Authority is yet to issue the separate consultation paper on the Rate of Depreciation to be adopted for the regulatory purpose.

3.36. The Authority, in its Proposal 8(g) of the Consultation Paper No. 05/2014-15 dated 12.6.2014, has indicated that the proposal of incentivisation of airport operators to increase non-aeronautical revenue (NAR) will not apply to Delhi and Mumbai. This is based on the premise that the revenue shared to AAI that has been agreed by DIAL and MIAL, was as a result of market based discovery and competitive bidding process.

3.37. The Authority has received comments from the stakeholders. The Authority would appropriately finalize the Order based on the normative approach of Building Blocks for the major airports.

3.38. After issuance of such Order, DIAL, which is also a major airport, will be covered under the normative approach to the extent the Authority decides it to be applicable for DIAL only for subsequent control periods i.e. third Control Period and beyond.

Proposal No. 1. Regarding Principles for Determination of Aeronautical Tariff in respect of IGI Airport, Delhi

1.a. The Authority proposes to consider the principles (laid in paras 3.12 to 3.15 above) for determination of aeronautical tariff in respect of IGI Airport, Delhi.

1.b. According to MOCA's Order AV 13024/03/2011-AS (Pt.I) dated 18.02.2014, the Authority proposes to consider the expenditure projected to be incurred by DIAL towards creation of security related fixed assets during the second Control Period (currently estimated at Rs 93.11 crore) towards computation of RAB in respect of IGI Airport, Delhi.

1.c. According to MOCA's Order AV 13024/03/2011-AS (Pt.I) dated 18.02.2014, the expenses pertaining to inline baggage screening for the first Control Period, which were not allowed by the Authority at that stage, are now proposed to be considered under the true-up exercise. Further the Authority proposes to consider the projections made by DIAL towards expenses pertaining to inline baggage screening for the second Control Period towards determination of Target Revenue for the second Control Period.

1.d. As and when the Central Government comes up with the SOP / Guidelines pertaining to the Rule no 88 A of the Aircraft Rules, 1937, wherein the expression "expenditure on aviation security" is clarified, the Authority proposes to consider such clarification for an appropriate treatment to capital expenditure and operating expenditure incurred by DIAL on account of security related requirements.

1.e. After issuance of the Order in respect of Normative Approach for determination of Building Blocks, DIAL will be covered under the normative approach to the extent the Authority decides it to be applicable. This would be applicable to DIAL only for subsequent control periods i.e. third Control Period and beyond.

4. Control Period

a. DIAL Submission on Control Period

4.1. With regard to the Control Period, DIAL has stated in its submissions as below:

"Schedule 6 of the SSA requires that AERA/ GOI to regulate the Aeronautical Charges of DIAL from the start of 4th year from the Effective Date. Further, the Schedule 1 of the SSA states that tariffs are to be set once every five years and therefore requires a five-year tariff filing.

DIAL Tariff filing 2nd Control Period (FY14-FY19)

In accordance with the concession agreement we had taken the 5 year block comprising 2009-10 to 2013-14 as the first regulatory period.

Currently we are filing the tariff for second control period starting from 1st April 2014 to 31st March 2019."

b. Authority's Examination of DIAL Submissions on Control Period

4.2. The Authority had extensively deliberated on the issue of control period to be considered in respect of IGI Airport, Delhi in paras 62 to 75 of its Consultation Paper No 32 / 2011-12 dated 03.01.2012 and in paras 3.7 to 3.11 of its Delhi Airport Tariff Order 03 / 2012-13.

4.3. The Authority had noted that SSA had envisaged the creation of an independent economic regulator to determine tariffs from the commencement of the fourth year (4th) after the Effective Date (03.05.2006) meaning the year commencing from 03.05.2009. Further, the AERA Act 2008 envisages that the Authority shall determine the tariff once in 5 years, indicating a control period of 5 years. The Authority had also considered the issue of data segregation and analyses and had noted the requirement of audited figures for a financial year. Accordingly the Authority had decided that it would consider the regulatory period from 01.04.2009 to 31.03.2014, i.e., in line with the normal Financial Years(s) reckoned in the country (instead of 03.05.2009 to 02.05.2014).

4.4. On balance, in line with the provisions of the AERA Act and the covenants of SSA as well as consideration of the comments from the stakeholders, the Authority, vide Decision no 1.a of its Delhi Airport Tariff Order 03 / 2012-13, had decided the first

Control Period to commence from 01.04.2009 and also decided the duration of the Control Period as 5 years.

4.5. Thus the first Control Period ends on 31.03.2014. Continuing with the same approach, the Authority proposes to consider the second Control Period to commence from 01.04.2014 and last till 31.03.2019. The Authority notes that DIAL has proposed the same duration for the second Control Period. This is also in accordance with the provision 13 (2) of Chapter III of the AERA Act 2008, stating that the Authority shall determine the tariff once in 5 years and if considered appropriate and in public interest, amend from time to time during the said period of five years, the tariff so determined.

Proposal No. 2. Regarding Control Period

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

i. To consider the second Control Period as 01.04.2014 to 31.03.2019.

5. Development Fee and its adjustment to RAB

5.1. The Authority has issued following Orders in respect of Development Fee (DF) to be levied at IGI Airport, Delhi:

5.1.1. Order No. 28 / 2011-12 dated 08.11.2011 in the matter of levy of Development Fee by Delhi International Airport (P) Ltd. (DIAL) at IGI Airport, Delhi

5.1.2. Order No. 12 / 2012-13 dated 25.07.2012 in the matter of Review of levy of Development Fee by Delhi International Airport Pvt Ltd. at IGI Airport, Delhi

5.1.3. Order No. 30 / 2012-13 dated 28.12.2012 in the matter of Review of levy of Development Fee at IGI Airport, Delhi

Order No. 28 / 2011-12 dated 08.11.2011

5.2. The Central Government had, vide its Order No. AV. 24011/002/2008-AD dated 09.02.2009, granted approval for levy of DF @ Rs. 200/- per departing domestic passenger and @ Rs. 1,300/- per departing international passenger, inclusive of all applicable taxes by M/s. Delhi International Airport Private Limited (DIAL), under section 22 A of the Airports Authority of India Act, 1994, purely on an ad-hoc basis, for a period of 36 months w.e.f. 01.03.2009.

5.3. After establishment of this Authority, the matter was referred by the Central Government to the Authority. The Authority's examination of DIAL submissions with respect to the project cost and the funding gap as well as the views of the MoCA and AAI were presented in the Consultation Paper No. 02/2011-12 on 21.04.2011. The last date for receipt of comments was 13.05.2011.

5.4. In the meantime, the Hon'ble Supreme Court in its judgement dated 26.04.2011 in Civil Appeal Nos. 3611 of 2011, 3612 of 2011, 3613 of 2011 and 3614 of 2011 (MANU/SC/0516/2011) has, inter-alia, held the letter dated 09.02.2009 of the Central Government (vide which the approval of the Government was conveyed for levy of DF by DIAL), as *ultra-vires* the AAI Act, 1994. Hon'ble Supreme Court has also held that, w.e.f. 01.01.2009; no DF can be levied or collected from the embarking passengers at major airports under Section 22 A of the AAI Act, 1994, unless this Authority determines the rate of such DF.

5.5. The proposal of DIAL for levy of DF was examined in light of Supreme Court judgement. The Hon'ble Supreme Court also, inter alia, had directed that:

"(v) We further direct that henceforth, any development fees that may be levied and collected by DIAL and MIAL under the authority of the orders passed by the Airports Economic Regulatory Authority under section 22A of the 1994 Act as amended by the 2008 Act shall be credited to the Airports Authority and will be utilized for the purposes mentioned in clauses (a), (b) or (c) of Section 22A of the 1994 Act in the manner to be prescribed by the rules which may be made as early as possible".

5.6. As per the directions of Hon'ble Supreme Court, the Ministry of Civil Aviation finalized the rules for collection and utilization of DF and notified the same vide Notification dated 02.08.2011 as "The Airports Authority of India (Major Airports) Development Fee Rules, 2011".

5.7. Further, the Hon'ble Supreme Court had also given liberty to the appellants – ROAR, COI and others before it to challenge the AERA's Public Notice dated 23.04.2010. Resources for Aviation Redressal Association (ROAR) filed an appeal before the Hon'ble AERA Appellate Tribunal against the said Public Notice. The Hon'ble Tribunal vide its Order No. 11/2011-12 dated 30.09.2011 in the matter of representations made by ROAR for including them in the list of AERA stakeholders, disposed-off the appeal and ordered that undisputedly the final decision in the matter has to be taken by the Authority in accordance with the law as early as practicable, preferably within two months.

5.8. Subsequent to the Order of the Hon'ble Supreme Court, the Authority had, based on its examination of DIAL submissions, identified the allowable project cost in respect of IGI Airport, Delhi as Rs. 12,502.86 crore.

5.9. The allowable project cost, means of funding the project, and the funding gap in respect of IGI Airport, Delhi were identified by the Authority as follows:

Table 1: Allowable project cost, means of funding the project, and the funding gap as per Delhi Tariff Order No. 3/2012-13

Particulars	**Rs. in crore**	
Final project costs as submitted by DIAL in Applications		12,857.00
Items proposed to be excluded		
Apron	23.82	

Particulars	Rs. in crore	
Runway 10-28	37.50	
Escalation for reinforcement	35.67	
Upfront Fee	150.00	
Gross floor area 8652 sq.	107.15	
Total exclusions		354.14
Balance (Allowable Project Cost)		12,502.86
Means of Finance		
Equity capital and Share Application Money less upfront fee	2,300.00	
Rupee Term Loan	3,650.00	
Foreign currency loan	1,616.00	
Internal accruals	50.00	
Refundable Security Deposits	1,471.51	
Total Means of Finance		9,087.51
Funding Gap		**3,415.35**

5.10. The Authority had noted that DIAL had collected DF of amount Rs. 1,484.08 crore till 01.06.2011. The balance funding gap was of amount 1,931.27 crore. The Authority had also noted that project cost worth an amount of Rs. 701.00 crore were not incurred by DIAL till 31.03.2010. Accordingly the Authority segregated the funding gap of Rs. 1,931.27 crore in two stages: Confirmed funding gap of Rs. 1,230.27 crore based on the project cost already incurred by DIAL – Stage 1 and Balance funding gap of Rs. 701.00 crore based on project cost not incurred till 31.03.2010 by DIAL – Stage 2.

5.11. Upon due consideration of all facts, circumstances and the submissions made by the stakeholders, the Authority issued its Order No. 28/2011-12 dated 14.11.2011, wherein it stated as under;

> *"In exercise of powers conferred by Section 13(1) (b) of the AERA Act, 2008 read with Section 22A of the AAI Act, 1994, the rate of Development Fee to be levied by DIAL at IGI Airport, New Delhi is determined as Rs.200/- per embarking domestic passenger and Rs. 1300/- per embarking international passenger (exclusive of statutory levies, if any) to bridge the funding gap of Rs. 1230.27 crores (NPV as on 1.12.2011). The levy shall commence with effect from 01.12.2011 and at present, is estimated to continue for a period of 18 months up to May, 2013 (Stage -1)."*

Order No. 12 / 2012-13 dated 25.07.2012

5.12. As per the Order No. 28/2011-12 dated 14.11.2011, review was to be undertaken by the Authority. The Authority during its review exercise noted the submission from

DIAL that expenses worth Rs. 328.50 were incurred by DIAL and this expense should also be considered by the Authority for reimbursement through DF. Based on its examination of DIAL submissions, the Authority issued its Order No. 12/2012-13 dated 25.07.2012, wherein it stated as under:

The tenure of DF — which was ordered to commence w.e.f. 01.12.2011 and estimated to extend up to May, 2013, to bridge the funding gap of Rs. 1230.27 crores (in Stage ii, vide Order No. 28/2011-12 dated 14.11.2011, is decided to be extended by 4 months — beyond Stage 1 — i.e, up to September, 2013 — to bridge the funding gap of Rs. 328.50 crores (included in project cost for determination of total DF amount and included in Stage 2 of levy of DF) — on current value — on account of expenditure of Rs. 297 crores and Rs.31.50 crores incurred by DIAL towards provisions and payment to Delhi Jal Board, respectively.

(ii). The Authority would review the monthly collections on the basis of audited figures provided by AM and DIAL and will take appropriate decisions as may be required, based on such review.

Order No 30 / 2012-13 dated 28.12.2012

5.13. During subsequent review, the Authority had noted in para 1.19 of the Consultation Paper No. 32/2012-13 dated 12.12,2012 that the time period of stage 2 had then overlapped with that of stage 1. Hence the distinction between Stage 1 and stage 2 was then irrelevant. Against the background or the above mentioned developments, the Authority undertook a review of DF levied at IGI Airport, New Delhi and Issued a CP No. 32/2012-13 in respect of Review of levy of Development Fee at Indira Gandhi International Airport, New Delhi. The Authority also carefully examined the comments received from various stakeholders on this Consultation Paper No 32 / 2012-13.

5.14. In its Consultation Paper No 32 / 2012-13, the Authority also calculated the amount of DF remaining as on 01.01.2013. The calculation is presented as under:

Table 2: Calculation of balance DF as per Consultation Paper No 32 / 2012-13

	Rs. in crore	Rs. in crore
Loan Disbursement · Tranche 1		1,210.00

	Rs. in crore	Rs. in crore
Loan Disbursement · Tranche 2		286.50
Total Loan Disbursement. -Tranche 1 and Tranche 2		1,496.50
Principal repayment till 30.11.2012	458.25	
Estimated principal repayment for Dec 2012	40.00	
Total principal repayment till 31.12.2012		498.25
Remaining principal to be repaid as on 01.01.2013		998.25
Balance amount remaining for Stage 1		0.27
Balance amount remaining for Stage 2		414.50
Total amount remaining as on 01.01.2013		1,413.02

5.15. Based on its examination of comments received and the material produced before it at that stage, the Authority issued Order No 30 / 2012-13 dated 28.12.2012, wherein it stated as under;

The rate of Development Fee in respect of IGI Airport, New Delhi is determined as Rs. 100/ -per embarking domestic passenger and Rs. 600/- per embarking international passenger w.e.f. 01.01.2013, so as to permit billing of total remaining amount of DF of Rs. 1,413.02 crore (on NPV basis as on 01.01.2013). This levy will commence w.e.f. 01.01.2013 and, at present, is estimated to continue up to April 2016 based on the traffic forecast considered at the time of DF Order dated 14.11.2011. The total amount of Development Fee billing allowed is therefore estimated at Rs.1703.68 crore of which Rs. 1,413.02 crore will represent the balance DF as of 01.01.2013 and the remaining amount of Rs. 290.66 crore represents the interest component.

5.16. In this Order No 30 / 2012-13 dated 28.12.2012, the Authority also discussed the issue of adjustment of RAB on account of DF in respect of IGI Airport, Delhi. The Authority stated as under:

The Authority had also considered the issue of adjustment of RAB on account of DF in the CP No. 32/2012-13. The Authority has not received any comments from the stakeholders in this regard in response to CP No. 32/2012-13…. The current decision of the Authority is limited to the determination of DF and its tenure in respect of IGI Airport, New Delhi. The issue of taking into account AAI's comments regarding adjustment of RAB on account of DF would arise at the time of determination of tariff for IGI Airport, New Delhi in the next Control Period (commencing i.e. 01.04.2014). The Authority, therefore, decides to *consider the issue of DF adjustment to RAB in case of DIAL, as may be required, at the time of the next Control Period.*

5.17. The Authority accordingly decided to consider the issue of adjustment to Regulatory Asset Base on account of Development Fee, as may be required, at the time of determination of tariffs for aeronautical services in respect of IGI Airport, New Delhi, for the next Control Period (commencing w.e.f. 01.04.2014). Accordingly the Authority has considered the issue of adjustment of RAB on account of DF under the present determination of aeronautical tariff in respect of IGI Airport, Delhi.

Adjustment of RAB on account of DF

5.18. According to the Order No. 32/2012-13 dated 15.01.2013 in the matter of determination of aeronautical tariffs in respect of CSI Airport, Mumbai, the Authority decided to consider the methodology of adjustment of RAB on account of DF funding such that the fund available to the Airport Operator on account of DF for investment in a year (including any DF apportioned towards CWIP in the previous year and brought-forward to the given year) would be apportioned between the expenditure incurred on the aeronautical assets capitalized in the given year and the expenditure incurred on aeronautical CWIP in the given year. The mechanism for such adjustment was detailed by the Authority in Paras 8.62 to 8.71 of the said Order (Order No. 32/2012-13 dated 15.01.2013). In line with this mechanism, the Authority proposed that the fund apportioned to the "expenditure incurred towards the aeronautical assets capitalized in a year" would be adjusted from RAB in that given year and the remaining part of the fund, which is apportioned to "expenditure incurred towards aeronautical CWIP" will be carried over to the subsequent years for adjustment from RAB in those years. The Authority further clarified in para 8.64 of the said Order that in the last year of project completion any remaining balance of DF sanctioned by the Authority would be adjusted in the RAB in that year. This view was considered by the Authority due to the concern that DF, a means of last resort, is levied on the passengers and if DF has been granted by the Authority for the purpose of development of assets, it should be adjusted from RAB at an early date to enable the benefit of lower returns on RAB to reach the passenger, who are having to bear the burden of DF.

5.19. The Authority proposes to follow the same mechanism as provided for in Paras 8.62 to 8.71 of the said Order (Order No. 32/2012-13 dated 15.01.2013) for adjustment of RAB on account of DF in case of Delhi. In order to be able to follow this mechanism, the Authority sought the following information from DIAL for each year from commencement of levy of the DF till the current year:

5.19.1. Capital expenditure incurred by DIAL in each year

5.19.2. Capital Expenditure pertaining to aeronautical assets in each year

5.19.3. Expenditure incurred towards aeronautical assets capitalized

5.19.4. Expenditure considered to be part of aeronautical CWIP

5.19.5. Total DF disbursed by AAI in each year along with details on DF securitization by DIAL

5.20. DIAL has submitted an Auditor certificate stating the actual drawdowns of DF securitization loan availed by it over each year of the first control period. DIAL has informed the Authority that portions of this loan has been used to repay outstanding DF loan. The Authority is in receipt of the following clarifications from DIAL:

Table 3: DIAL submission on DF securitization

INR Crore	MOCA Order	AERA Order 28/2011-12	AERA Order 12/2012-13	AERA Order 30/2012-13	Gross Total
Drawdown by way of securitization	1827.00	1210.00	286.50	1200.85	4524.35
Prepayments of DF loans		561.86		786.08	1347.94
Net securitized by DIAL					3176.27

5.21. The Authority sought from DIAL the reconciliation between the DF securitizations made by DIAL and the adjustments made in the books of DIAL on account of DF:

Table 4: DIAL submission on reconciliation between the DF securitization and DF adjustments in its books

INR Crore	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Total
DF securitized	250.00	1577.00		1210.00 +286.50	1200.85		4524.35
DF Adjustment as shown in FA schedule			1817.00	1236.90	(2.80)	(2.90)	3048.20
DF collection charges				11.10	3.20	2.90	17.20
DF pending capitalization (ATC Tower)							350.00
Total DF adjustment in schedule							3415.40

5.22. The Authority is also in receipt of the auditor certificates submitted by DIAL for the prepayments of DF loans and finds that the amounts of drawdowns certified by the auditors are Rs. 1,827 crore, Rs. 1,210 crore, Rs. 286.50 crore and Rs. 1,200.85 crore and prepayments certified by the auditors are Rs. 561.86 crore and Rs. 786.08 crore. The Authority notes that "Net securitized by DIAL", as submitted by DIAL, is at Rs. 3176.27 crore. However, the correct arithmetic calculation works out to Rs. 3,176.41 crore.

5.23. The Authority in its Order No 28 / 2011-12 had allowed the amount of Rs. 3,415.35 crore as the total DF. The Authority also notes that the net securitization actually made by DIAL, as certified by the Auditor certificate, stands at Rs. 3176.41 crore. The Authority proposes to consider the actual DF securitized by DIAL of Rs. 3176.41 crore as the amount to be considered for DF adjustment to RAB. As regards the balance amount of Rs. 238.94 crore (=3,415.35 - 3176.41), the Authority has noted that DIAL has not capitalized "New ATC block", which is under construction. DIAL had submitted at the stage of first Control Period that projected capital expenditure for "New ATC block" is Rs. 350 crore. Hence the Authority proposes to adjust the balance amount of Rs. 238.94 crore in RAB as and when the New ATC block is capitalized by DIAL in its books.

5.24. To follow the approach for DF apportionment as discussed in paras 5.18 and 5.19 above, the Authority has considered the actual DF securitization schedule submitted by DIAL, which is as follows.

Table 5: Securitization of DF by DIAL as being considered by the Authority

INR Crore	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13
DF Securitization by DIAL	250.00	1577.00	0	648.14	701.27
Total					**3176.41**

5.25. As per the formulation of adjustment of RAB on account of DF (paras 8.62 to 8.71 of the Order No. 32/2012-13 dated 15.01.2013), the Authority required the actual amounts - on year wise basis - recorded as aeronautical CWIP and as aeronautical capitalized assets in the books of DIAL. DIAL has submitted to the Authority that DIAL does not segregate the CWIP assets into aeronautical and non-aeronautical in its books of Accounts.

5.26. Accordingly, the Authority proposes to consider the values of CWIP assets recorded in audited financial statements of DIAL for respective years and to apportion these values into aeronautical and non-aeronautical components based on the overall asset allocation ratio of 89.25% and 10.75% respectively. Such apportioned CWIP into aeronautical component is proposed to be considered towards "expenditure incurred towards aeronautical CWIP".

5.27. The Authority notes that Vide its Decision No.16 of the Delhi Tariff Order No. 3/2012-13, the interest on DF to the tune of Rs. 350.50 crore was expensed out over the first three years of the first Control Period. DIAL in its financial statements has expensed out Rs. 162.12 crore in its accounts over the year FY2011-12. The remaining amount of Rs. 188.38 crore has been capitalized by DIAL in its books in FY 2011-12. This approach has been detailed in paras 6.26.6 and 6.26.7 below. Accordingly the Authority, based on the treatment made by DIAL in its books, proposes to expense out Rs. 162.12 crore in FY 2011-12 and consider a capitalization of Rs. 188.38 crore in FY 2011-12.

Thus the values of capitalized aeronautical assets and aeronautical CWIP assets considered by the Authority for apportionment of year-wise DF available with DIAL are as follows:

Table 6: DF to be considered towards Adjustment of RAB by the Authority in respect of DIAL

Value in INR crore	**FY2008-09**	**FY2009-10**	**FY 2010-11**	**FY 2011-12**	**FY 2012-13**
Aeronautical assets capitalized in a year for the purpose of DF apportionment (A)	1,866.37	540.01	8,241.08	372.56	
CWIP assets recorded in books of DIAL (B)	4393.49	7859.42	195.58	124.33	47.74
Allocations into aeronautical CWIP @ 89.25% (C)	3,921.19	7,014.53	174.56	110.96	
Aeronautical CWIP considered for the purpose of DF apportionment (D)=(A)+(C)	5,787.56	7,554.54	8,415.64	483.52	
Ratio for apportionment of DF into aeronautical capitalization (E =A/D)	0.32	0.07	0.98	1.00	1.00
DF Securitization by DIAL (F)	250.00	1577.00	0.00	648.14	701.27
DF brought forward from previous year(G)	0.00	169.38	1621.55	33.63	0.00
DF available for apportionment	250.00	1746.38	1621.55	681.77	701.27

Value in INR crore	FY2008-09	FY2009-10	FY 2010-11	FY 2011-12	FY 2012-13
into aeronautical capitalization and CWIP (H = F + G)					
DF to be considered towards aeronautical capitalization (I =H*E))	80.62	124.83	1587.91	681.77	701.27
DF to be considered towards aeronautical CWIP (J= H – I)	169.38	1621.55	33.63	0.00	0.00
DF to be considered for adjustment into RAB (Ki)	**80.62**	**124.83**	**1587.91**	**681.77**	**701.27**
Total DF adjusted into RAB during 1st Control Period = Sum of Li for 1st Period					**3176.41**

Proposal No. 3. Regarding Development Fee and its adjustment to RAB

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

i. **To consider DF funding of RAB such that fund available to DIAL on account of DF for investment in a year (including any DF apportioned towards CWIP in the previous year brought-forward to the given year) would be apportioned over expenditure incurred on the aeronautical assets capitalized in the given year and the expenditure incurred on aeronautical CWIP in the given year as per the scheme indicated in Paras 8.62 to 8.71 of Order No 32 / 2012-13 dated 15.01.2013. While the fund apportioned to the expenditure incurred on the aeronautical assets capitalized in a year would be adjusted from RAB in the given year, that amount which is apportioned to expenditure incurred on aeronautical CWIP is proposed to be carried over to the subsequent years for adjustment from RAB in those years.**

ii. **Accordingly, to adjust DF of Rs. 3176.41 crore (out of the allowed DF of Rs 3415.35 crore by the Authority in respect of IGI Airport, Delhi) from the capitalizations made by DIAL till FY 2012-13**

iii. **To adjust the balance amount of DF of Rs. 238.94 crore from the RAB of DIAL when the “New ATC block” is capitalized by DIAL in its books.**

iv. **Based on the above, to consider the adjustments in RAB in respect of IGI Airport, Delhi on account of DF as per Table 6.**

6. Consideration of True-ups for first Control Period in respect of DIAL

6.1. At the time of determination of aeronautical tariff for the first Control Period, the audited financials of DIAL were available to the Authority for FY 2009-10 and FY 2010-11. The Authority had relied on the financials of these two years and made projections for the remaining three years of the first Control Period, namely FY 2011-12, FY 2012-13 and FY 2013-14. Now DIAL along with its submissions for the second Control Period, has made available the audited financial statements for FY 2011-12, FY 2012-13 and FY 2013-14.

6.2. The Authority, while determining various elements of the building blocks in its Delhi Tariff Order 03 / 2012-13, provided for true-ups / claw-backs in respect of certain items. These true-ups were to be considered based on the actual values of respective items in the first Control Period (except for certain items decided by the Authority not to be trued-up, such as WACC and Non-aeronautical revenue) towards determination of aeronautical tariff for the next Control Period commencing from 01.04.2014.

6.3. As regards broad approach of the Authority with respect to true-ups of various elements that go into determination of aeronautical tariff, which are individually indicated in the relevant decisions of the Delhi Tariff Order 03 / 2012-13, the Authority recognizes that the overarching purpose of the true-ups is to enable the Airport Operator to get a fair rate of return on his investments (consistent with the quality of service as well as the risk factors for the airport in question). Hence an important part of the exercise of tariff determination is to compare the ex-post (at the end of the Control Period) Aggregate Revenue Requirements (ARR) of the airport with what was estimated as the entitlement of ARR at the time of determination of tariff. The actual ARR that the Airport Operator is entitled to at the end of the Control Period depends on the actual values of various Regulatory building blocks as considered by the Authority, after these values are trued-up, ex-post, at the end of the control period, based on the figures available as per the audited balance sheet of the company.

6.4. On the revenue side, items to be considered for true-up relate to revenues from aeronautical services to match the ARR. The Authority notes that the 30% share of non-aeronautical revenue is a part of the regulatory building blocks for the calculation of ARR.

6.5. Within the above framework, the Authority is giving hereunder its examination with respect to true-up of various items / building blocks.

6.6. The Authority proposes to adopt the following approach in providing true-up to the airport operator for the first Control Period as per Delhi Tariff Order 03 / 2012-13. The Authority proposes to provide a true-up against the actual entitlement of DIAL in terms of Aggregate Revenue Requirement (ARR) based on actual values of regulatory building blocks for the first Control Period. The ARR was estimated based on the building blocks, namely, Regulatory Asset Base (RAB), Hypothetical Regulatory Asset Base (HRAB), WACC, Depreciation, Operating Expenses, Taxation and Non-Aeronautical Revenue for the first Control Period as per the actual audited financial and traffic information. Whereas, vide Decision No. 29 of Delhi Tariff Order 03/2012-13 the Authority decided not to true-up the WACC, with regards to the Non-Aeronautical Revenue, the value for Non-Aeronautical Revenue projection was based on Scenario 3 discussed in para 374 of the Consultation Paper No. 32/2011-12. The Authority continues with its decision of not truing-up WACC. As regards the Non-Aeronautical Revenue, the Authority proposes to consider it as per the Authority's Delhi Tariff Order 03/2012-13 except treatment of some items as given in the paras 6.406.41 to 6.47 below. The re-estimated ARR is compared with the actual aeronautical revenue as per audited financials, to obtain the true-up value. This computation has been elaborated below.

6.7. The Authority has taken note of the submissions made by DIAL insofar as it relates to its appeal regarding various building blocks considered by the Authority while determining the tariff for the first Control Period. The Authority, however, proposes to proceed with the true-up of various building blocks based on its approach as indicated in this para 6 and the actual figures reflected in the audited balance sheet of DIAL pertaining to the first Control Period, which would be subject to the final outcomes of the appeal proceedings before the Appellate Tribunal (refer para 2 above).

True-up of Regulatory Asset Base

6.8. The Authority had computed RAB in the first Control Period in order to determine the return on RAB based on the WACC of 10.33% as per its Decision No. 29 of the Delhi Tariff Order 03 / 2012-13. RAB considered for the purpose of estimating return was based on the average of opening and closing balances of RAB where closing RAB for a year was arrived at by incorporating additions / deletions / adjustments to aeronautical asset base of DIAL to the opening balance of RAB in that year.

6.9. While determining RAB for the first Control Period, the Authority had considered the actual audited numbers of additions / deletions / adjustments to assets of DIAL for FY 2009-10 and FY 2010-11 and projections of the same for the remaining years, namely FY 2011-12, FY 2012-13 and FY 2013-14. Similarly the Authority had considered the actual audited numbers of depreciation for FY 2009-10 and FY 2010-11 and projections of the same for the remaining years, namely FY 2011-12, FY 2012-13 and FY 2013-14. With the actual audited numbers for all five years of the first Control Period being available to the Authority now, it has examined these actual audited numbers for the purpose of truing-up of respective additions / deletions / adjustments to assets of DIAL.

6.10. In this regard, the Authority has noted from the financial statements submitted by DIAL that the actual capital investment in the years FY2011-12, FY2012-13 and FY2013-14 has varied from what was considered by the Authority during the first Control Period. The Authority in its Delhi Tariff Order 03/2012-13 (Decision Truing-up 2) had decided that it may consider the future capital expenditure and future maintenance capital expenditure incurred by DIAL during the balance Control Period based on the audited figures and evidence of stakeholder consultation as contemplated in the SSA, as well as the review thereof that the Authority may undertake in this behalf. The Authority has examined the actual audited numbers for these three years i.e. FY2011-12, FY2012-13 and FY2013-14 as below.

Table 7: Additions to RAB as considered by the Authority for the 1st Control Period and actual aero additions submitted by DIAL during FY12, FY13, and FY14

Additions to RAB	FY2011-12	FY2012-13	FY2013-14
Projected aeronautical additions as per Delhi Tariff Order No. 3 / 2012-13	550.41	78.92	0.00
Actual Addition as submitted by DIAL in their calculations for	372.56	74.06	113.59

Additions to RAB	FY2011-12	FY2012-13	FY2013-14
Return on RAB			
Actual aeronautical additions as per DIAL submissions	560.94*	74.06	33.20**
*Includes 188.38 Cr. Partial capitalization of DF interest as accounted for in DIAL's books as mentioned in 6.26.6 below **An amount of Rs. 80.39 Cr. has been capitalized by DIAL in their books on account of SFIS script which the Authority has not considered as it is considered in the nature of grant in the books of DIAL.			

6.11. While determining the tariff for the first Control Period in respect of Delhi Airport, the Authority had considered the additions / deletions to RAB as per the figures given in the Table 8.

Table 8: Assets considered by the Authority in Delhi Tariff Order 03 / 2012-13 for the first Control Period based on actuals till FY 2010-11

INR crore	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Additions to assets (tangible and intangible) as shown in the books of DIAL	214.94	83.67	1,891.61	889.40	9,494.19
Deletions		0.77	-	7.41	-
Balance	214.94	82.90	1,891.61	881.99	9,494.19
Segregation into					
Aero assets	62.46	50.52	1,866.37	540.01	8,230.75
Non-aero assets	2.48	32.38	25.24	91.10	1,047.65
Non-admissible assets (Upfront Fee)	150.00	-	-	-	-
Forex Fluctuation (AS 11 adjustments)				-	11.65*
Airport Concessionaire Rights				250.88	
Disallowed assets					204.14
Notes: While the aero assets were considered by the Authority towards addition into RAB, the other elements were not considered for determination of aeronautical tariff in Delhi Tariff Order 03 / 2012-13. * - Refer para 6.12 below					

6.12. The Authority notes that DIAL had considered the foreign exchange fluctuation (net gain) of Rs. 11.65 crore for FY 2010-11 in its submissions during the first Control Period. Accordingly DIAL, in its submissions, had adjusted this gain of Rs. 11.65 crore while calculating the additions to assets in FY 2010-11 and reduced the additions to assets by this amount. However, the Authority had not factored this adjustment in the RAB while determining the tariff for the first Control Period. In line with its current approach of not considering the foreign exchange fluctuation, the Authority, now, proposes to factor the adjustment of Rs. 11.65 crore in additions to RAB of FY

2010-11 and accordingly recomputed the ARR for the first Control Period as per Table 9:

Table 9: Re-computation of RAB for FY 2010-11

Rs crore	Considered by the Authority in Delhi Tariff Order 03 / 2012-13	Proposed re-computation under the current determination
Additions to assets (tangible and intangible) as shown in the books of DIAL	9,494.19	9,494.19
Deletions	-	-
Balance	9,494.19	9,494.19
Adjusted by		
Disallowed assets	204.14	204.14
Forex Fluctuation (AS 11 adjustments)	11.65	
Aero assets	8,230.75	8,241.08
Non-aero assets	1,047.65	1,048.97

6.13. Vide Decision no 3.b of its Delhi Tariff Order 03 / 2012-13, the Authority had decided to true up the difference between the return on RAB calculated based on actual date of commissioning/ disposal of assets and the return on RAB calculated considering that such asset has been commissioned/ disposed-off half way through the Tariff Year by adjusting the differences for each year in the Control Period at the end of the Control Period.

6.14. In this regard, the Authority notes that there could be various dates in a year, at which the capitalization of different assets may have been undertaken by the airport operator. The RAB to be considered for the purpose of return will need to factor in such dates of capitalization and the value of such assets. The Authority has also proposed to adjust RAB on account of DF based on the approach discussed in para 5.18 above. The Authority notes that DIAL has availed the DF funding (through collections or through drawdowns of securitization loans) on various dates in a year. Hence, to be able to follow the approach of adjustment of RAB on account of DF by considering the actual dates of availing the DF funds, corresponding values of aeronautical capitalization and aeronautical CWIP values (Refer para 5.18 above) will need to be considered to apportion the available DF funding into aeronautical capitalization and aeronautical CWIP values respectively. The Authority finds that this approach will require validation of a large number of accounting data points to be considered and the data submitted by DIAL has not yet been duly reconciled with the financial statements. The Authority notes that in this background an alternative approach could be to consider all the asset capitalizations to have been made halfway through the year and to consider all the DF funding to be available to DIAL at the mid of the given year. However, all the DF funding available to DIAL in a year would be considered for apportionment into aeronautical capitalization and aeronautical CWIP values as per the approach discussed by the Authority above.

The DF funding value apportioned to aeronautical capitalization would be reduced from total aeronautical capitalization in that year. Such adjusted (reduced) aeronautical capitalization will be added to the opening RAB for that year and then average of the opening and closing RAB values will be considered for the application of WACC for the purpose of determination of Return on RAB. The Authority has proposed this approach of averaging of RAB under its Airports Economic Regulatory Authority of India (Terms and Conditions for Determination of Tariff for Airport Operators) Guidelines, 2011 dated 28.02.2011. On account of issues pertaining to authentication and verification of data points under the first approach, the Authority finds the alternate approach of considering average value of opening and closing RAB values as more appropriate. Accordingly the Authority proposes to adopt the approach of considering the average value of opening and closing RAB values for the purpose of determination of Return on RAB.

6.15. The Authority has noted that asset addition for the years FY 2009-10 and FY 2010-11, as submitted by DIAL under current exercise, varies from that considered by the Authority during the first control period. The Authority sought clarifications from DIAL. The Authority has also sought a reconciliation of the amounts submitted by DIAL now with what is reflected in the books of DIAL. The Authority is in receipt of submission from DIAL detailing the project items developed during FY 2011-12, FY 2012-13 and FY 2013-14. As regards asset addition during FY 2009-10 and FY 2010-11, DIAL highlighted during discussions that the variation from the values submitted during the first Control Period is on account of construction contracts getting finalized over a period of time as well as inclusion of PSF assets in the books of DIAL. Pending reconciliation of these values, the Authority proposes to make the following adjustments to the calculations submitted by DIAL: Aero asset additions till the year

FY2011 have been taken as per the Delhi Tariff Order 03 / 2012-13 and aero asset additions for the year FY2012 to FY2014 have been taken from DIAL's auditor certificate referred above. Corresponding adjustments have also been made to depreciation for the year.

6.16. In line with the Authority's approach towards DF apportionment as calculated in Table 6 above, DF adjustment to RAB has also been updated and corresponding adjustments to depreciation have been considered.

6.17. As regards the asset allocation, the Authority has also sought from DIAL the allocation of its assets into aeronautical and non-aeronautical assets in line with the principles for determination of aeronautical tariff considered by the Authority in Delhi Tariff Order 03 / 2012-13. DIAL has got a study conducted by Jacobs for asset allocation in respect of IGI Airport, Delhi and has submitted the same to the Authority. The study report is currently being examined by the Authority. For the time being, the Authority proposes to adopt the asset allocation considered by it in the first Control Period i.e. 89.25% towards aeronautical assets and remaining towards non-aeronautical assets. Further as per Decision 4 of its Delhi Tariff Order 03 / 2012-13, the Authority has commissioned an independent study by ICWAI Management Accounting Research Foundation on allocation of assets at IGI Airport, Delhi. ICWAI Management Accounting Research Foundation (ICWAI-MARF) is a well-known institution, incorporated under Section 25 of the Companies Act, 1956 by the Registrar of Companies, West Bengal on 17th August, 2009. Their Study was based on the Jacobs Consultancy Report (dated 14th June 2011) which provides the allocation of Terminal Buildings between Aeronautical and Non-Aeronautical Assets and concluded that DIAL's allocation of assets for the first Control Period is appropriate. As per the study, the allocation of 89.25% and 10.75% towards aeronautical and non-aeronautical assets respectively for the first Control Period should be considered. The approach and outcomes of the Study are elaborated in the in paras 7.7 to 7.13 below.

6.18. In working out the closing RAB, the Authority had also adjusted for the amount of Development Fee (DF) realized by DIAL during the first Control Period. The Authority had provided the mechanism of adjustment of RAB on account of DF in the Decision

No. 5 of its Order No. 32/2012-13 dated 15.01.2013 in respect of CSI Airport, Mumbai. The Authority accordingly proposes to consider the same approach for adjustment of RAB on account of DF in respect of DIAL as well. The proposed adjustments have been detailed in paras 5.18 to 5.27 above.

6.19. Accordingly, the RAB adjustment on account of DF and Return on RAB proposed to be considered by the Authority in respect of IGI Airport, Delhi for the 1st Control Period are presented below:

Table 10: RAB and Return on RAB as per audited financial statements of DIAL considered by the Authority for the 1st Control Period

In crore	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14
Opening RAB	0.00	61.34	108.40	1,850.33	2,155.22	8,556.19	8,077.18	7,131.62
Add Additions during the year	62.46	50.52	1,866.37	540.01	8,241.08	560.94	74.06	33.20
Less Sale of Assets	-	-	-	-	-	0.01	0.56	-
Add Depreciation Written back	-	-	-	-	-	-	0.02	-
Depreciation charged	1.12	3.46	43.82	110.29	252.19	358.17	317.81	361.69
DF Apportioned	-	-	80.62	124.83	1,587.91	681.77	701.27	-
Less Disposals and Depreciation	1.12	3.46	124.44	235.12	1,840.11	1,039.95	1,019.62	361.69
Closing Regulatory Asset Base	**61.34**	**108.40**	**1,850.33**	**2,155.22**	**8,556.19**	**8,077.18**	**7,131.62**	**6,803.13**
Rate of Aeronautical Asset Depreciation	3.60%	3.94%	4.54%	5.40%	3.78%	3.74%	3.84%	4.97%
Opening Hypothetical RAB (HRAB)	-	-	-	467.00	441.80	424.15	406.66	388.73
Add Additions to HRAB	-	-	467.00	-	-	-	-	-
Less Depreciation on HRAB	-	-	-	25.20	17.65	17.49	17.94	23.20
Closing HRAB	-	-	467.00	441.80	424.15	406.66	388.73	365.52
Average HRAB	-	-	233.50	454.40	432.98	415.41	397.70	377.13
Opening Total RAB	-	61.34	108.40	2,317.33	2,597.02	8,980.34	8,483.84	7,520.35
Closing Total RAB	61.34	108.40	2,317.33	2,597.02	8,980.34	8,483.84	7,520.35	7,168.65
Average RAB (RAB for return)	**30.67**	**84.87**	**1,212.87**	**2,457.17**	**5,788.68**	**8,732.09**	**8,002.10**	**7,344.50**
WACC Rate	10.33%	10.33%	10.33%	10.33%	10.33%	10.33%	10.33%	10.33%
Return on Capital Employed	**3.17**	**8.77**	**125.29**	**253.83**	**597.97**	**902.03**	**826.62**	**758.69**

True-up of Operation and Maintenance Expenses

6.20. As regards Operation & Maintenance Expenses, the Authority, in Decision No. 14 of its Delhi Tariff order 03 / 2012-13, had decided to accept the forecasts for 2012-13 and 2013-14 made by DIAL. However, it had also decided to commission an independent study to assess the efficient operating costs of IGI Airport New Delhi for the entire control period. The study was proposed to be commissioned by the Authority in line with the requirements in Schedule 1 of SSA where it mentions efficient operation and maintenance costs pertaining to aeronautical services as a building block for determination of Target Revenue and accordingly establishing the efficiency of operation and maintenance costs was considered important. The Authority also decided that, if the costs of efficient operation and maintenance, assessed in the independent study are lower than the values used by the Authority, then it will claw back this difference in the next control period commencing from 01.04.2014.

6.21. As per this decision, the Authority has commissioned an independent study by ICWAI Management Accounting Research Foundation to assess the efficient operation and maintenance costs of IGI Airport, Delhi.

6.22. The Authority is in receipt of a letter from ICWAI vide letter no. ICWAI-MARF/DIAL/2014/07 dated 27.10.2014 regarding this study. The Authority notes from the letter that the actual operating cost incurred by DIAL for the year FY 2012-13 can be considered as efficient operation and maintenance cost for the airport in the first Control Period. An extract of the letter is reproduced below,

> *"…During the course of our analysis of the data/information made available by DIAL, it has been observed that the operating and maintenance expenses of FY 2012-13 were efficient during the first control period.*
>
> *The Authority may take the operating and maintenance expenses incurred for the FY 2012-13 as the costs for efficient operation in the formulating the consultation paper for the next control period."*

6.23. In line with this letter from ICWAI, the Authority has had reference to the actual values of operating expenses under all sub-heads as available from DIAL's audited financial statements as well as Auditor's Certificates submitted by DIAL for the first

Control Period. The actual operating expenses of DIAL during the first Control Period as noted by the Authority are presented in Table 11. The Authority also notes that actual operating expenses for FY 2012-13 and FY 2013-14 are much lower than those projected during the first Control Period. The Authority also notes that the operation and maintenance cost for FY 2013-14 comes to Rs. 673.67 crore (excluding airport operator fee, property tax, VRS and interest on DF), which is an increase of 10.46% over FY 2012-13. Considering that inflation in FY 2013-14 was 9.50%[1] the real increase in operating expenses from FY 2012-13 to FY 2013-14 works out to less than 1%.

Table 11: Operating & Maintenance Expenses noted by the Authority from financial statements / auditor certificates of DIAL for the 1st Control Period

Operating Expenses, INR Crore	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
VRS Aero	80.00	32.72	48.18	19.38	19.07
Interest on DF*	0.00	0	162.12	0	0
Staff Cost**	101.66	139.34	142.61	123.72	122.65
Administrative & General Expenses	85.44	132.23	153.14	140.95	161.81
Electricity & Water Charges	31.21	60.82	85.73	98.12	106.26
Operating Expenses	109.55	193.68	210.10	247.10	282.96
Airport Operator Fee	13.01	15.38	17.61	18.91	68.00
Property Tax	0.00	0.00	15.00	5.53	60.92
Total	**434.42**	**574.26**	**834.49**	**653.71**	**821.67**
* as considered by the Authority in its Delhi Tariff Order 03 / 2012-13 ** includes inline screeners cost					

Allocation of Operation & Maintenance Expenses

6.24. The Authority notes that the operating expenses presented in the books of DIAL include both aeronautical and non-aeronautical expenses and accordingly it needs to be allocated into aeronautical expenses, which will be considered by the Authority as a regulatory building block towards determination of Aggregate Revenue Requirements for DIAL.

6.25. While determining operating expenses for the first Control Period, the Authority had considered the actual audited numbers of DIAL for FY 2009-10 and FY 2010-11 and projections of operating expenses for the remaining years, namely FY 2011-12, FY

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[1] CSO release 30th May 2014

2012-13 and FY 2013-14 and allocated these numbers into aeronautical and non-aeronautical components.

6.26. The Authority had noted during the first Control Period that DIAL had got a study conducted by Jacobs to establish the ratio for allocation of operating expenses into aeronautical and non-aeronautical components. DIAL had submitted that while there are certain costs which can be directly classified as Aeronautical and Non-Aeronautical, there were others which cannot be directly classified. In such cases, relevant drivers (including direct allocation, area allocation, and asset base allocation) were used by Jacobs to allocate such costs. DIAL had submitted that while the ratio for allocation of manpower costs was worked out by Jacobs on the basis of split of activities undertaken by respective departments, ratio for allocation of non-staff costs / administrative costs was arrived at by Jacobs on the basis of a detailed analysis of the activity of its departments and the functions of these departments. The Authority had considered the allocation ratios established by Jacobs in respect of DIAL for the first Control Period. These were as follows:

6.26.1. Manpower cost incurred by DIAL for FY 2009-10 and FY 2010-11 was allocated into aeronautical and non-aeronautical components based on application of such an allocation ratio (considered by the Authority during the first Control Period at 89.79%). This allocated manpower cost was adjusted for the cost incurred by DIAL on inline screeners. The cost thus arrived was considered as manpower cost of DIAL. Vide its Decision No. 15 of the Delhi Tariff Order 03/2012-13 the Authority had decided to adopt 1471 (w.e.f 01.04.2011) as the manpower requirement till the end of the Control Period.

6.26.2. Electricity and water expenses were considered net-off recovery from the concessionaires and were taken at 100% allocation into aeronautical expenses.

6.26.3. Administrative and General Expenses (excluding Property Tax) were allocated into aeronautical component based on application of an allocation ratio of 70.28%.

6.26.4. Other operating expenses (excluding Airport Operator Fee) were allocated into aeronautical component based on application of an allocation ratio of 91.89%.

6.26.5. Elements of operating expenses namely, Property Tax and Airport Operator Fee were allocated into aeronautical component based on application of a weighted average of allocation ratios for the above four elements, which worked out to 87.54%. As regards the Airport Operator Fee, the Authority proposes to follow an alternative approach of allocation discussed in para 17.29 belowand 17.38 below. As per this alternate approach, 3% of aeronautical revenues of DIAL is to be considered as aeronautical component of Airport Operator Fee. The Authority has sought views of the stakeholders for finalization of this approach. Pending such finalization, the Authority proposes to consider 3% of aeronautical revenues of DIAL as aeronautical component of Airport Operator Fee.

6.26.6. As per Decision No. 16 of its Delhi Tariff Order No. 3/2012-13, the Authority had decided to expense out the interest on DF Loan for the entire period of 01.03.2009 to 30.11.2011 as operating expenditure. This issue was discussed in para 18.1 to para 18.6 of the Delhi Tariff Order No. 3/2012-13. The total interest for such period amounted to Rs. 350.50 crore. The Authority has noted the difference in treatment decided by it in the said Order and that made by DIAL in its books. While the Authority expensed out the amount of Rs. 350.50 crore as per the schedule of interest payment certified by the auditor, DIAL has capitalized an amount of Rs. 188.38 crore and expensed out the balance of Rs. 162.12 crore. In this regard, the Authority notes the following from the Note 29 (b) (iii) of the Financial Statement of FY 2012-13:

"In its DF Order, issued on November 14, 2011, AERA had stated that treatment of interest paid on debts raised by the Company on securitization of DF and liability would be considered at the stage of tariff determination. Further, based on submissions made, by the Company and other stakeholders, AERA in its order No. 03/2012-13 issued on April 24, 2012 considered the aforesaid interest amount aggregating to Rs. 350.50

Crores for the period from March 1, 2009 till November 30, 2011 as an operating cost for the purpose of tariff determination and not to be adjusted against the DF receipts.

In view of the aforesaid order and the fact that the Company has used DF loans obtained against DF receivable for the construction of the airport, the Company has capitalised a portion of interest aggregating to Rs. 188.38 Crores till the date of commencement of operations of the domestic and international terminals at the airport and interest aggregating to Rs 162.12 crores subsequent to such commencement of operations is charged to the statement of profit and loss."

6.26.7. The Authority has noted this difference in treatment. Based on the treatment made by DIAL in its books, the Authority proposes to expense out the interest amount of Rs. 162.12 crore in FY 2011-12 and capitalize the amount of Rs. 188.38 crores and consider such capitalization towards RAB in FY 2011-12. As DF was considered solely for funding of aeronautical assets, the ratio for allocation of expensed interest on account of DF securitization loan (Rs. 162.12 crore) into aeronautical component as well as for allocation of capitalized interest of Rs. 188.38 crore into aeronautical component was kept at 100%.

6.26.8. Additionally, the Authority had noted that DIAL had capitalized VRS expenses in its books towards intangible assets. However, the Authority had decided to expense out the VRS payments made by DIAL to AAI, as these costs are more in the nature of costs associated with staff matters under the concession agreements and do not build any additional assets. The ratio for allocation into aeronautical component for VRS payments made by DIAL to AAI was kept at overall weighted average ratio of 87.54%. The Authority has reconsidered its approach and is of the opinion that VRS expense is on account of manpower and its related costs and accordingly proposes to consider the allocation of VRS payment to AAI into aeronautical and non-aeronautical components at the rate of allocation of manpower costs at 87.79%.

6.27. The Authority, based on its detailed examination of various sub-heads of operating expenses, has noted that DIAL has incurred expenses on account of Management Fees, Professional and Consultancy Fee and Corporate Costs. The Authority has noted from the Financial Statements that the expenses incurred by DIAL towards professional and consultancy services are Rs. 52.55 crore and Rs. 61.72 crore for FY 2012-13 and FY 2013-14 respectively and those towards corporate costs are Rs. 27.62 crore and Rs. 35.00 crore for FY 2012-13 and FY 2013-14 respectively. The total expenditure towards consultancy and corporate fee for the first Control Period works out to Rs. 280.57 crores and Rs. 89.62 crores respectively. The Authority has sought details on the nature of services availed against these expenses and has received the same.

6.28. As regards the professional and consultancy expenses, DIAL stated as under:

"The professional and consultancy charges include expenses on account of:

- Legal consultancy undertaken for various Legal cases pending at several Hon'ble Courts in the country, legal opinion undertaken for various business related matters.

- Training: DIAL follows the philosophy of investing in its people. During the years, various courses and conducted to empower and upgrade the skill set within the company. The employees are sent to the best of B - Schools like IIM Ahmadabad, XLRI, IIM Bangalore, IIM Lucknow etc. In addition, there are function specific trainings which are provided to the employees to level up their skill set and bring more efficiency into the system.

- HR consultancy, undertaken for the recruitment of the new employees

- Expenditure on internal audit, tax audit etc.

- Certification fees

- Consultation charges paid to the banks

- Technical consultancy

- Other expenses containing, consultancy provided to various departments on projects as and when required. In many cases, these projects are mandated by the bankers, regulators etc.

The professional and consultancy fee increase is attributed to various new studies and consultancies. It included studies related to facility planning, comparison with other *major airports globally in light of upcoming Master Plan Update and other facility improvements, feasibility study for the solar project at the airport etc."*

6.29. As regards the corporate costs, DIAL stated as under:

"…We would also like to clarify that, DIAL is a group entity of the GMR Infrastructure Limited ("GIL") which holds its investments in DIAL through holding company called GMR Airports Ltd ("GAL"), receives several services from the parent company and the holding company. DIAL pays the management fees towards the allocated costs for having availed the services…

…The costs incurred are in nature of 'Indirect costs'. The proposed cost allocation model for GIL & GAL is to recover the cost incurred in providing common corporate services to the business for strategic leadership & governance, business sustenance support and functional & managerial expertise.

…The Cost allocation exercise is not a revenue generating exercise for GIL & GAL and it does not include any 'markup' i.e. they are at zero markup basis and hence only a means of cost recovery.

… DIAL Board also has approved the allocation of corporate cost..."

6.30. The Authority notes DIAL submissions on expenditure incurred towards Professional and Consultancy services and corporate costs as well as justifications for the same.

6.31. In line with the discussions presented in paras 3.18 to 3.31 above, the Authority proposes to consider the inline baggage screening cost towards determination of aeronautical tariff and hence has not removed the same from staff cost as it had adjusted during determination of tariff for the first Control Period.

6.32. Accordingly, the Authority proposes to consider the values as presented in the Table 12 towards truing-up of aeronautical operating expenses for the first Control Period:

Table 12: Operating & Maintenance Expenses to be considered by the Authority towards truing-up for the 1st Control Period

Operating Expenses, INR Crore	Cost Allocation	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
VRS Aero	89.79%	71.83	29.38	43.26	17.40	17.12
Interest on DF	100.00%	0.00	0	162.12	0	0
Staff Cost	89.79%	91.28	125.11	128.05	111.08	110.12
Administrative & General Expenses#	70.28%	60.04	86.24	106.19	95.88	108.13

Operating Expenses, INR Crore	Cost Allocation	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
Electricity & Water Charges*	100.00%	31.21	61.29	86.89	98.17	106.54
Operating Expenses##	91.89%	100.67	177.97	193.06	227.06	260.01
Airport Operator Fee	**	13.01	15.38	17.61	18.91	68.00
Property Tax	87.54%	0.00	0.00	13.13	1.21	6.07
Total		**368.03**	**495.37**	**750.31**	**569.72**	**676.00**
* - In some years, DIAL has clubbed electricity and water charges and in others electricity and fuel charges, adjustments have been made accordingly ** Taken as 3% of aero revenue for previous year # Excludes Provisions for Bad Debts ## Excludes Cargo Expenses						

True-up of Depreciation

6.33. The Authority, vide Decision No 9 of its Delhi Tariff Order 03 / 2012-13, had provided that it will true up the difference between the depreciation calculated based on actual date of commissioning/ disposal of assets and the amount of depreciation calculated considering that such asset has been commissioned/ disposed of half way through the Tariff Year by adjusting at the end of the Control Period the Future Value of such difference.

6.34. Based on the actual audited values of depreciation available to the Authority for FY 2011-12, FY 2012-13 and FY 2013-14, the Authority now proposes to consider the depreciation values recorded in the books of DIAL for these years for the purpose of truing-up the depreciation. The Authority understands that DIAL has adjusted the value of Fixed / Tangible assets in its books on account of DF realized by it. Post such adjustments, depreciation recorded in the books of DIAL do not include depreciation attributable to DF and hence no further adjustment on this count is required. The Authority sought a confirmation from DIAL in this regard. DIAL, vide its submission dated 19.09.2014 in response to the Authority's clarification, has stated as under:

"…we would like to clarify that the Auditor Certificate for Depreciation and Amortization during 1st Control Period submitted to the Authority is as per the Audited Financials and these do not include assets capitalized out of DF Funds."

6.35. The Authority has considered the additions to aeronautical assets and depreciation on aeronautical assets for the years FY2009-10 and FY 2010-11 as considered its Delhi Tariff Order 03/2012-13 and those for FY 2011-12, FY 2012-13 and FY 2013-14 from the DIAL submission on actual additions. The Authority has made relevant adjustments in asset addition as given in the table below:

Table 13: Adjustment to Aero Depreciation for RAB calculation

Rs Crore	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14
Depreciation charged By DIAL Considered for Calculation	-	-	-	-	-	(373.53)	(327.82)	(373.74)
Depreciation charged as per AERA (Actuals till FY2011 as per Delhi Tariff Order No. 03/2012-2013)	(1.12)	(3.46)	(47.48)	(121.38)	(250.92)	(366.94)	(322.08)	(367.21)
Depreciation after being adjusted for DF	(1.12)	(3.46)	(43.82)	(110.29)	(252.19)	(358.17)	(317.81)	(361.69)

6.36. The Authority has applied the tariff year wise average depreciation rate for aeronautical assets on Hypothetical Regulatory Asset Base (HRAB) to derive the depreciation on HRAB as per Decision No. 10b of the DIAL Tariff Order 03 / 2012-13. Calculations for the same are presented in Table 10.

True-up of corporate taxes

6.37. As regards corporate taxes, the Authority had projected that DIAL will pay taxes of Rs. 196.08 crore and Rs. 345.54 crore in FY2012-13 and FY2013-14 respectively. These were considered by the Authority for the purpose of estimating target revenue at the time of determination of tariffs for the first Control Period. The Authority, vide Decision No 18 of its Delhi Tariff Order 03 / 2012-13, also decided to review the actual corporate taxes on aeronautical services paid by DIAL, based on the audited figures as may be available and true up the difference between the actual corporate tax paid and that used by the Authority in the forecast.

6.38. With the audited financial statements for FY 2012-13 and FY 2013-14 being available to it, the Authority has noted that DIAL has not paid any tax in these years. The Authority notes that SSA prescribes consideration of corporate taxes on earnings pertaining to aeronautical services as a building block. The Authority, in its Delhi Tariff Order 03 / 2012-13, had noted that corporate taxes are statutory payments due to the Government. Further, the tax is being considered as a cost in the target revenue computations. Therefore, if the actual tax paid in any of the years (in the control period) were lower than the tax forecast to have been paid (and accordingly included in the target revenue calculation), it would lead to a situation wherein DIAL would be unjustly enriched. In view of this, the Authority has decided that only the actual tax paid that can be ascribed to aeronautical services will be reckoned for the purpose of determining the target revenue. Thus corporate taxes have been considered as nil for FY 2012-13 and FY 2013-14 for the purpose of ARR. As corporate taxes were projected to be nil by the Authority in the Delhi Tariff Order No. 3 in these years, there is no true up on account of corporate taxes.

True-up of Non-aeronautical Revenue

6.39. As per Decision 19 of Delhi Tariff Order 03 / 2012-13, the Authority had decided to retain the forecasts proposed under scenario 3 of its projections of Non aeronautical revenue. At the time of determination of tariffs for the first Control Period, non-aeronautical revenues were estimated based on the projections of relevant passenger and air traffic growth, penetration and inflation for each of the sub-heads under non-aeronautical revenues, as indicated in paras 21.2.16 to 21.2.17 of the Delhi Tariff Order No. 3/2012-13. At the time, audited value for non-aeronautical revenues realized by DIAL in FY2009-10 and FY2010-11 i.e. the first two years of the first Control Period were available. For these two years, the Authority had considered the higher of the projected value or actual value of each sub-head for the purpose of estimation of the total non-aeronautical revenue. Such higher value was considered as base for projection of revenue from that sub-head of non-aeronautical revenue. For remaining financial years, values were projected based on the relevant drivers.

6.40. The revenues hence obtained were given in the Delhi Tariff Order No 03/2012-13 (Table 35 -3) and are as given in the table below:

Table 14: Non-Aeronautical Revenues considered by the Authority in its Delhi Tariff Order No. 03/2012-13

Building Blocks Calculation	FY2010	FY2011	FY 2012	FY 2013	FY 2014
Non Aeronautical revenue incl. cargo	494.63	686.90	880.07	1,096.03	1,346.40

6.41. The Authority had received the Ministry of Civil Aviation's letter No.AV.24032/4/2012-AD, dated 09.03.2012 which states that revenues from Cargo and Ground Handling services accruing to the airport operator should be regarded as non-aeronautical, irrespective of whether these services are provided by the airport operator or concessionaires appointed by the airport operator. In line with this letter, the Authority proposes to consider the revenue generated by DIAL from cargo and ground handling services as non-aeronautical revenue. The revenue of Rs. 135.59 crores from cargo in FY2009-10 was treated as aeronautical revenue at the time of determination of aeronautical tariffs for the first Control Period. However, based on the said MoCA letter, the Authority proposes to consider this amount as non-aeronautical revenue. However the revenue from CUTE is proposed to be considered as aeronautical revenue as discussed in paras 20.25 below 20.30 below.

6.42. Further, the Authority proposes to continue to consider fuel throughput (FTP) revenues as aeronautical revenues as per its Decision No. 24.d. in the Delhi Tariff Order 03/2012-13. The Authority is of the view that any fee consequent to the supply of fuel to the aircraft (which is an aeronautical service), called by any name whatsoever (fuel throughput/license fee etc.), is an aeronautical revenue as per the provisions of both AERA Act 2008 and OMDA. Vide Decision No. 22.a. of the same Order (refer paras 21.5.1 to 21.5.7 for discussions), the Authority had considered the revenue from Into Plane services as non-aeronautical revenue. However, based on the discussions presented in paras 20.32 to 20.34 below, the Authority proposes to consider revenue from Into Plane services as aeronautical revenue.

6.43. The Authority, during the determination of tariff for the first Control Period, had not considered the revenues realised by DIAL from "Other Income" (typically including Interest Received Deposit with Banks, Income from Current Investments, Income from Non-Current Investments, Interest received - Delayed payment, Sale of Others material /Scrap others, Profit on Sale of Depreciable Assets, Dividend income, Realized Foreign Exchange Gain/Loss, Misc. income Others, Liquidated Damages received, Management Fee, Tender cost recovery) as non-aeronautical revenue. These values, as submitted by DIAL, are as follows:

Table 15: DIAL's submission of Other Income for the first control period

INR crore	FY09-10	FY10-11	FY11-12	FY12-13	FY13-14
Interest Received - Deposits with banks	1.22	6.52	1.08	1.35	0.8
Interest Received-Deposits with Others	2.87				0.32
Profit on sale of Investments		6.02	15.46	22.73	17.41
Interest Received - Delayed Payment	6.01		19.78	38.44	9.59
Sale of Other Materials / Scrap - Others	0.78	0.33	0.63	0.87	1.38

INR crore	FY09-10	FY10-11	FY11-12	FY12-13	FY13-14
Profit on sale of Depreciable Assets			0.22		0.39
Dividend				17.05	26.4
Management Fees					10.5
Realized Foreign Exchange Gain/Loss -		0.5	1.11	0.41	0.0
Miscellaneous Income Others	0.09		0.04		14.95
Tender Cost recovery	7.59	5.15			
Total Other Income	18.56	18.52	38.32	80.85	81.74

6.44. However the Authority has examined the revenue streams as indicated in Table 15 and is of the view that revenues arising out of Sale of Other Materials / Scrap – Others, Profit on sale of Depreciable Assets, Management Fees, Miscellaneous Income Others and Tender Cost recovery should form part of the non-aeronautical revenue of the airport and therefore needs to be considered towards determination of aeronautical tariff in terms of the provisions of AERA Act and Schedule 1 of SSA.

6.45. As regards the other streams not reckoned towards tariff determination, the Authority's examination is given below.

6.45.1. While considering such revenue, the Authority, in line with its decision not to consider the impact of fluctuations in foreign exchange, proposes not to consider the "Realized Foreign Exchange Gain/Loss". Also the Authority notes that DIAL has realized dividend income from its investments in JVs. However as the assets pertaining to the JVs are not being reckoned for the purpose of determination of RAB, the Authority is of the view that the dividend income accruing to DIAL from such JVs should also not be considered towards cross-subsidisation.

6.45.2. Further the Authority is of the view that the interest income received by DIAL (on bank deposits, other deposits and on account of delayed payments) is part of the cash flow management undertaken by DIAL. The Authority has not considered the interest on working capital as an operating expense in its determination of tariff in respect of DIAL and accordingly proposes not to consider the interest income as part of cross-subsidisation.

6.45.3. The revenues from remaining items under "Other Income" which were not considered by the Authority earlier towards cross-subsidization are now proposed to be considered for cross-subsidization.

6.46. After making the above adjustments of treating certain revenue as aeronautical and certain others as non-aeronautical revenue, the Authority has recomputed the non-aeronautical revenue to be considered for cross-subsidisation in respect of DIAL for the first Control Period. With respect to the true-up of non-aeronautical revenues, the Authority had detailed its approach for the projections in paras 21.2.14 to 21.2.24 of its Delhi Tariff Order 03 / 2012-13. The Authority has noted that, from 2008-09 onwards DIAL had set up JVCs with respect to some streams of non-aeronautical revenues (JVCs with the concessionaires appointed for these streams with equity participation). The Authority had also noted from DIAL's submission that one of the objectives behind the formation of JVs was to increase the non-aero revenue to DIAL. Accordingly, projections were done with an intent to reflect this objective. The Authority in its approach had considered the higher of the actuals or the projected revenues to arrive at the non-aeronautical revenues to be considered towards cross-subsidisation.

6.47. As per Decision No. 19, Scenario 3 was proposed for the purpose of considering non-aeronautical revenue for the first Control Period in Delhi Order No.03/2012-13, based on the growth drivers also indicated in the said Order. The Authority did not explicitly either provide for true up or state that it will not true-up. The Authority in its Delhi Tariff Order 03 /2012-13 had stated as under,

"…

(i) The non-aero activities were concessioned to third parties even before 2008-09. However, from 2008-09 onwards DIAL adopted a different business model and most of these activities were concessioned to JV companies where DIAL held equity stake.

(ii) In the presentation made to the Authority, DIAL strongly supported this new business model on the grounds that the concession through JV route would achieve higher revenues.

(iii) Therefore, now, it cannot fairly be the case of DIAL that revenue received by it from these activities during 2009-10 and 2010-11 should be in any way less than the 2008-09 revenue figures duly adjusted by the growth drivers. In case a

different view is to be taken, it would undermine the objective of change in business model followed by DIAL.

(iv) DIAL commissioned the new terminal T3 in 2010-11, which was operationalised for international flights from 28th July 2010 and for domestic flights from 11th November 2010. As highlighted by DIAL in its response regarding operating costs estimates, the terminal area post T3 has increased from a total of 1,25,160 sq.mts to 6,79,047 sq.mts (an increase of 442%). Due to this massive increase in terminal area and other related developments, DIAL have themselves proposed that revenue for last 4 months of 2010-11 may be used to forecast revenue for the balance tariff years of the Control Period. In other words, DIAL have proposed 2010-11 figures to be the basis for forecast for the remaining years of the control period. The actual non-aeronautical revenues of DIAL for 2010-11 is Rs.594 crore and the annualised Non Aeronautical revenues for 2011-12 as per DIAL's submission is Rs.703 crore. The projected Non Aeronautical revenues for 2010-11 and 2011-12 as per Authority's methodology is Rs.686.89 crore and Rs. 835.25 crore. As can be seen the numbers arrived by the Authority is higher than both the actuals of 2010-11 or the annualised figures for 2011-12.It will thus be clear that as far as treating 2010-11 as base year is concerned the Authority's view is same as that of DIAL.

(v) In the scheme of SSA, 30% of the non-aero revenue is to be shared towards target revenue determination thereby proportionately reducing the aeronautical tariff. Therefore, it is important for the Authority to ensure disincentives against lower than expected non-aeronautical revenues.

…

The Authority decided to retain the forecasts as proposed in the Non-Aeronautical Revenue Scenario 3 as proposed in the Consultation Paper (Ref para 374 of CP-32/2011-12 dated 03.01.2012)

…"

6.48. In view of the above i.e. the formation of JVCs, it was expected that the non-aeronautical revenues to DIAL would increase. However the Authority has noted that non-aeronautical revenue realized by DIAL are less than those projected at the time of determining aeronautical tariffs for the first Control Period.

6.49. The Authority notes that DIAL, vide their letter dated 06.01.2015, has requested for true-up of the non-aeronautical revenues which were projected during the first Control Period. The Authority notes that its purpose of not explicitly providing for true-up of non-aeronautical revenue during the first Control Period was based on the premise that the model adopted by DIAL through JVC route was to increase the non-aeronautical revenue accruing to DIAL, which would have allowed them to keep the upside. Now if the Authority was to true-up the non-aeronautical revenue realized by DIAL for the first Control Period, it would defeat the very purpose for which JVCs were set up by DIAL. The Authority, accordingly, proposes not to true-up the non-aeronautical revenue realized by DIAL for the first Control Period.

6.50. Hence, the Authority proposes not to true-up the non-aeronautical revenue projected apart from making adjustments for (1) streams of Other Income (Refer paras 6.44 and 6.45 above), (2) Revenue from ITP considered (Refer para 6.42 above) and (3) cargo revenue (Refer para 6.41 above). Thus, the non-aeronautical revenues considered by the Authority are as below,

Table 16: Non-Aeronautical Revenues considered by the Authority for 1st Control Period for true-up

Non-Aeronautical Revenues, INR Crore	**FY2009-10**	**FY2010-11**	**FY2011-12**	**FY2012-13**	**FY2013-14**
Non Aero as per previous model	494.63	686.90	880.07	1,096.03	1,346.40
Cargo Handling	135.59	-	-	-	-
Other Income considered as Non-aeronautical revenue	8.46	11.50	16.35	23.60	44.63
Adjustment for ITP (-)	0.00	1.17	1.02	1.25	1.36
Non Aero for the purpose of true-up	638.68	697.23	895.40	1118.38	1389.67

True-up of Aggregate Revenue Requirement

6.51. Thus, the target revenue estimated for the first Control Period is as below,

Table 17: Target Revenues considered by the Authority for 1st Control Period

Target Revenue, INR Crore	**FY2009-10**	**FY2010-11**	**FY2011-12**	**FY2012-13**	**FY2013-14**
Return on RAB	253.83	597.97	902.03	826.62	758.69

Target Revenue, INR Crore	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
Total Aeronautical Operating Expenses	368.03	495.37	750.31	569.72	676.00
Depreciation & Amortization	135.49	269.84	375.66	335.75	384.90
Taxes	-	-	-	-	-
Gross Target Revenue	757.35	1,363.18	2,027.99	1,732.08	1,819.58
Cross Subsidization	191.61	209.17	268.62	335.52	416.90
Net Target Aero Revenue	565.74	1,154.01	1,759.37	1,396.57	1,402.68

True-up of Aeronautical Revenue Realized by DIAL

6.52. The target aeronautical revenue for DIAL is compared against aeronautical revenues realised by DIAL as per its financial statements in the first Control Period. The difference is either over recovered or under recovered ARR or under recovered ARR and accordingly the net present value of the target revenue (entitlement) and actual aeronautical revenue (realisation) is considered by the Authority as part of the true-up and to be carried into 2nd Control Period and accounts.

Table 18: True-up considered by the Authority for the 1st Control Period

True-up, INR Crore	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
Actual Aero Revenue					
LPH	283.58	337.24	350.17	764.09	854.93
UDF	-	-	0.00	1322.27	1805.63
PSF	104.10	121.35	128.12	30.22	0.00
FTP+ITP	84.99	106.06	128.15	120.98	134.81
Other (baggage X-ray in 2009-10)	29.50	1.16			
CUTE	4.96	5.07	4.63	10.37	10.98
Aero Cargo - Screening	5.45	16.27	19.25	18.87	21.91
Total	512.58	587.15	630.32	2266.80	2828.26
Target Aero Revenue	565.74	1,154.01	1,759.37	1,396.57	1,402.68
Difference (Target – Actual)	53.16	566.86	1,129.05	(870.23)	(1,425.58)
Discount rate (10.33%)	1.63	1.48	1.34	1.22	1.10
NPV of the difference as on 01.04.2014	**86.91**	**839.95**	**1,516.33**	**(1,059.31)**	**(1,572.84)**
True-up as on 01.04.2014					**(188.96)**

Proposal No. 4. Regarding truing-up of Target Revenue for the first Control Period for DIAL

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

- **i. To true-up RAB along with Depreciation based on actual additions during the first Control Period towards determination of tariff for the second Control Period as elaborated in para 6.14 above.**
- **ii. To consider the average of opening RAB and closing RAB values and apply WACC on this average RAB to arrive at the Return on RAB under the true-up exercise as elaborated in para 6.14 above.**
- **iii. To adjust RAB on account of DF based as presented in Table 6**
- **iv. To consider allocation of assets of 89.25% and 10.75% towards aeronautical and non-aeronautical assets respectively for the first Control Period as per ICWAI report.**
- **v. To true-up RAB along with Depreciation for the first Control Period as presented in Table 10**
- **vi. To not true-up WACC of 10.33%, which was considered by it in its Delhi Tariff Order 03 / 2012-13**
- **vii. To consider inline baggage screening expenses incurred by DIAL during the first Control Period towards determination of aeronautical tariff and hence include it as part of the operating expenses being considered for true-up**
- **viii. To consider the same ratios for allocation of operating expenses into aeronautical and non-aeronautical components as considered by it in its Delhi Tariff Order 03 / 2012-13 expect VRS which will be allocated at the rate of manpower allocation**
- **ix. To consider revenue accruing to DIAL from ITP service providers for the first Control Period as aeronautical revenue**
- **x. To consider revenue accruing to DIAL from Cargo and Ground Handling and for the first Control Period as non-aeronautical revenue**
- **xi. To consider revenue accruing to DIAL from CUTE counter charges as aeronautical revenue**

xii. **To consider the aeronautical component of Airport Operator Fee as per para 17.29 below**

xiii. **To consider revenue realized by DIAL under the head "Other Income" (excluding income from interest, dividend and forex gain/loss) during the first Control Period towards cross-subsidisation under the current exercise**

xiv. **To not true-up non-aeronautical revenue for the first Control Period in its Delhi Tariff Order No. 03 / 2012-13 as elaborated in para 6.46 and 6.47 above.**

xv. **To true-up corporate taxes based on actual taxes paid by DIAL during the first Control Period and accordingly consider nil taxes for the first Control Period towards determination of aeronautical tariff for the second Control Period**

xvi. **On balance, to consider true-up of Rs. 188.96 crore as on 01.04.2014 (over-recovery by DIAL in the first Control Period) towards determination of aeronautical tariff for the second Control Period**

xvii. **To add the above true-up in the ARR to be considered for determination of aeronautical tariff for the second Control Period**

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

a DIAL Submission on Asset Allocation (Aeronautical / Non-Aeronautical)

7.1. DIAL's submission with respect to Allocation of Assets into aeronautical and non-aeronautical to be considered for the purpose of tariff computation is as below:

"In a hybrid till model, costs and assets are to be allocated for determining the target revenue over the regulatory period. The list of activities to be included in Aeronautical Services is given in OMDA Schedule 5 and reproduced in the Box below.

<table>
<tr><td colspan="2">Aeronautical services means the provision of the following facilities and services:
1. Provision of flight operation assistance and crew support systems;
2. Ensuring the safe and secure operations of the Airport excluding national security interest;
3. The movement and parking of aircraft and control facilities;
4. General maintenance and upkeep of the Airport;
5. The maintenance facilities and the control of the and hangar age of aircraft;
6. Flight Information Display screens
7. Rescue and fire fighting services
8. Management and administration of personnel employed at the Airport
9. The movement of staff and passengers and their interchange between all modes of transport at the airport
10. Operation and maintenance of passenger boarding and disembarking systems including vehicles to perform remote boarding; and
11. Any other services deemed to be necessary for the safe and efficient operation of the airport

A more detailed list would include the following</td></tr>
<tr><td>12. Aerodrome control services
13. Airfield
14. Airfield lighting
15. Air taxi services
16. Airside and landside access roads and forecourts including writing, traffic signals, signage and monitoring
17. Common hydrant infrastructure for aircraft fuelling services by authorized providers
18. Apron and aircraft parking area
19. Apron control and allocation of aircraft stands
20. Arrivals concourses and meeting areas
21. Baggage systems including outbound and reclaim</td><td>30. Foul and surface water drainage
31. Aircraft Docking Guidance systems and marshalling
32. Information desks
33. Inter-terminal transit systems
34. Lifts escalators and passenger conveyors
35. Loading Bridges
36. Lost property
37. Passenger and hand baggage search
38. Piers and gate rooms
39. Policing and general security
40. Prayer rooms
41. Infrastructure/Facilities for Post offices
42. Infrastructure/Facilities for Public telephones</td></tr>
</table>

22. Bird-scaring *23. Check-in concourses* *24. Cleaning, heating, lighting, and air conditioning public areas* *25. Customs and immigration halls* *26. Emergency services* *27. Facilities for the disabled and other special needs people* *28. Fire service* *29. Flight information and public*	*43. Infrastructure/Facilities for Banks* *44. Infrastructure/facilities for Bureaux de Change* *45. Runways* *46. Signage* *47. Staff search* *48. Taxiways* *49. Toilets and nursing mothers rooms* *50. Waste and refuse treatment and disposal* *51. X-ray service for carry on and checked-in luggage* *52. VIP/special lounges*

Based on above, a systematic approach has been adopted for allocating costs and assets between aeronautical and non-aeronautical segments. The following key principles have been considered while allocating costs and assets:

1. ***Full allocation**: No Items should be missed out in allocation exercise.*
2. ***Attribution quality**: The methodology of measurement must be credible.*
3. ***Relevance**: The allocation must be used based on the relevant usage of that area.*
4. ***Consistency**: The methodology adopted must be applied consistently.*
5. ***Continuity:** The methodology adopted for allocation of assets must also continue to apply to costs.*
6. ***Avoidable Cost**: the primary activity of the airport is to provide aeronautical services and the users should bear their full cost. The resources essential to the primary activity of operation of the airport, even if there were no secondary (non-aeronautical) should be allocable to aeronautical activities. Where, however, the presence of non-aeronautical activities has generated an additional requirement for space or facilities, which would otherwise have not been needed, these resulting avoidable costs should be regarded in full as non-aeronautical.*
7. ***Transparency**: The allocation must be carried out in a transparent manner.*

In general the vast majority of the income at a given airport tends to be clearly allocable to either Aeronautical or Non-Aeronautical categories as the case *may be. Most assets are also relatively simple to deal with the important exception of the terminal (in which Aeronautical and Non-Aeronautical activities take place alongside each other below a common roof). "*

7.2. DIAL was advised by M/s Jacob Consultancy on allocation of terminal assets into aeronautical and non-aeronautical categories for the IGI Airport at Delhi. DIAL has submitted a summary of their report titled "Allocation of Passenger Terminal Areas between Aeronautical and Non-Aeronautical Activities Indira Gandhi International Airport -Delhi, India" dated 17.11.2011. DIAL submission regarding allocation of assets based on this study is reproduced below,

"Terminal area allocation

The most important asset used for both aeronautical and non-aeronautical services is the terminal building. For terminal assets allocation, as advised M/s Jacobs Consultancy (airport consultancy firm), the floor area requirement within the terminal building provides a fair, credible and accurate measurement system. The same allocation can be used for allocation of aeronautical and non-aeronautical Capex on the terminal building. Jacob's carried out a separate exercise of allocation of terminal areas. A certificate to this effect obtained from them is given as Annexed. The summary of aero and non-aero classification obtained in the aforesaid exercise for the terminal areas at IGIA is as below:

Summary of Area Allocation of all Passenger Terminal Assets at IGIA

Passenger Terminal	*Aeronautical Area %*	*Non-Aeronautical Area %*
Terminal 3	*84.07*	*15.93*
Terminal 1A	*96.00*	*4.00*
Terminal 1C	*75.00*	*25.00*
Terminal 1D	*83.00*	*17.00*
Terminal 1 (A,C&D)	*84.00*	*16.00*
Terminal 2	*84.20*	*15.80*
Overall Weighted Average	*84.10*	*15.90*

"

7.3. DIAL has elaborated the methodology adopted for classification of assets into aeronautical and non-aeronautical as below,

"Assets Allocation

Methodology adopted: Most of the assets, at individual level, can be clearly classified as aeronautical or non-aeronautical. However, where this is not the case, assumptions have been made and the following methodology has been adopted in the assets allocation:

1. Firstly, the admissibility test has been applied on all the assets. The upfront fee paid to AAI, capitalized as Intangible asset, is not considered as part of RAB as per provisions of the SSA.

2. On the other assets, identification on individual asset level having direct relation to an activity (Aeronautical, Non Aeronautical or Mixed Asset) is established. Assets on airside are classified into Aeronautical Assets and are 100% allocable to the aeronautical RAB. For e.g. investment in runway, drainage and culverts, taxiway, apron and bays, AGL, satellite rescue and fire station, perimeter road, boundary wall, sub-stations etc.

3. For areas within passenger terminal building used for passenger processing and facilitation have been considered as aeronautical. This is in accordance with principle of avoidable cost concept. Incremental areas in the terminal building necessitated due to presence of retail or commercial activities, have been considered as non-aeronautical.

4. Finally, assets which were not directly allocable to either asset (aeronautical or non-aeronautical) are classified as mixed assets.

5. The mixed assets have been allocated based on respective terminal area mix, in case they are related to the respective terminal. In case of other non-related mixed assets, overall terminal area mix has been applied.

The allocation of assets carried out using the aforesaid principle and facts have been independently verified by statutory auditors. The allocation of the assets, as on March 31st 2013 and September 30th 2013, into aeronautical and non-aeronautical has been certified by the statutory auditors and the summary of the same is given below.

Gross Block	*FY2013 (Rs. Crores)*	*FY2013 (%)*	*FY2014 (H1) (Rs. Crores)*	*FY2014 (H1) (%)*
Aeronautical	*11,402*	*89.31%*	*11,419*	*89.31%*
Non	*1,364*	*10.69%*	*1,367*	*10.69%*

Aeronautical				
Total	*12,766*		*12,786*	

"

7.4. Furthermore, in its submission dated 23.07.2014, DIAL has made the following additional submission on allocation of assets into aeronautical and non-aeronautical as on 31st March 2014 as below and has provided Auditor's Certificate for the same,

"The allocation of assets (as on 31st March 2014) has been independently verified by statutory 31st auditors. The allocation of the assets, as on March 2014, into aeronautical and non-aeronautical (as certified by the statutory auditors) is as under:

Gross Block	*FY2014*	*FY2014*
	(Rs. Crores)	*(%)*
Aeronautical	*11,516*	*89.24%*
Non Aeronautical	*1,388*	*10.76%*
Total	*12,904*	

"

b Authority's Examination of DIAL's Submission on Asset Allocation (Aeronautical / Non-Aeronautical)

7.5. The Authority has carefully examined DIAL's submissions on allocation of assets into aeronautical and non-aeronautical categories. The Authority's examination is elaborated below.

7.6. The Authority has noted that DIAL in its submissions during the first Control Period had proposed an asset allocation of 89.25% and 10.75% towards aeronautical and non-aeronautical categories respectively as on 31st March 2011 based on Jacob's Report. The Authority had decided in Delhi Tariff Order 03/2012-13 to accept the DIAL proposal to take aeronautical asset allocation as 89.25% and non-aeronautical asset allocation as 10.75% for the first Control Period on the basis of the Jacobs' Report, in the absence of any other relevant basis for allocation at that stage. The Authority had also decided to commission an independent study in this respect and to take corrective action, as may be necessary, at the commencement of the second Control Period.

7.7. In line with this decision, the Authority commissioned a study by ICWAI Management Accounting Research Foundation on Allocation of Assets at IGI Airport, Delhi. ICWAI Management Accounting Research Foundation (ICWAI-MARF) was incorporated under Section 25 of the Companies Act, 1956 by the Registrar of Companies, West Bengal on 17th August, 2009. It is an agency promoted by the Institute of Cost Accountants of India.

7.8. The Authority is in receipt of a letter from ICWAI dated 03.04.2014 confirming that it considers DIAL's allocation of assets for the first Control Period to be appropriate. An extract of the letter is reproduced below:

> *"We have examined each line item in Fixed Assets Register to review the current allocation of assets between Aero, Non-Aero at IGI Airport, Delhi and the allocation of assets is found to be appropriate."*

7.9. The Authority has also received the study from ICWAI-MARF titled "Report on Study of Allocation of Assets at Indira Gandhi International Airport, Delhi" vide letter no. ICWAI-MARF/DIAL/2014/05 dated 03.04.2014.

7.10. As regards the methodology, ICWAI-MARF has stated as under,

> *"Our study was based on the Jacobs Consultancy Report (dated 14th June 2011) which provides the allocation of Terminal Buildings between Aeronautical and Non-Aeronautical Assets on a floor area occupied for different activities. It is the general practice to allocate the assets located in Terminal Buildings between Aero and Non-Aero, primarily based on the floor area allocated to these two categories. Other assets are assigned to Aero and Non-Aero based on their use. Cost of Assets, which are used for both types of activities, have been allocated to Aero and Non-Aero in the ratio of Aero and Non-Aero Assets, before the allocation of common assets."*

7.11. The Study considered the assets capitalized by DIAL up to 31.03.2011, which were worth Rs. 12,565.69 crore. These assets were categorized under aeronautical; non-aeronautical, mixed and inadmissible assets. The study identified assets of Rs. 6,077.55 crore as aeronautical, Rs. 176.59 crore as non-aeronautical, Rs. 150 crore as inadmissible and Rs. 6,161.55 crore as mixed assets. The mixed assets of respective Terminals were then segregated into aeronautical and non-aeronautical assets based on the ratio of floor area of respective terminal building and allocated into aero and non-aero assets. However mixed assets (other than power and electricity system in Terminal-3) which are not located in any Terminal Building (e.g. New Udaan Bhawan and Other Common), were allocated on the basis of overall ratio of floor area of all terminal buildings allocated to aero and non-aero activities. Based on this approach, mixed assets of Rs. 6,161.55 crore were allocated as Rs. 5,003.10 crore of aeronautical assets and Rs. 1,158.45 crore of non-aeronautical assets. Thus, the study summarized the gross assets of Rs. 12,565.69 Crore as of 31.03.2011 into Rs. 11,080.65 crore of assets as aeronautical, 1,335.04 crore of assets as non-aeronautical and Rs. 150 crore of assets as inadmissible.

7.12. Further, the study concluded the final asset allocation in respect of the IGI Airport, Delhi to be 89.25% and 10.75% towards aeronautical and non-aeronautical assets respectively for the first Control Period. An extract of the study has been reproduced below,

"After reviewing each item of assets, other than assets valued at Rs. 5 lacs or less, we conclude that the allocation of assets is appropriate.

We do not suggest any change in allocation of assets acquired up to 31st March 2011.

Final allocation of gross block of assets, as on 31st March 2011, into Aeronautical and Non-Aeronautical activities (excluding Inadmissible assets amounting Rs. 150 crore) is summarized in table below:

Final Allocation of Gross Block of Assets up to 31st March 2011: (Rs. in Crore)

Category of Assets	*Total as on 31.03.2011*	*% of Total*
Aero	*11,080.65*	*89.25%*
Non-Aero	*1,335.04*	*10.75%*
Total	*12,415.69*	*100%*

."

7.13. Based on the outcome of the ICWAI study, the Authority now proposes to consider allocation of assets of 89.25% and 10.75% (the ratio that was considered by the Authority at the time of determination of the tariff for the first Control Period in respect of IGI Airport, Delhi) towards aeronautical and non-aeronautical assets respectively for the first Control Period.

7.14. DIAL in its submissions dated 11.11.2013 for the second Control Period has proposed an asset allocation of 89.31% and 10.69% towards aeronautical and non-aeronautical categories respectively. However, in its submission dated 23.07.2014 DIAL has revised the allocation to 89.24% and 10.76% respectively. The Authority has also noted the Auditor's Certificate on allocation of assets into aeronautical and non-aeronautical as of 31st March 2014. The comparisons of DIAL submissions are presented below,

Table 19: Comparison of Asset Allocation into aeronautical and non-aeronautical assets submitted by DIAL

DIAL submissions on allocation of assets	As per Jacob's report in Order no.03 (as of 31.03.2011)	11.11.2013 (as of 31.03.2013)	23.07.2014 (as of 31.03.2014)
Aeronautical	89.25%	89.31%	89.24%
Non-Aeronautical	10.75%	10.69%	10.76%

7.15. The Authority has noted the revisions in allocation of assets between aeronautical and non-aeronautical assets submitted by DIAL. The Authority sought from DIAL the details of allocation of Terminal area into aeronautical and non-aeronautical components. DIAL, in response, has submitted the details of area allocation, which is summarized below:

Table 20: Area Allocation of Passenger Terminals into aeronautical and non-aeronautical assets submitted by DIAL

Terminal	Aero floor area (sq.m.)	Non-aero floor area (sq.m.)	Total area (sq.m.)
Terminal 1A	11,206	441	11,647
Terminal 1C	8,654	2,931	11,575
Terminal 1D	33,970	6,954	40,924
Terminal 2	46,080	8,640	54,729
Terminal 3	452,901	97,292	550,193

7.16. DIAL has submitted to the Authority a fresh study for assessment of allocation of assets into aeronautical and non-aeronautical components as on 31.03.2014 conducted by Leigh Fischer (Earlier Jacobs), dated 11.11.2014. An extract of the findings of the report have been reproduced from DIAL submission below,

"As per the findings of the Consultant, the new overall allocation for aeronautical area in Terminals has increased to 87.1% (from 84.1% earlier). Enclosed is the detailed report on Terminal area allocation as on 31.03.2014. Based on the above area allocation report, Auditors have reviewed the Asset Allocation (RAB). The resultant impact of change in terminal area allocation on overall asset allocation is as follows:

Sl. No.	*Summary of Assets*	*New*	*New*	*Old*	*Old*

Sl. No.	Summary of Assets	New	New	Old	Old
1	Aeronautical Assets	11650.91	90.29%	11515.80	89.21%
2	Non-Aeronautical Assets	1252.80	9.71%	1387.92	10.76%
	Grand Total		100%		100%

"

7.17. The Authority is also in receipt of the auditor's certificate regarding the terminal area allocation. An extract of the same has been reproduced below,

"We have verified the Relevant Documents/Agreements/Hand Over Take Over (HOTO) Reports valid as on 31st March 2014. Based on our examination, we hereby certify that the commercially occupied area in the Airport terminals as on 31st March, 2014 as shown below is verified and found correct.

Terminal	Area Occupied (In Square Metres)
Terminal 1A	42.00
Terminal 1C	735.47
Terminal 1D	6,445.04
Terminal 2A	9.40
Terminal 3	51,391.57
Grand Total	58,623.48

7.18. The Authority is currently examining the above submission by DIAL. Thus, pending completion of its examination, the Authority proposes to continue with the results of the study carried out by ICWAI for the second Control Period and follow the same asset allocation as followed in the first control period.

7.19. The Table 19 reflects the comparison of asset allocation into aeronautical and non-aeronautical assets submitted by DIAL for the first Control Period from 31.03.2011 to 31.03.2014. The Authority notes that this ranges from 89.25% to 89.24% for aeronautical assets and from 10.75% to 10.76% for non-aeronautical assets. This is in line with the Jacobs Report as considered in Delhi Tariff Order 03 / 2012-13. The Authority has adopted the same for the first Control Period. The Authority has noted that DIAL has submitted a fresh assessment of allocation of assets into aeronautical and non-aeronautical assets as on 31.03.2014 conducted by Leigh Fisher as mentioned in para 7.16 above. From the above study, as noted that there is a wide variation in the aeronautical and non-aeronautical areas between these two studies.

The study does not give the details of terminal area with details on identified mixed area. This requires further details and closer study of the Leigh Fisher report. The Authority, for the present, continues with the earlier study (Refer para 7.13 above).

7.20. The Authority notes that during the second Control Period there will be capital asset additions to the aeronautical assets on the airside namely, runway, apron, taxiway etc. and to the non-aeronautical assets namely, additions to commercial area, and mixed assets, which are of common nature. The Authority notes that airside asset additions will be of 100% aeronautical and added to the aeronautical assets. Similarly the identified 100% non-aeronautical assets will be added to the non-aeronautical assets. The identified mixed assets for respective tariff years will be allocated based on auditor certificate on asset allocation ratio. This aero and non-aero asset will be added with that of the previous year respective assets to arrive at the aeronautical RAB for determination of tariff.

7.21. Meanwhile, if the Authority finalizes its approach for determination of ARR on normative basis detailed in its Consultation Paper No. 05/2014-15 dated 12.6.2014 titled "Normative Approach to Building Blocks in Economic Regulation of Major Airports", it will consider the appropriate allocation of assets as finalized under this approach at that stage for the purpose of estimation of ARR.

Proposal No. 5. Regarding allocation of assets into aeronautical and non-aeronautical assets

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

i. To consider allocation of assets of 89.25% and 10.75% towards aeronautical and non-aeronautical assets respectively for the first Control Period as indicated in para 7.19 above and also for the second Control Period as indicated in para 7.20 above

ii. To true-up the allocation of asset into aeronautical and non-aeronautical component for the second Control Period as per 7.20 above

iii. If the Authority finalizes its normative approach for determination of asset allocation presented in the Consultation Paper No. 05/2014-15 dated 12.06.2014 ("Normative Approach to Building Blocks in

Economic Regulation of Major Airports), the Authority proposes to consider such finalized approach for allocation of assets in respect of IGI Airport, Delhi.

8. Opening Regulatory Asset Base (RAB) for Second Control Period

a. DIAL Submission on Opening Regulatory Asset Base (RAB)

8.1. DIAL's submission dated 11.11.2013 on Opening Regulatory Asset Base is as below,

"As contemplated in State Support Agreement (SSA), the following principle has been used to compute RAB. RAB representing the aeronautical assets is calculated as below:

RAB at the start of a year/period (Opening RAB)

+

Projected capital investment

-

Projected depreciation

=

RAB at the end of a year/period (Closing RAB)

This calculation of RAB for each year is the average of the opening and the closing RAB. Movement of RAB is depicted by applying the aforesaid methodology. The return is calculated on the average RAB.

- *Opening RAB is calculated based on the historical cost of assets created by the airport.*
- *In addition to above a value is determined on the assets acquired on privatization (Hypothetical Asset Base) in line with the SSA. Hypothetical Asset Base has been added based on the calculation explained earlier.*
- *Capital expenditure forecasted for the relevant year is added to the RAB.*

Following approach has been adopted for firming up the RAB during the regulatory control period:

1. The statutory auditors have classified total assets of the organisation between Aeronautical assets and Non-Aeronautical assets.

Gross Block	*FY2013*	*FY2013*	*FY2014 (H1)*	*FY2014 (H1)*

	(Rs. Crores)	*(%)*	*(Rs. Crores)*	*(%)*
Aeronautical	*11,402*	*89.31%*	*11,419*	*89.31%*
Non Aeronautical	*1,364*	*10.69%*	*1,367*	*10.69%*
Total	*12,766*		*12,786*	

2. Opening RAB has been firmed up, by aggregating the aeronautical assets as on the last day of the 2012-13.

RAB for the purpose of calculation of return on RAB	*As of Mar 2013 In Crores*
Aeronautical Assets as certified by auditors	*11,402*
Less: DF funded assets	*3,065*
Less: Assets disallowed	*97*
Add: Forex Adjustment (Aeronautical Portion)	*292*
Total Aeronautical Block eligible for return	*8,532*

."

8.2. DIAL's revised submission dated 23.07.2014 on Opening Regulatory Asset Base is as below,

"Opening RAB is calculated based on the historical cost of assets created by the airport. In addition to above a value is determined on the assets acquired on privatization (Hypothetical Asset Base) in line with the SSA. Hypothetical Asset Base has been added based on the calculation explained earlier. Capital expenditure forecasted for the relevant year is added to the RAB.

Following approach has been adopted for firming up the RAB during the regulatory control period:

The statutory auditors have classified total assets of the organisation between Aeronautical assets and Non-Aeronautical assets is as follows:

Gross Block	*2013- 14 (Rs. Crores)*
Aeronautical	*11,516*
Non Aeronautical	*1,388*
Total	*12,904*

Opening RAB has been firmed up, by aggregating the aeronautical assets as on the last day of the 2013-14.

RAB for the purpose of calculation of return on RAB	*As of Mar 2014 In Crores*	
Aeronautical Assets as certified by auditors		*11,516*
Less: DF funded assets	*(3,065)*	
Less: Aeronautical Assets disallowed	*(97)*	
Add: Forex Adjustment (Aeronautical Portion)	*479*	
Total Aeronautical Block eligible for return		*8,833*

Reconciliation of Assets used for RAB calculation with the audited financials of FY2013-14 is as follows:

Particulars	*Amount (in Rs. Crs)*	*Reference*
Tangible assets as on 31 Mar 2014	*10,491*	*Note 13 of financials*
Intangible assets as on 31 Mar 2014	*529*	*Note 14 of financials*
DF Funded	*3,065*	*Total of DF drawdown*
DF Collection charges	*(17)*	*Total DF Collection Charges*
Total assets	*14,068*	
Aero Assets as per Auditor Certificate	*11,516*	
Non Aero Assets as per Auditor Certificate	*1,388*	
Forex Adjustment	*537*	
DF Interest Capitalized	*188*	*(Capitalized in book and not considered for RAB)*
Upfront fee	*150*	
Intangibles – VRS	*289*	
Total assets	*14,068*	

"

b. Authority's Examination of DIAL Submissions on Opening Regulatory Asset Base (RAB)

8.3. The Authority has carefully examined the submissions made by DIAL on opening Regulatory Asset Base for second Control Period. The Authority's examination is presented below.

8.4. The Authority has noted from DIAL's initial submission dated 10.11.2013 that DIAL has considered a closing RAB as on 31.03.2014 at Rs. 8,314.95 crore. While making this submission, the financial results for FY 2013-14 were available for the first half only. Subsequently when the audited results for the full year FY 2013-14 were available, DIAL made a revised submission and considered a closing RAB as on 31.03.2014 at Rs. 8,543.17 crore.

8.5. The Authority has noted from the Tariff Model submitted by DIAL that DIAL has differed from the Authority's calculation of closing RAB in certain aspects. These are as follows:

8.5.1. The Hypothetical RAB considered by DIAL is Rs. 1,119.00 crore at the end of FY2008-09 as against Rs. 467 crore decided by the Authority in its DIAL Tariff Order 03/2012-13.

8.5.2. In its DIAL Tariff Order 03/2012-13, the Authority had decided not to consider the forex fluctuation. The Authority has noted from the submissions of DIAL for the second Control Period that it has considered adjustments of Rs. 326.76 crore as on 30.09.2013 in RAB on account of forex fluctuations. In its revised submission dated 23.07.2014, DIAL revised the amount of adjustments upward to Rs. 536.82 crore (by adding forex fluctuation of Rs. 210.82 crore for FY 2013-14) as on 31.03.2014. The Authority has noted from the financial statements of DIAL that the forex fluctuations for respective years are as follows:

Table 21: AS 11 adjustments in the books of DIAL as noted by the Authority

INR Crore	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
AS 11 adjustments (on account of forex fluctuations)	-	(11.65)	205.85	131.80	210.82
Total forex fluctuation for 1st Control Period = Rs 536.82 crore					

8.5.3. The Authority, vide Decision No. 8 in its Tariff Delhi Tariff Order 03/2012-13, had decided not to consider any capital expenditure in excess of Rs. 48.86 crore (for FY 2011-12), Rs. 78.92 crore (for FY 2012-13) and nil (for FY 2013-14) towards Future Maintenance capital expenditure at that time. The Authority has noted from financial statements of DIAL that the actual capitalization of assets in FY 2011-12, FY 2012-13 and FY 2013-14 respectively are different from the values considered by the Authority in the said Order.

8.6. As discussed in the Paras 9.5 and 9.7 below, the Authority proposes to consider the HRAB at Rs. 467.00 crore at the end of FY 2008-09, pending outcome of the appeal by DIAL referred in Para 2.17. As per the DIAL Tariff Order 03 / 2012-13, HRAB is proposed to depreciate at a rate, which is the average rate of depreciation of aeronautical assets every tariff year. The Authority proposes to consider closing HRAB at the end of FY 2013-14 as Rs. 365.52 crore as per working shown in Table 10.

8.7. Further, the Authority, in Decision No. 12 of Delhi Tariff Order No. 3/2012-13, had decided not to consider any adjustments in RAB related to foreign exchange variations related to both debt and interest on debt. The Authority also notes means of finance and its hedging etc. are business decisions. The Authority does not find any fresh argument from DIAL and is not persuaded to reconsider its approach. Accordingly, the Authority proposes not to consider foreign exchange fluctuations in the determination of RAB.

8.8. As regards the future maintenance capital expenditure, the Authority had decided that it may consider the future maintenance capital expenditure and future capital expenditure based on the audited values of such expenditure, evidence of the stakeholder consultations as well as review thereof that the Authority may undertake in this regard. Accordingly, the Authority has sought Auditor's Certificates providing details of additions to aeronautical assets in FY 2011-12, FY 2012-13 and FY 2013-14 including the details of future maintenance capital expenditure. The Authority has also sought clarification on the reasons for the expenditure in these three years being different from what was approved by the Authority in its Delhi Tariff Order 03/2012-13. In response, DIAL has submitted as follows:

"The details of assets capitalized other than project cost, which has been incurred to keep the airport operational during FY2011-12 to FY2013-14 are as follows:

Year	*Amount (in Rs. crore)*
FY 2011-12	*81.06*
FY 2012-13	*121.76*
FY 2013-14	*64.20*
Total	*267.02*

A detailed item wise split of the Capital expenditure other than Project Capex is as enclosed for the year FY2011-12, FY2012-13 and FY2013-14."

8.9. The Authority has noted the above differences as mentioned in the Table 7 above and has considered the audited values of actual expenditure incurred by DIAL in these years towards determination of closing RAB as on 31.03.2014.

8.10. The Authority, in its examination of various submissions from DIAL towards determination of true-up on RAB for the first Control Period in Paras from 6.8 to 6.19 above, has considered the issues of HRAB, foreign exchange fluctuation and maintenance capital expenditure. The value of opening and closing RAB for each year of the first Control Period, proposed to be considered by the Authority for the purpose of true-up has been presented in Table 10 above.

8.11. The closing RAB as on 31.03.2014 in respect of DIAL has been considered by the Authority at Rs 7,168.65 crore, which includes closing value of HRAB at Rs 365.52 crore. Accordingly the opening RAB for second Control Period is proposed to be considered at Rs 7,168.65 crore, which includes opening value of HRAB at Rs 365.52 crore.

8.12. With regard to assets of JVCs formed by DIAL, the Authority has sought clarification from DIAL that the RAB as calculated by DIAL does not include the capital expenditure undertaken by JVs for their operations at the airport. The Authority has noted DIAL's submission of the Auditor's Certificate, which states as under,

"We further certify that assets related/belongs to Joint ventures are not capitalized in the Books of accounts of the Company as on 20th November 2014"

8.13. As regards the reconciliation of allowable project cost of Rs 12,502.86 crore with the capitalized assets in the books of DIAL, the Authority notes that it had considered the allowable project cost of Rs. 12,502.86 crores at the time of determination of tariff for the first Control Period. The Authority understands that this allowable project cost would have been with respect to a corresponding scope. The Authority further notes that ATC tower, which was projected at Rs. 350 crores is, at present, under construction and accordingly has not been capitalized in the books of DIAL. The Authority has noted that DIAL has submitted that it has incurred towards additional capital expenditure over and above the scope to the tune of Rs. 267.00 crores as part of the maintenance capital expenditure. The Authority has sought clarification from DIAL on break-up of the project cost of Rs. 12,502.86 crore reckoned by the Authority in its Delhi Tariff Order 03/2012-13 in terms of components of cost i.e. civil construction cost, IDC etc.; in key Airport block cost like passenger terminal building (PTB), runway, apron, cargo, fuel farm etc.; in Airside Assets, PTB, City side Asset etc. as well as year-wise schedule of capitalization of this allowed project cost along with details on IDC for each year. The Authority has had reference to actual capital addition submitted by DIAL reproduced in para 8.2 above. To examine these aspects further, the Authority proposes to have the reconciliation of the scope and its cost. The Authority also proposes to obtain revised Board approval with justification for increase in cost and/or scope. The Authority proposes to appropriately consider the cost incurred, if any, including IDC, based on reconciliation study at the time of determination of tariff for the next control period.

Proposal No. 6. Regarding Opening RAB for second Control Period for DIAL

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

- **i. To consider an Opening RAB of Rs. 7,168.65 crore, which includes opening value of HRAB at Rs. 365.52 crore**
- **ii. To reconcile the scope considered under the allowable project cost of Rs 12,502.86 crore and the costs incurred by DIAL for this scope as elaborated in para 8.13 above.**
- **iii. To appropriately consider the outcome of the study at the time of determination of tariff for the next control period as presented in para 8.13 above.**

9. Hypothetical Asset Base

a. DIAL Submission on Hypothetical Asset Base (HRAB)

9.1. Hypothetical Asset Base is a part of Regulatory Asset Base, which is considered as a regulatory building block for the purpose of determination of aeronautical tariff. The Hypothetical Regulatory Asset Base (HRAB) was set as Rs. 467 crore vide Decision No. 10 of the Authority's Order no. 3/2012-13 dated 20.04.2012 in respect of IGI Airport, Delhi as against Rs. 1,119 crore submitted by DIAL; at the time of determination of tariffs for the first Control Period.

9.2. For the current Control Period, DIAL has submitted as below:

"As per the concession, from the 4th year after the Effective Date, the Aeronautical Charges are to be determined in accordance with the formula set forth in Schedule 1 of the SSA. The Schedule 1 lay down a comprehensive mechanism and formulae for determination of the Target Revenue. One of the components in the determination of the Target Revenue is the Regulatory Asset Base (RAB) pertaining to the Aeronautical Assets. The mechanism set forth in the SSA for the computation of the Regulatory Base of Aeronautical Assets in any given year is based on the following formula:

$RB_i = RB_{i-1} – D_i + I_i$

The RAB of the Aeronautical Assets in any year (RB_i) is the Regulatory Base for the immediately preceding year (RB_{i-1}), subject to negative adjustment on account of depreciation (D_i) and positive adjustment on account of investments in the relevant year (I_i).

Schedule 1 of the SSA specifies 'RB_0' as follows:

(i) The Book Value of the Aeronautical Assets in the books of the JVC; and

(ii) The 'hypothetical regulatory base' computed using the then prevailing tariff and the revenues, operation and maintenance cost, corporate tax pertaining to Aeronautical Services at the Airport, during the financial year preceding the date of such computation

RB_0 is the Regulatory Asset Base at the start of the regulatory period.

The Schedule 1 requires, at the time of determination of Initial Regulatory Asset Base (RB_0), an addition of the Hypothetical Asset Base. SSA prescribed the components to be considered while determining the Hypothetical Asset Base. The following are considered in this respect:

	Calculation	Explanation
	Aeronautical revenue	Aeronautical revenue of preceding Year of tariff determination.
Less	(-)O and M costs	Aeronautical Operation and Maintenance costs*
Less	(-)Taxes	Net Of Taxes if any
Balance	(=) Net Revenue	
Multiply	(X) 1/WACC	Multiplied by reverse of WACC: as the hypothetical asset base multiplied by WACC should give last year's Net Aero Income. We have considered the Bid WACC for the aforesaid purpose.

Considering the provisions of the SSA, we had considered 2009-10 as the first year of the regulatory period and Hypothetical Asset Base had been considered based on revenues and expenses of the year 2008-09."

9.3. DIAL's submission regarding its calculation of Hypothetical Asset Base, based on its interpretation of the principles of SSA and OMDA, for the current Control Period is as below:

*"*Calculation of Hypothetical Asset Base:

Following is the calculation of Hypothetical asset included in RAB

Particulars	*2008-09 Figures in Rs. Crores*
Aero Revenue [A]	*434*
Aero Expenses [B]	*385*
Less: Expenses not considered [C]	*82*
DIAL manpower cost	*81*
Runway 11/29 operations & maintenance cost	*1*
Eligible Expenses [D=B-C]	*304*
Aero EBIDTA [A-D]	*130*
WACC	*11.60%*
Hypothetical Asset Base	*1,119*

In the aforesaid calculation, aero expenses calculation is as below:

Total Expenses FY 2008-09	*As Per Filing*

Total Expenses FY 2008-09	As Per Filing
Total Expenses	445 Crs.
Aeronautical Cost Allocation Mix %	86.5%
Allocated Aero Expenses	386 Crs.
Less: Inefficient costs	82 Crs
Efficient cost	304 Crs

In the year 2008-09 there was an overlap of manpower costs of AAI staff as well as DIAL staff. From a valuation point of view the manpower cost of only AAI staff for the relevant period need to be considered (Operational Support Cost) to result in a fair valuation. The manpower cost of DIAL staff need to be excluded as the AAI staff was mandated to support the working of existing terminals for that period while the DIAL staff was getting oriented and trained. As such the amount of 81 Crores for the additional manpower should not be included in HRAB valuation.

The operation and maintenance cost of the new assets viz. new runway are also excluded. An amount of 1 Crore on this account also need to be excluded in opex cost.

WACC: At the time of bidding of the airport, AAI had in the bid documents referred to a BID WACC. This Bid WACC was used during the bidding process. This was the WACC suggested by AAI to be included in bidding documents. Since the assets belong to assets acquired at that stage as such this WACC has been used.

The calculation of Hypothetical Asset Base as such should be as below:

Details	Tariff filing
Aero Revenue	434 Crs.
Aero efficient Costs	304 Crs.
WACC	11.60%
Hypothetical RAB	1,119Cr

Based on the above valuation of HRAB, following is the movement in HRAB Block during the last control period:

INR in Crores	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014
Opening HRAB	1,119	1073	1043	995	948	901
Depreciation for the year	(46)	(30)	(48)	(47)	(47)	(47)
Closing HRAB	1,073	1043	995	948	901	854

b. Authority's Examination of DIAL Submission on Hypothetical Asset Base (HRAB)

9.4. The Authority has carefully examined the submissions from DIAL on the HRAB to be considered towards determination of aeronautical tariff for the second Control Period. The Authority's examination of the same is presented below.

9.5. The Authority has noted that DIAL, in its submissions for the second Control Period, has submitted the same value of Rs. 1,119 crore as submitted by it in its submissions for the first Control Period. The Authority vide Paras 168 to 201 of Consultation Paper No. 32/2011-12 dated 03.01.2012 had examined the submissions of DIAL on the Hypothetical Regulatory Asset Base and vide Paras 12.21 to 12.35 of DIAL Tariff Order 03/2012-13 has given its decision on the same. The Authority, vide Decision No. 10 of DIAL Tariff Order 03/2012-13, had determined the value of Hypothetical Regulatory Asset Base (HRAB) as Rs. 467 crore as against Rs. 1,119 crore submitted by DIAL.

9.6. The Authority had examined the issue in details in its Consultation Paper No.32/2011-12 dated 03.01.2012, which was commented upon by various stakeholders. The Authority had noted in said Consultation Paper and Tariff Order that DIAL, in its calculation of HRAB at Rs. 1,119 crore, had considered elements of determination of HRAB, including aeronautical revenue, aeronautical expenses and capitalization factor (WACC), in line with its own interpretation of the provisions of SSA and OMDA. The Authority had differed from DIAL's interpretations and presented its calculation of HRAB for inviting comments from the stakeholders. Pursuant to an examination of the comments from stakeholders, the Authority in its Delhi Tariff Order No. 03/2012-13 (Refer Para 12.22) had stated that the concept of Hypothetical RAB is entirely within the framework of the State Support Agreement (SSA) and is defined only in relation to the calculation of Regulatory Base RB_0 for the first regulatory period. Accordingly the Authority determined the HRAB at Rs. 467 crore as given below,

Table 22: Hypothetical RAB determined by the Authority in its Delhi Tariff Order 03/2012-13

Hypothetical RAB as decided by the Authority	INR crore
Revenues at prevailing tariffs in the year 2008-09 [A]	433.51
Landing Charges	243.51

Hypothetical RAB as decided by the Authority	INR crore
Parking & Housing Charges	13.40
Passenger Service Fees	85.16
Baggage X- Ray Revenue	3.63
In-Line X-Ray Revenue	15.34
Fuel Throughput Revenue	72.47
Aeronautical Expenses [B]	385.23
Operation and Maintenance Cost	385.23
Corporate Tax pertaining to aeronautical services at the airport	0.00
Eligible Target Revenue C= (A-B)	48.28
Capitalisation Factor (@ WACC) [D]	10.33%
Hypothetical Asset Base =C /D	467.00

9.7. The Authority does not find any new argument submitted DIAL on this issue in its current submission for determination of aeronautical tariffs for the second Control Period. Thus, the Authority is not persuaded to reconsider the determination of HRAB made in Decision No. 10a of its Delhi Tariff Order 03/2012-13 and proposes to maintain this decision. However, as discussed in detail in para 2: "DIAL Appeal against Delhi Tariff Order No. 03/2012-13" above, the Authority acknowledges that its determination of HRAB is subject to the final outcome of DIAL's appeals before AEARAT / High Court in respect of Delhi Tariff Order no. 03/2012-13.

9.8. Accordingly, HRAB considered towards determination of aeronautical tariff will be based on closing HRAB for 2013-14 of Rs. 365.52 crore, which will be the opening HRAB for FY2014-15.

Table 23: HRAB and Depreciation on HRAB till the end of the first Control Period

Hypothetical RAB (HRAB)	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Opening HRAB	-	467.00	441.80	424.15	406.66	388.73
Additions to HRAB	467.00	-	-	-	-	-
Depreciation on HRAB	-	25.20	17.65	17.49	17.94	23.20
Closing HRAB (A+B-C)	467.00	441.80	424.15	406.66	388.73	365.52
*Depreciation on HRAB has been estimated on the average depreciation rate for the aeronautical assets in respective year, which have in turn been re-estimated by excluding aeronautical assets funded by Development Fee.						

9.9. The Authority as per decision 10.b of Delhi Tariff Order 03/2012-13 had proposed to depreciate the Hypothetical RAB at the overall depreciation rate for aeronautical assets over each year of the second control period. The Authority has noted that

DIAL has adopted the new depreciation rates as per the Companies Act 2013 as per paras 16.4 to 16.10 below.

9.10. The Authority has accordingly computed the HRAB considered towards determination of aeronautical tariff for the second Control Period as below. The Authority has noted that the sharp jump in depreciation on HRAB in FY2014-15 from FY2013-14 is on account of new rates of depreciation adopted by DIAL from FY2014-15 onwards.

Table 24: HRAB and Depreciation on HRAB for Second Control Period

Hypothetical RAB	2014-15	2015-16	2016-17	2017-18	2018-19
Opening HRAB	365.52	336.92	310.21	283.78	257.53
Add: Additions to HRAB	0.00	0.00	0.00	0.00	0.00
Less: Depreciation on HRAB	28.61	26.71	26.44	26.25	25.96
Closing HRAB	336.92	310.21	283.78	257.53	231.57

Proposal No. 7. Regarding Hypothetical RAB for second Control Period for DIAL

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

i. To continue with its determination of Hypothetical RAB at Rs. 467.00 crores as on 31.03.2009 as was considered in Delhi Tariff Order 03 / 2012-13.

ii. To adopt the year-wise average depreciation rate for aeronautical assets for the second Control Period as rate of depreciation for HRAB in the second Control Period

iii. To accordingly consider an Opening Hypothetical RAB of Rs. 365.52 crore as on 01.04.2014.

10. Additions to Regulatory Asset Base

a DIAL Submission on Additions to Regulatory Asset Base

10.1. DIAL's submission dated 11.11.2013 regarding future capex in the form of Addition to Regulatory Asset Base (Excluding Security Equipment) is as below:

"Capital expenditure Program for the years 2014-15 to 2018-19

As part of the next control period, DIAL has planned various rehabilitation capital expenditure works at the IGI Airport. IGI Airport has various old facilities especially on the airside that have been developed over a period of time and which facilities have now outlived their useful life and need to be reconstructed / rehabilitated to continue its proper usage. Detailed below are lists of such works that are expected to be carried out in the next control period.

These Capex are small Capex works and do not require user consultation as per the terms of concession agreement.

The note below provides the background and the basis for the estimated Capital Expenditure.

1. REHABILITATION AND IMPROVEMENT CAPITAL EXPENDITURE:

Background:

IGI airport has various assets and facilities that have been developed / implemented over a period of time. With regards to the various airside works especially the runways, taxiways, stands etc., the regulatory /statutory requirements define the periods after which these need to be rehabilitated upon.

DIAL has carried out various studies to plan the Capex in a phased manner without hindering the operations of the airport. These studies are based on various statutory, regulatory and good industry practices firstly by NATS of UK and then by other reputed consultants. Regular directions are also received from the statutory agencies like ATC, DGCA which are also taken into consideration while planning the Capex works.

During the period in question, the following rehabilitation works are proposed at the Airside areas of the IGI Airport:

a. T1 / T2 AIRSIDE AREAS

i) Rehabilitation of Runway 09/27

Rehabilitation of Runway 9/27 will be started during the control period. The runaway is due for rehabilitation / repairs during the current control period.

ii) Rehabilitation of Various Taxiways

Around 40 numbers of taxiways exist at the airside areas of T1/T2 and most of these taxiways were constructed by AAI, 20-25 years ago. While routine maintenance and patch repair works were performed by AAI (and by DIAL after takeover), the condition of several taxiways have deteriorated over time and lived beyond their design life. Few taxiways which were beyond any further repair (like taxiway N, M & L) were upgraded and rehabilitated by DIAL in the year 2010 & 2011 while Taxiway L1 is below rehabilitation.

As a part of above Capital Expenditure till 2018-19, and in order to ensure smooth and safe airside operations, DIAL is planning to carry out following rehabilitation and up-gradation of the below listed taxiways which are also severely deteriorated over time:

- *Taxiway no. P, R1, B, C1, B3, M1, R2, R (balance portion), R4, R3, S, E (balance portion), E1 and F3.*
- *Intersection of 15/33 - RWY 27 (isolation bay).*
- *Widening of TWY E2 (east of TWY E) and widening of TWY L2 shoulders.*

The pavement area of above rehabilitation constitutes around 50% of the whole of the taxiway pavement at the T1/T2 airside. The remaining taxiway pavement areas may not require significant rehabilitation measures in the next 4-5 years.

iii) Rehabilitation of Aprons

Like the Taxiways, most of the aprons stands (which mainly have rigid pavement) were constructed around 20-25 years ago by AAI and apart from routine patch repairs, no rehabilitation has been undertaken for the Apron. Some of the Apron pavements are completely deteriorated over time.

To ensure smooth and safe operations for the Aircrafts, DIAL is planning to rehabilitate the following Apron pavements during the above Capital Expenditure program till 2018-19:

- *Taxi/ Apron stand no. 41 to 49, 81 to 92.*
- *Taxi/ Apron stand no. 120 to 132, 135, 136 to 141, 142 to 153*
- *PQC Pavement at Satellite bays, various locations at Domestic Apron*

iv) Rehabilitation of Airside Service Roads

The service roads at the airside are also deteriorated over time and require rehabilitation at certain stretches. Most of the roads have flexible pavements while few areas have been constructed in concrete. Out of a total of around 4 lakh square meter road pavement, DIAL is planning to rehabilitate approximately 50% of the road pavement over the next Capital Expenditure development phase, i.e. till 2018-19.

b. T3 AIRSIDE AREAS

All the airside areas of T3 that consist of Runway 11/29 and associated Taxiways, Apron and Service roads, were constructed in the year 2007-2009/10. While no rehabilitation work is planned at the T3 airside in the next Capex development phase, DIAL plans to carry out the following new improvement works at these areas:

i) Rehabilitation of 11/29 & associated taxiways

Runway 11/29 and the associated taxiways were commissioned in July 2008. The system would complete about 10 years during this control period. Considering the useful life as well as service requirements, it is foreseen that the rehabilitation of the runway would start during the period and continue into the next period.

ii) Rehabilitation of PQC Pavement at Satellite bays, various locations at Domestic Apron

The regular site inspections / survey have shown that many of the domestic apron stands, satellite bays need rehabilitation so as to meet the serviceability

/ safety requirements. The works will be taken up in a phased manner during the period.

c. Terminal and Landside Areas:

Many of the developments at the terminal and landside areas require refurbishment / improvement in order to meet the capacity as well as service quality requirements during the next control period. In principle, the following works are foreseen to be executed:

i) Terminal 1D refurbishment:

Terminal 1 of IGIA currently handles around 12 million (arrival and departure combined) annually with a peak hour capacity of 2200 passengers at Terminal 1D and 2100 passengers for Terminal 1C. Post shifting of full services carriers to Terminal 3 in the year 2010 utilization of Terminal 1 were reduced however growth of airlines operating from Terminal 1 was very significant. In the year 2010 Terminal 1D was catering to around 102 departures per day whereas currently 154 departures take place.

Terminal 1D currently consists of 15 boarding gates and 12 bussing ramps corresponding to it. As per the current hourly distribution of flights around 15 departures take place during peak hours. In such scenarios simultaneous boarding of flights is a challenge. The peak hour design capacity of the terminal is 2200 pax/hour and at present we are handling the same number. It is therefore absolutely necessary to expand T1D to the extent possible.

Glass vestibules installed at boarding gates to maintain effectiveness of cooling system are required to be shifted towards the external area to create additional seating space for passengers and to have an effective queuing process; along with creation of two boarding stations per flight (at boarding gates) for a quick boarding process as per international standards.

The above measures would augment to passenger convenience levels along with effective utilization of available infrastructure with certain modification works and circumvent on immediate further development works.

ii) IT Upgrades:

IT systems of T3 have all been installed and commissioned in 2010. As is prevalent in the industry, IT systems get out-dated in a period of 5 years and thus would need a complete updating / revamping during the current period. This will involve significant costs including hardware up gradation etc.

iii) Other terminal and landside Capital Expenditure:

A list of other Capital Expenditure that is foreseen to be executed during the current period is set out in the table below. In general these relate to:

- Change of electrical / mechanical switch gear across the airport which have outlived their life,

- Rehabilitation /up gradation of various equipment across the terminal 1D

- Improvement to aesthetics /finishes of T3

- Purchase of equipment like runway sweeping machines, vehicles, office equipment etc.

S.No.	***Item Description***	***Remarks***
1	*Procurement of 12 Numbers DFMD's units*	*to increase handling capacity*
2	*Implementation of Automated Early Baggage Storage*	*process improvement*
3	*Up gradation of all DFMD's with head count facility*	*process improvement*
4	*Bus gate at Pier D*	*Improvement in passenger throughput*
5	*Improvement to finishes in various areas of T3*	*Certain areas need refurbishment due to end of life issues, in certain locations required to meet various service quality requirements*
6	*Miscellaneous rehabilitation Capital Expenditure*	*various rehabilitation works in the terminal*
7	*Replacement of all old MOCB in T1/T2 area*	*MOCB have outlived their life and need to be replaced as per statutory requirements*
8	*Conversion of BPCL land into parking stand T1 area*	*after clearance of area by BPCL, area to be restored and converted to stands*
9	*Bus gate at Pier D concrete foundations area restoration*	*restoration of pavement surface to facilitate bus movements and reducing turnaround time*
10	*Rehabilitation of back office store/ BHS VIP area*	*improvements to increase life of existing finishes*
11	*Rehabilitation of VIP lounge*	*improvements based on feedback from various authorities*
12	*Package Sub Station for to provide alternative power to street light*	*There is no second source power supply to the central spine and tunnel areas. It is essential to have alternate source due*

S.No.	Item Description	Remarks
		security and safety reasons of road lighting.
13	Construction of new sewer line from toll plaza to centaur	Existing drain near AAI HQ and centaur hotel is damaged resulting sewerage block and overflow in operational area. New line needs to be laid.
14	Concrete Ramp at DX drain and Runway 11	access requirement to have access to drain for maintenance purposes
15	Redundant Pipeline for Potable & Flush water line	process improvement
16	Replacement of 3 no.s of Carousal at Arrival T1C	Three Carousal Belts at Arrival T1C are very old since operational 20 years and there is lot of noise while operational of the Belts. They are proposed to be replaced with new Carousals.
17	Additional units for SHA air-conditioning	Passengers feedback on air-conditioning.
18	Arch rehabilitation	various rehabilitation works in the terminal
19	Replacement of 11kV MOCB of Haj Substation, BOAC and AI Substations	Required for Mandatory replacement of the Obsolete Breakers
20	Central Stores additional racks	capacity enhancement
21	Redundant power supply arrangement for secondary pumps	Operational requirement- no second source
22	Replacement of Pilca Cable from SFS to E-Block to AI Engineering to STP Substation	The old PILCA cable is old and needs to be replaced
23	Redundant fire motor-pump set for PTB	Safety requirement
24	RCC building for cooling tower motor starter panel	Permanent structure for protection of motor panel
25	Facility Management	Replacement of furniture etc.
26	Providing & fixing of Vestibules for T-1C	There is HVAC loss because of ingress of hot air entering in to Terminal building from Airside. The Cost of two vestibules has been taken based on the drawing & details given by Finishes team
27	New prepaid Energy meter	For efficient and proper control / monitoring of power usage
28	Up gradation of Lighting from Dwarka Circle to Northern Access Tunnel	The low Lux levels have been pointed out by Chief and Principle secretary of Delhi Government.
29	SITC of side stream filters for cooling tower	process improvement
30	Installation of gravity louvers to save energy in all the roof extraction fan	process improvement

S.No.	Item Description	Remarks
31	Water supply in forecourt	For façade cleaning and forecourt cleaning
32	Fencing of DJB and other civil associated works	Safety requirement
33	Document control/Library in EMO office	Document storage racks and drawing storage racks
34	Sludge holding shed at STP area	all weather provision for slued holding area
35	Fencing of AS1 substation and other Civil Associated works	up gradation of safety provisions
36	Weigh Bridge 30 T	process improvement
37	Installation of Dewatering Pump in T-1 service Tunnel	Installation of Dewatering pump inside the service tunnel of T-1 for the safety of tunnel and essential utilities passing through it.This service tunnel having the Electrical cable, HVAC Line, Fire Line.
38	Surfacing of AS1 substation road	up gradation to permanent road for all weather access
39	Provision of Bunds for filter cleaning and panel protection	process improvement
40	Procurement of critical tools and equipment	process improvement / existing have outlived their life
41	Corporate Communications	Branding and signage works
42	Connection of T-1C fire line with T-1D	This line is very long and very old, presently being fed from T-1A. It is proposed to connect with fire line of T-1D which is a new system. It will improve the reliability of system. This is approx. cost of 200 Mt in length
43	Integration of NUB and Project office Power System	For optimum utilization of the two transformers and the two DG sets, thereby providing redundancy and cutting down on diesel cost.
44	SITC of timer actuated solenoid valves for urinal flush water	process improvement
45	Cooling Tower Blow down water connection to Flush Water tank	process improvement
46	vibration sensors for chiller	process improvement
47	CCTV in T1 D lift	Security requirement
48	Redundancy for control panel	process improvement
49	Additional new water cooler for apron area	As more airlines and aircraft operation, usage has increased and we need to augment the current capacity.

2. SCHEDULE OF EXECUTION OF WORKS:

It may be noted that DIAL carries out a regular monitoring of the airside / various facilities and takes feedback of various stake holders including pilots /

airlines etc. regarding the airfield operations in order to establish the necessity of various improvement/ rehabilitation works and amplifications. Depending on such analysis and feedback, the priority / programme for various rehabilitation works is set out keeping in mind also the operational interface requirements.

It should be noted that the schedule would have to be adjusted/ revised as per operational requirements from time to time.

3. ESTIMATED COST OF WORKS:

The overall estimated value of works for the Proposed CAPITAL EXPENDITURE Program from 2013-14 to 2018-19 is as follows:

Type of Capex	Amount in Crores
Airside works	657.44
Terminal / landside/ others	254.33
Total	911.77

The costs have been estimated based on current rates for carrying out such works. OMDA requires DIAL to follow a system of competitive bidding to finalize and award various contracts. The costs as estimated above will be subject to adjustment based on the actual costs that each of these contracts are finalized / completes.

The details of various rehabilitation Capital Expenditure and the basis of their costing are as follows:

Year	*Amount Spent*	*Capitalization*	*Building/Pavement*	*P&M*	*Furniture*
In Crores					
2013-14	*136.77*	*68.38*	*54.71*	*10.26*	*3.42*
2014-15	*136.77*	*136.77*	*109.41*	*20.51*	*6.84*
2015-16	*136.77*	*136.77*	*109.41*	*20.51*	*6.84*
2016-17	*136.77*	*136.77*	*109.41*	*20.51*	*6.84*
2017-18	*182.35*	*159.56*	*127.65*	*23.93*	*7.98*
2018-19	*182.35*	*182.35*	*145.88*	*27.35*	*9.12*
2019-20		*91.18*	*72.94*	*13.68*	*4.56*
TOTAL	*911.77*	*911.77*	*729.42*	*136.77*	*45.59*

10.2. The detailed working for the above capital expenditure is given by DIAL as below:

"Detailed Working of the above Capex is as below:

1. Air side works cost summary

SL. No.	***Location***	***TOTAL PAVEMENT AREA (sqm)***	***Pavement area to be rehabilitated (sqm)***		***Total Estimated Cost of Rehabilitation Works (in Crore INR)***
			Rigid	*Flexible*	
T1 & T2 Airside Pavements					
TAXIWAYS					
1	*Taxi N*	*26,400*			
2	*Taxi M*	*18,260*			
3	*Taxi L*	*18,260*			
4	*Taxi U*	*17,600*			
5	*Taxi V*	*23,200*			
6	*Taxi W*	*8,062*			
7	*Taxi P*	*188,540*		*188,540*	*37.71*
8	*Taxi M1*	*12,760*		*12,760*	*2.55*
9	*Taxi M2*	*9,240*			
10	*Taxi L1*	*12,760*			
11	*Taxi J*	*13,464*			
12	*Taxi H*	*5,280*			
13	*Taxi R*	*61,688*	*32,246*	*29,442*	*26.85*
14	*Taxi R1*	*15,075*	*10,350*	*4,725*	*7.67*
15	*Taxi R2*	*9,715*	*6,670*	*3,045*	*4.94*
16	*Taxi R3*	*19,550*	*19,550*	*0*	*12.71*
17	*Taxi R4*	*6,700*	*4,600*	*2,100*	*3.41*
18	*Taxi S*	*0*	*0*	*0*	
19	*Taxi K*	*19,976*			
20	*Taxi E2*	*92,048*			
21	*Taxi E3*	*10,626*			
22	*Taxi E4*				
23	*Taxi E5*	*10,736*			
24	*Taxi E*	*47,127*		*47,127*	*9.43*
25	*Taxi E1*	*6,700*		*6,700*	*1.34*
26	*Taxi D*	*27,940*			
27	*Taxi D1*	*21,912*			
28	*Taxi F*	*25,564*			
29	*Taxi F1*	*19,430*			
30	*Taxi F2*	*14,950*			
31	*Taxi F3*	*4,140*	*4,140*	*0*	*2.69*
32	*Taxi F4*	*16,415*			
33	*Taxi B*	*17,248*	*9,016*	*8,232*	*7.51*
34	*Taxi B2*	*13,340*			
35	*Taxi B3*	*8,800*	*4,600*	*4,200*	*3.83*
36	*Taxi C*	*25,392*			
37	*Taxi C1*		*25,392*	*0*	*16.50*
38	*Taxi A*	*22,770*			

SL. No.	Location	TOTAL PAVEMENT AREA (sqm)	Pavement area to be rehabilitated (sqm)		Total Estimated Cost of Rehabilitation Works (in Crore INR)
39	Taxi E2 extension	20,838	15,870	4,968	11.31
40	TWY L2	13,200	6,900	6,300	5.75
	Total Taxiways area	**905,706**	**139,334**	**318,139**	**154.19**

RUNWAYS					
1	Rwy 28/10	285,750			
2	Rwy 27/09	105,480		105,480	42.19
3	Rwy 27/09	105,480		105,480	42.19
	Total Runway area	**391,230**	**210,960.00**	**84.38**	

APRONS					
1	Apron and Stands 1 to 13	75,000			
2	Apron and Stands 15 to 40 C	185,000			
3	Apron and Stands 121 to 124	23,333	23,333		15.17
4	Apron and Stands 125 to 128	23,333	23,333		15.17
5	Apron and Stands 129 to 132	23,333	23,333		15.17
6	Apron and Stands 143 to 147	36,000	36,000		23.40
7	Apron and Stands 148 to 152	36,000	36,000		23.40
8	Apron and Stands 156 to 168	52,000			
9	Apron and Stands 41 to 43	45,000	45,000		29.25
10	Apron and Stands 44 to 46	45,000	45,000		29.25
11	Apron and Stands 47 to 49	45,000	45,000		29.25
12	Apron and Stands 81 to 83	36,250	36,250		23.56
13	Apron and Stands 84 to 86	36,250	36,250		23.56
14	Apron and Stands 87 to 89	36,250	36,250		23.56
15	Apron and Stands 90 to 92	36,250	36,250		23.56
16	Apron and Stands 98 to 103	130,000			
17	Apron area 104 to 106	42,900			
18	Apron of GA hangers	22,000			
19	Apron of Sahara hangers	1,400,000			
	Total Apron area	**2,328,900**	**422,000**	**0**	**274.30**

SERVICE ROADS					
1	Vehicular & Service road North side of rwy 28/10	187,500		187,500	16.88
2	Vehicular & Service road south side of rwy 28/10	225,000		225,000	20.25
	Total service roads	**412,500**	**0**	**412,500**	**37.13**

	TOTAL PAVEMENT WORKS - T1 & T2 AIRSIDE (A)	**4,038,336**	**561,334**	**941,599**	**550.00**

T3 Air side Pavements					
RUNWAYS					
1	Rwy 29/11	329,572		86,068	34.43
	Total Runway area	**329,572**			**34.43**

TAXIWAYS					
1	Taxiway CW1	99,000		59,400	11.88
2	Taxiway CW2	99,000		59,400	11.88
3	Taxiway Z	258,000		64,500	12.90
4	Taxiway T	258,000		65,340	13.07
5	Taxiway Y	258,000		51,600	10.32
6	Other Taxiways	529,199			
		1,501,199			**60.05**

APRON					
1	Main Apron - all areas	755,332			
		755,332			

SERVICE ROADS					
1	Road Pavement area	144,000		144,000	12.96
		144,000			**12.96**

TOTAL PAVEMENT WORKS - T3 AIRSIDE (B)	**2,730,103**	**0**	**0**	**107.44**

TOTAL PAVEMENT WORKS - T1, T2 & T3 (A) + (B)	**6,768,439**	**561,334**	**941,599**	**657.44**

Note:

1. The above estimate is based on the current estimates and may need to be revised based on actual site conditions prior to planned execution of each respective work.

2. Year 2013-14 and 2014-15 are estimated including inflation. However the Capex for subsequent years is without inflation and 7.7% inflation is added in the same.

TERMINAL / LANDSIDE / OTHER WORKS COST SUMMARY:

S.No.	**Item**	**Remarks**	**Amount**

S.No.	Item	Remarks	Amount
1	Procurement of 12 Nos DFMD's units	to increase handling capacity	0.59
2	Implementation of Automated Early Baggage Storage	process improvement	1.00
3	Up gradation of all DFMD's with head count facility	process improvement	0.50
4	Bus gate at Pier D	Improvement in passenger throughput	15.00
5	Improvement to finishes in various areas of T3	Certain areas need refurbishment due to end of life issues. In certain locations required to meet various service quality requirements. Overall terminal area is 550,000 m2	40.00
6	Project and Engineering minor rehabilitation capex 13-14	various rehabilitation works in the terminal	10.00
7	IT capex	Equipment Up gradation, license renewals etc.	-
		Networking	19.00
		CC TV	28.00
		ACS	5.00
		FDS	21.00
		Servers	5.00
		TMRS	5.00
		PAVA (Speakers Etc.)	5.00
		Other like BMS, MPAS, Desktops & Laptops	12.00
8	Replacement of all old MOCB in T1/T2 area	MOCB have outlived their life and need to be replaced as per statutory requirements	15.00
9	Up gradation of T1 d	up gradation of T1 D to meet passenger / capacity and service quality requirements	10.00
10	Conversion of BPCL land into parking stand T1 area	after clearance of area by BPCL, area to be restored and converted to stands	8.00
11	Operational capex	Various minor capex to meet operational requirement	14.92
12	Bus gate at Pier D concrete foundations area restoration	restoration of pavement surface to facilitate bus movements and reducing turnaround time	3.00
13	rehabilitation of back office store/ BHS VIP area	improvements to increase life of existing finishes	3.00
14	rehabilitation of VIP lounge	improvements based on feedback from various authorities	2.50
15	Package Sub Station for to provide alternative power to street light	There is no second source power supply to the central spine and tunnel areas. It is essential to have alternate source	2.00

S.No.	Item	Remarks	Amount
		due security and safety reasons of road lighting.	
6	construction of new sewer line from toll plaza to centaur	Existing drain near AAI HQ and centaur hotel is damaged resulting sewerage block and overflow in operational area. New line needs to be laid.	2.00
17	Concrete Ramp at DX drain and Rwy 11	access requirement to have access to drain for maintenance purposes	-
18	Redundant Pipeline for Potable & Flush water line	process improvement	2.00
19	Replacement of 3 nos of Carousal at Arrival T1C	Three Carousal Belts at Arrival T1C are very old since operational 20 years and there is lot of noise while operational of the Belts. They are proposed to be replaced with new Carousals.	1.65
20	Security capex	Capex required for upgradation / replacement of security equipment	10.00
21	Additional units for SHA air-conditioning	Passengers feedback on air-conditioning.	1.00
22	Arch rehabilitation	various rehabilitation works in the terminal	1.00
23	Replacement of 11kV MOCB of Haj Substation, BOAC and AI Substations	Required for Mandatory replacement of the Obsolete Breakers	0.80
24	Central Stores additional racks	capacity enhancement	0.50
25	Redundant power supply arrangement for secondary pumps	Operational requirement- no second source	0.30
26	Replacement of Pilca Cable from SFS to E-Block to AI Engineering to STP Substation	The old PILCA cable is old and needs to be replaced	0.25
27	Redundant fire motor-pump set for PTB	Safety requirement	0.25
28	RCC building for cooling tower motor starter panel	Permanent structure for protection of motor panel	0.25
29	Facility management capex	furniture replacement etc	5.00
30	Replacement of False Ceiling of T-1C between Belt 3 to 8.	Ceiling tiles has turned black, framing also requries strengthening for the safety of passengers. The Appprox area is 2500sqmt.	0.24
31	Providing & fixing of Vestibules for T-1C	There is HVAC loss because of ingress of hot air entering in to Terminal building from Airside. The Cost of two vestibules has been taken based on the drawing & details given by Finishes team	0.20

S.No.	Item	Remarks	Amount
32	New prepaid Energy meter	For efficient and proper control / monitoring of power usage	0.20
33	Updradation of Lighting from Dwarka Circle to Northern Access Tunnel	The low Lux levels have been pointed out by Chief and Principle secretary of Delhi Government.	0.20
34	SITC of side stream filters for cooling tower	process improvement	0.20
35	Installation of gravity louvers to save energy in all the roof extraction fan	process improvement	0.20
36	Water supply in forecourt	For façade cleaning and forecourt cleaning	0.20
37	Fencing of DJB and other civil associated works	Safety requirement	0.20
38	Document control/Library in EMO office	Document storage racks and drawing storage racks	0.20
39	Sludge holding shed at STP area	all weather provision for slude holding area	0.20
40	Fencing of AS1 substation and other Civil Associated works	upgradation of safety provisions	0.20
41	Weigh Bridge 30 T	process improvement	0.17
42	Installation of Dewatering Pump in T-1 service Tunnel	Installation of Dewatering pump in side the service tunnel of T-1 for the safety of tunnel and essential utilities passing through it. This service tunnel having the Electrical cable, HVAC Line, Fire Line.	0.15
43	Surfacing of AS1 substation road	upgradation to permanent road for all weather access	0.15
44	Provision of Bunds for filter cleaning and panel protection	process improvement	0.15
45	Procurement of critical tools and equipment	process improvement	0.15
46	CAPEX as per AOP13-14 of Corp comm.	various rehabilitation works in the terminal	0.14
47	Connection of T-1C fire line with T-1D	This line is very long and very old, presently being fed from T-1A . It is proposed to connect with fire line of T-1D which is a new system. It will improve the reliability of system. This is apprx cost of 200 Mt in length	0.10
48	Integration of NUB and Project office Power System	For optimum utilization of the two transformers and the two DG sets, thereby providing redundancy and cutting down on diesel cost.	0.10
49	SITC of timer actuated	process improvement	0.10

S.No.	Item	Remarks	Amount
	solenoid valves for urinal flush water		
50	*Cooling Tower Blow down water connection to Flush Water tank*	*process improvement*	*0.10*
51	*vibration sensors for chiller*	*process improvement*	*0.10*
52	*CCTV in T1 D lift*	*security requirement*	*0.06*
53	*Redundancy for control panel*	*process improvement*	*0.06*
54	*Additional new water cooler for apron area*	*As more airlines and aircraft operation, usage has increased and we need to augment the current capacity.*	*0.05*
TOTAL			***254.33***

The total Capex including the inflation will look as below:

Capitalization including inflation							
Year	***Amount Spent***	***Amount spent with inflation***	***Capitalization***	***Capitalization including inflation***	***Building/Pavement***	***P&M***	***Furniture***
2013-14	*136.77*	*136.77*	*68.38*	*68.38*	*54.70*	*10.26*	*3.42*
2014-15	*136.77*	*136.77*	*136.77*	*136.77*	*109.42*	*20.52*	*6.84*
2015-16	*136.77*	*147.30129*	*136.77*	*164.03*	*131.22*	*24.61*	*8.20*
2016-17	*136.77*	*158.6434893*	*136.77*	*164.03*	*131.22*	*24.61*	*8.20*
2017-18	*182.35*	*227.7995582*	*159.56*	*191.36*	*153.09*	*28.71*	*9.57*
2018-19	*182.35*	*245.3401242*	*182.35*	*218.70*	*174.96*	*32.81*	*10.94*
2019-20			*91.18*	*109.35*	*87.48*	*16.40*	*5.47*
TOTAL	***911.78***	***1,052.62***	***911.78***	***1,052.62***	***842.09***	***157.90***	***52.63***

"

10.3. DIAL's submission regarding future capital expenditure in the form of Addition to ***Regulatory Asset Base (Security Equipment)*** is as below:

"DIAL, in terms of the concession agreements is mandated to spend on the Capex of the security related equipment. The following are the year wise forecast of security related Capex. The relevant BCAS circulars mandating these Capex are also mentioned against each item. It is assumed that the following Capex will not be allowed for inclusion in PSF determination. In case the same is allowed in fixation of PSF Tariff than the same need not be considered for purpose of tariff fixation.

S. No.	Name of the Item	FY15	FY16	FY17	FY18	FY19	BCAS Circular
Capex 1: Security System for Gate House Plan							**Plant & Machinery**
1	Crash rated electro hydraulic bollard at airside gates, UVSS with LPR & DIC, Boom Barriers, CCTV, HHMD, DFMD, ETD and X BIS at Entrance at all Airside Gates	9.0					Letter of gate house plan
Capex 2: PIDS							**Plant & Machinery**
1	PIDS SLA Enhancement+ New dark zone installation as identified by CISF	3.0	4.50				BCAS Circular 2/2007
2	Entry Exit Naka	0.5	-	-	0.55	0.55	
3	Terminal 3 below pass Intrusion Detection system	0.5	-	-	0.35		
Capex 3: RT Communication							**Plant & Machinery**
1	TETRA, Battery charger, Batteries and VOX	0.2	0.25	0.30	0.35	0.40	SOP for ASG of CISF
2	Replacement of old walkie talkie sets with TETRA sets	0.06	0.06	0.07	0.07	0.08	SOP for ASG of CISF
Capex 4: CCTV							**Plant & Machinery**
1	Additional 542 Cameras in Terminal 3	16.0	-				BCAS Circular 02/2007
2	Additional 50 Cameras in Terminal – 1	6.0	0.50	0.60	0.70	0.75	BCAS Circular 02/2007
3	Additional 20 Cameras from Gate No. 15 to BPCL & HPCL Fuel Tank for strengthening of Security at IGI Airport	0.70					BCAS Circular 02/2007
4	Extending CCTV Recording of all CCTV Cameras from 7 days to 30 days to comply BCAS order	10.0	-	-	-	2.00	BCAS Circular 12 / 2011
5	CCTV coverage of vital installations (WTP, STP, MRSS, SSB. MSB etc.) for strengthening of Security at IGI Airport	1.0	-	-	0.25	0.30	BCAS Circular 02/2007
6	Surveillance CCTV system for Approach roads as per Delhi Police requirement	12.0	-	-	-		BCAS Circular 02/2007
7	Replacement of 60 Nos. of Indigo vision Indoor Cameras damaged to due to water seepage and other.		0.10	0.11	0.12	0.13	BCAS Circular 02/2007
8	Camera feed system from parking bays to CCCR(Isolation Bay)	2.0					CAS5 (4A)/2008/Div. I(DIAL

S. No.	Name of the Item	FY15	FY16	FY17	FY18	FY19	BCAS Circular Ops)
9	Replacement of Cameras & accessories on account of wear and tear.	0.30	0.30	0.35	0.45	0.50	BCAS Circular 02/2007
Capex 5: Access Control System (ACS)							**Plant & Machinery**
1	Replacement of damaged readers and other parts 130 No. of access control procurement for damage cases	1.55	-		1.50		BCAS Circular 2/2007
2	Phase wise replacements of ACS Readers and accessories	0.60	0.30	0.20	0.10	0.10	
3	New BCAS Requirement(Extra ACS installation project as per BCAS guideline) including turnstile and ACS reader	2.00					
Capex 6: Vehicles for CISF							**Vehicles**
1	Motor cycles replacement	0.03	0.03	0.03			
2	Vehicles for Quick Reaction Team	0.25					
3	BDDS Vehicles for Additional strength	0.20					
Capex 7: Computers							
1	Computers	0.10	0.10				Computers
Capex 8: Other requirements							
1	Purchase of 3 Nos. of 100100T X-BIS for random checking at Entry points of T3 & T1 Departure Building	2.21					AVSEC Order No.21/2011
2	Cabin Baggage X-Ray machines(6046i): 4 No's for SHA (Dom and Int) 3 No's for Staff Entry (Arrival Side),Int to Int Transfer and Domestic Airside gate	0.93		1.43			AVSEC Order No.21/2011
3	Procurement of 03 ETD for random checking at entry points of T3 and T1 departure building	1.30					AVSEC Order No.21/2011 and BCAS Circular 25/ 2004
4	Ion Scan 500DT ETD 3 No's for Domestic and International SHA at T-3 (Future Expansion)			1.64			AVSEC Order No.21/2011 and BCAS Circular 25/ 2004
5	Ion Scan 500DT ETD 1 No's for Haj operations and VIP	0.43					AVSEC Order

S. No.	Name of the Item Movements at T-1	FY15	FY16	FY17	FY18	FY19	**BCAS Circular** No.21/2011 and BCAS Circular 25/ 2004
6	NIJ 0602 Standard DFMD: Total 23 Nos. 6 No's for Domestic and International SHA expansion at T-3 17 No's for different locations at T-3 immediately	0.78		0.32			BCAS Circular 25/2004
7	NIJ 0602 Standard DFMD: Total 16 Nos. 6 No's for SHA at T-1, 10 No's for different locations at T-1	0.46		0.32			BCAS Circular 25/2004
8	HHMD: Total 162 Nos. 12 No's for Domestic and International SHA-Future Expansion. 150 No's for different locations of T-3, immediate.	0.17		0.02			BCAS Circular 25/2004
9	HHMD: 65 Nos. 12 No's for SHA. 53 No's for different locations of T-1	0.06		0.02			BCAS Circular 25 / 2004
Total		**72.33**	**6.14**	**5.39**	**4.44**	**4.81**	
		FY15	**FY16**	**FY17**	**FY18**	**FY19**	

However we shall like to submit that the

- *Security related Capex is dynamic in nature and the requirement of the same may vary with perceived security threat and mandate from various agencies.*
- *We request the authority to consider the aforesaid Capex in tariff determination.*
- *We also request a full true up of security related Capex."*

10.4. DIAL's submission dated 23.07.2014 on additions to capital expenditure is as below:

"Apart from the initial submission (dated 10th November 2013) following new additions to Regulatory asset base is also envisaged:

Solar Power:

As a part of the green initiative at the Airport, we plan to go for solar power generation. The Solar power capacity will be expanded in phases to meet the *future enhanced requirement of the Airport area. This will be done in 2 phases, Phase 1 will be of 5.6 MW captive power plants and subsequent phase would be of 5 MW. The estimated Capital expenditure for this project is INR 80.6 Cr, at rate of INR 7.6 Crores/MW. There is no user consultation required for this project.*

Rationale for RAB inclusion:

This is a green initiative and is good for the environment.

This ensures cheaper power supply to Airport and its users.

This also protects DIAL from unreasonable rise in tariff by distribution companies. In long run, it will be a great boon for the airport.

FY	*Expansion (MW)*	*Capital expenditure in (INR Crores)*
FY15-16	*5.6*	*42.6 (for 5.6 MW)*
FY16-17	*5*	*38 (for 5 MW)*

PSF Capital expenditure:

Further, an order has been received from MoCA, i.e., AV.13024/03/2011-AS (Pt.I) dated 18th Feb'2014, regarding Security Capital expenditure incurred by DIAL from PSF account during 1st control period. The order lays down that capital expenditure incurred by airport operator out of PSF (SC) together with interest, has to be reimbursed back to escrow account of PSF (SC). We have contested the order, therefore as per the outcome of this, we may entail revision of the current tariff filing, including true up related to previous control period. We reserve our right to amend the tariff application based on the final outcome of above."

b Authority's Examination of DIAL's Submission on Additions to Regulatory Asset Base

10.5. The Authority has carefully examined DIAL's submissions on additions to RAB for the second Control Period.

10.6. The Authority notes that DIAL has segregated the proposed additions to RAB in two parts, namely, Additions to RAB (excluding security equipment) and Additions to RAB (security equipment). The Authority has also noted DIAL's revised submission dated 23.07.2014 on solar power plant and PSF Capital Expenditure. The Authority's examination of these submissions is as follows.

10.7. As regards the projected Additions to RAB (excluding security equipment), the Authority understands from DIAL submissions that these pertain to capital expenditure planned by DIAL on account of rehabilitation of (1) T1 / T2 airside areas, (2) T3 airside areas and (3) Terminal and landside areas. The overall value of these works as estimated by DIAL is Rs. 911.77 crore. DIAL has submitted as follows:

"The costs have been estimated based on current rates for carrying out such works. OMDA requires DIAL to follow a system of competitive bidding to finalize and award various contracts. The costs as estimated above will be subject to adjustment based on the actual costs that each of these contracts are finalized / completes."

10.8. The Authority has noted that DIAL has submitted detailed break-ups of the proposed capital expenditures. Summary of the same is presented below:

Table 25: Summary of capital expenditure proposed by DIAL to be incurred over the second Control Period

Component	Amount (Rs. crore)
T1 and T2 airside taxiways	154.19
T1 and T2 airside runways	84.38
T1 and T2 airside apron	274.30
T1 and T2 airside service roads	37.13
T3 airside taxiways	60.05
T3 airside runways	34.43
T3 airside service roads	12.96
Terminal / Landside / Other Works	254.33
Total	911.77

10.9. The Authority further notes from DIAL submissions that DIAL has applied an inflation rate of 7.7% every year to compute inflation-adjusted values of capital expenditure to be incurred in each year of the second Control Period, as below:

Table 26: Summary of capital expenditure proposed by DIAL for FY2013-14 and each year during the second Control Period

Year	Amount Spent (INR Crore)	Amount spent with inflation (INR Crore)
2013-14	136.77	136.77
2014-15	136.77	136.77
2015-16	136.77	147.30

2016-17	136.77	158.64
2017-18	182.35	227.80
2018-19	182.35	245.34
TOTAL	911.78	1,052.62

10.10. The Authority has examined the components of the capital expenditure proposed by DIAL as listed in paras 10.22 to 10.24 below and it has also noted DIAL's submission establishing need for these expenditures. The Authority proposes to accept the same towards determination of aeronautical tariffs for the second Control Period adopting standard methodology of estimation like CPWD / market rates estimation, user consultation and approvals from competent Authorities as detailed in paras 10.19 to 10.25 below. However, the Authority has noted from details submitted by DIAL for terminal / land side works that it includes an expenditure of Rs. 100 crore as part of IT Capex on account of (Networking, CC TV, ACS, Servers etc.). The Authority has also noted an expenditure contract entered into by DIAL with another JV wherein DIAL pays a subsistence cost to the JV. The Authority understands that this subsistence cost includes capital cost recovery, its interest (return of RAB as well as return on RAB) plus operation cost. DIAL has considered this subsistence cost as an element of operating expenses. The Authority is of view that proper justification is needed for the proposed cost on IT related expenditure under capital works along with board approval for the same as well as there should be no duplication of consideration of expenditure in capital and operating expenses. The Authority sought details and justifications from DIAL on the subsistence costs. DIAL has submitted as follows:

"IT costs are forecasted based on payments due from DIAL to the joint venture company providing IT services at terminal T3.

INR Crore	2013	2014	2015	2016	2017	2018	2019
Total Subsistence as per Annexure L of the Tariff Proposal	*157.27*	*158.58*	*159.13*	*144.30*	*143.48*	*116.55*	*35.83*

IT systems get worn out due to heavy use and technological obsoleting the following additional Capital expenditure will need to be done by IT JV in the 2nd control period….

…. In addition to IT Systems at Terminal 3, IT Joint Venture Company is also expected to maintain the IT Systems at Terminal 1D .These expenses are expected to result as additions to the existing subsistence levels (item B. and C. in the table below)...

… Further, Unified Flight Information System (UFIS) cost is reduced from the Joint venture Company working scope hence there is expected reduction in the cost (item D. in the table below)…

… Following is the reconciliation between the value computed as per the agreement and the numbers considered in the model:

		2013	2014	2015	2016	2017	2018	2019
A.	*Total Subsistence as per Annexure L of the Tariff Proposal*	*157.27*	*158.58*	*159.13*	*144.30*	*143.48*	*116.55*	*35.83*
B.	*T1D CUPPS – Expenses*			*3.56*	*3.70*	*3.85*	*4.00*	*4.16*
C.	*T1D Others – Expenses*			*6.22*	*6.58*	*6.99*	*7.41*	*7.85*
D.	*UFIS De Scoped*		*(3.71)*	*(3.85)*	*(4.01)*	*(4.14)*	*(4.29)*	*(4.43)*
E	*Total Subsistence revised (E = A+B+C-D)*	*157.27*	*154.87*	*165.06*	*150.58*	*150.18*	*123.67*	*43.41*
F	*Additional subsistence for IT Refresh*			*18*	*36*	*119.57*	*119.57*	*119.57*
	Total Subsistence (Values shown in Row 420) (G = E+F)	*157.27*	*154.87*	*183.06*	*186.58*	*269.75*	*243.24*	*162.98*

”

10.11. As regards the amount of expenditure on IT assets included as part of capital expenditure, DIAL has submitted as follow:

"…IT systems of T3 have all been installed and commissioned in 2010. As is prevalent in the industry, IT systems get out-dated in a period of 5 years and thus would need a complete updating / revamping during the current period. This will involve significant costs including hardware up gradation etc…. "

10.12. The Authority has further requested clarifications from DIAL on whether the cost being considered as part of IT Subsistence under operating expenses is additional to what is being proposed as part of capital expenditure. Based on submissions by DIAL subsequent to the release of this Consultation Paper, the Authority proposes to consider this cost of Rs. 100 crore towards determination of aeronautical tariff for second Control Period.

10.13. As regards the other components of Additions to RAB (excluding security equipment), the Authority has examined the details submitted by DIAL along with justifications for the same. The Authority proposes to consider these components towards determination of aeronautical tariff for second Control Period.

10.14. As regards Additions to RAB (security equipment), the Authority has noted DIAL submission of projected expenditure of Rs. 93.11 crore on this account. The Authority has also noted the detailed break-up of these expenditure submitted by DIAL. The Authority also notes the following submission from DIAL:

"DIAL, in terms of the concession agreements is mandated to spend on the Capex of the security related equipment. The following are the year wise forecast of security related Capex. The relevant BCAS circulars mandating these Capex are also mentioned against each item. It is assumed that the following Capex will not be allowed for inclusion in PSF determination. In case the same is allowed in fixation of PSF Tariff than the same need not be considered for purpose of tariff fixation."

10.15. In line with the discussions presented in paras 3.18 to 3.31 above, the Authority proposes to consider the projected expenditure of Rs. 93.11 crore on account of Additions to RAB (security equipment) towards computation of RAB in the second Control Period.

10.16. The Authority has also noted the DIAL has projected expenditure of Rs. 80.60 crore on account of Solar Plant. The Authority sought from DIAL relevant proof and reasoning for the estimated Capex. DIAL responded as follows:

"The estimated Capex on solar power plant has been done on the basis of actual figures as incurred in FY2013 -14 which is approximately INR 7.4 Crores/MW. We have taken INR 7.6 Crores/MW for the future projection. The Solar power capacity will be expanded in phased manner. This will be done in 2 phases, Phase 1 will be of 5.6 MW (FY15-16) captive power plants and subsequent phase would be of 5 MW (FY16-17).

Furthermore, we would like to submit that during FY2013-14 the 2 MW plant was operational from 15th January 2014 to 31st March 2014 and during these 2.5 months power production from was approximately 6.6 lakh units, due to this DIAL was able to save Rs. 0.47 Crores on account of electricity expenses.

Further, we estimate following savings are envisaged on account of reduced electricity consumption:

FY	*Estimated Unit generated (MU)*	*Current Electricity Rate (INR/Unit)*	*Saving in Electricity Cost (INR/Crores)*
FY 14 – 15	*3*	*7.10*	*2.13*
FT 15 -1 6	*3*	*7.10*	*2.13*
FY 16 - 17	*11.4*	*7.10*	*8.09*
FY 17 - 18	*18.9*	*7.10*	*13.42*
FY 18 - 19	*18.9*	*7.10*	*13.42*

We shall like to clarify that the above saving include the savings of the current installation as well as the future proposed installation of 5.6 MW in year FY16-17 and 5 MW in year FY17-18…"

10.17. The Authority has noted the projected savings in electricity on account of the solar plan and proposes to consider these savings towards determination of ARR for second Control Period. The Authority accordingly proposes to consider the projected capital expenditure on account of solar plant.

10.18. The Authority has noted from DIAL submissions and Tariff Model that DIAL has considered the total additions to capital expenditure towards expenditures other than security related capital, PSF (SC) and solar plant for the second Control Period as below:

Table 27: Summary of capital expenditure (inflation adjusted values in INR crore) proposed by DIAL for second Control Period

Year	Capex (excl. Security related) in INR crore	Solar Plant in INR crore	PSF (SC) in INR crore	Total in INR crore
2014-15	136.77		72.33	209.10
2015-16	147.30	42.60	6.14	196.04
2016-17	158.64	38.00	5.39	202.03
2017-18	227.80		4.44	232.24
2018-19	245.34		4.81	250.15
TOTAL	915.85	80.60	93.11	1089.56

10.19. The Authority has noted that the estimation of cost proposed by DIAL for the capital works to be undertaken during the second Control Period should have been based on standard methodology of estimation like CPWD scheduled rates for scheduled items and market rates estimation for non-scheduled items as per the methodology adopted in CPWD estimation and should have been subjected to stakeholder consultation as per the provisions under OMDA.

10.20. The Authority, in case of Kempegowda International Airport, Bengaluru has provided an approach for estimation of capital expenditure vide para no 9.46-of its Order no 08/2014-15. It has suggested the cost estimation of any works (Terminal building, Runway, Taxiway, Apron Pavement, Road etc.) based on public document namely CPWD scheduled rates for scheduled items and market rates estimation for non-scheduled items as per the methodology adopted in CPWD estimation. The Authority has also proposed to adopt the same principle for future works in proposal number 5.d of its Consultation Paper 05/2014-15 in the matter of normative approach to Building Blocks in economic regulation of major airports.

10.21. For purpose of the current determination of tariff, the Authority proposes to consider DIAL's submission regarding capital expenditure to RAB (excluding Security related) for the following heads: RAB (Security related) and solar plant. However, the Authority proposes to advise DIAL, as follows, before execution of capital works:

10.21.1. To follow the principle stated in para no 9.46-of its Order no 08/2014-15 and in proposal number 5.d of its Consultation Paper 05/2014-15 towards estimation of future capital expenditure,

10.21.2. To undertake user consultation in terms of OMDA outlining the necessity, cost estimation and likely amount of estimated increase in tariff and

10.21.3. To obtain approvals, as necessary from competent authorities.

10.22. Further, the Authority has recomputed the inflation-adjusted capital expenditure including security related assets as a indicative cost for the second Control Period based on the revised CPI inflation forecast of 6.6% per year by RBI, as elaborated in para 22.8, as below,

Table 28: Summary of estimated capital expenditure considered by the Authority as indicative cost for second Control Period

Year	Capex (excl. security related) in INR crore	Solar Plant in INR crore	PSF (SC) in INR crore	Total in INR crore
2014-15	136.77		72.33	209.10
2015-16	145.80	42.16	6.08	194.04
2016-17	155.42	37.23	5.28	197.93
2017-18	220.89		4.31	225.20
2018-19	235.47		4.62	240.09
TOTAL	894.35	79.39	92.62	1066.36

10.23. The Authority has noted from the Tariff Model submitted by DIAL that DIAL has considered this entire estimated cost of capital works as an aeronautical asset. The Authority notes that asset addition is being made on account of the following components:

10.23.1. Runway and Taxiway

10.23.2. Terminal including IT

10.23.3. Solar Plant

10.23.4. PSF related expenditure

10.24. The Authority proposes to consider 100% of Runway and Taxi capital expenditure and PSF related expenditure towards aeronautical assets. Further, the Authority proposes to consider solar plant capital expenditure as well as terminal building (including IT) after allocation of the asset between aeronautical and non-aeronautical.

10.25. The Authority proposes to consider the estimated cost of capital works (refer Table 28) for addition towards RAB and for consideration towards determination of aeronautical tariff for 2nd Control Period for the reasons explained above adopting due process mentioned in para 10.10 above.

Proposal No. 8. Regarding Additions to RAB during second Control Period

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

i. **To consider the additions to RAB as presented in Table 28 towards determination of aeronautical tariff for 2nd Control Period.**

ii. **Based on the Interim Order from the Hon'ble High Court of Delhi, to include capital expenditure of Rs. 92.62 crore on account of assets for security-related infrastructure for consideration towards RAB in the second Control Period. The Authority proposes to review the same based on final outcome of the legal proceedings and the SOP / Guidelines issued by the Central Government in this regard.**

iii. **To true-up the projected additions to RAB (refer Table 28) based on actual audited values of these additions over the second Control Period towards determination of aeronautical tariff for the third Control Period**

11. Regulatory Asset Base for Second Control Period

a Authority's examination of DIAL Submission on Regulatory Asset Base

11.1. The Authority has noted DIAL's projection of regulatory asset base for the second Control Period from its Tariff Model dated 11.11.2013 to be as below:

Table 29: RAB computed by DIAL for the second Control Period as per Tariff Model (11.11.2013)

S. No	INR in crore	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening RAB	8314.95	7741.12	7216.34	6741.41	6292.34
B	Additions to Aero Assets in the period	209.09	170.17	169.42	195.80	223.51
C	Depreciation for the period	782.91	694.95	644.36	644.87	594.04
	Closing RAB (A+B-C)	7741.12	7216.34	6741.41	6292.34	5921.81

11.2. The Authority has noted DIAL's submission on return on RAB for the second control period as below:

Table 30: Return on RAB computed by DIAL for the second Control Period as per Tariff Model (11.11.2013)

INR Crore	2014-15	2015-16	2016-17	2017-18	2018-19
Return on RAB	1410.06	1313.58	1225.78	1144.64	1072.66

11.3. The Authority has noted DIAL's projection of regulatory asset base for the second Control Period from its revised Tariff Model dated 23.07.2014 to be as below:

Table 31: RAB computed by DIAL for the second Control Period as per Tariff Model (23.07.2014)

S.No	INR in crore	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening RAB	8,543.17	7,713.05	7,088.01	6,528.69	5,989.05
B	Additions to Aero Assets in the period	104.55	202.57	199.04	217.14	241.19
C	Depreciation for the period	934.67	827.61	758.35	756.78	671.66
	Closing RAB (A+B-C)	7,713.05	7,088.01	6,528.69	5,989.05	5,558.59

11.4. The Authority has computed the RAB for the second Control Period based on opening RAB of Rs. 7.168.65 crore (including Hypothetical RAB of Rs. 365.52 crore) for FY2014-15 as per Table 10. Thus, the Authority proposes to consider RAB for the second Control Period as below:

Table 32: RAB and Return on RAB considered by Authority to be considered for the second Control Period

INR crore	2014-15	2015-16	2016-17	2017-18	2018-19
Opening RAB(without HRAB)	6803.13	6384.75	6075.98	5757.60	5446.26
Investment / Additions	89.83	173.19	168.39	181.78	199.89
Deletion/Disallowance	0.00	0.00	0.00	0.00	0.00
Depreciation & Amortization	508.21	481.96	486.77	493.11	498.37
Assets funded out of DF	0.00	0.00	0.00	0.00	0.00

INR crore	2014-15	2015-16	2016-17	2017-18	2018-19
Closing RAB	6384.75	6075.98	5757.60	5446.26	5147.78
Opening HRAB	365.52	336.92	310.21	283.78	257.53
Additions to HRAB	0.00	0.00	0.00	0.00	0.00
Depreciation on HRAB	28.61	26.71	26.44	26.25	25.96
Closing HRAB	336.92	310.21	283.78	257.53	231.57
Opening Regulatory Asset Base	7168.65	6721.67	6386.19	6041.38	5703.79
Closing Regulatory Asset Base	6721.67	6386.19	6041.38	5703.79	5379.35
Average RAB	**6945.16**	**6553.93**	**6213.78**	**5872.59**	**5541.57**
WACC	9.99%	9.99%	9.99%	9.99%	9.99%
Return on RAB	**693.55**	**654.48**	**620.52**	**586.44**	**553.39**

Proposal No. 9. Regarding Regulatory Asset Base to be considered for second Control Period

9.a. Based on material before it and its above analysis, the Authority proposes

i. **To consider the Regulatory Asset Base and Return on RAB as per Table 32 for the purpose of determination of aeronautical tariff for second Control Period.**

ii. **To true-up the Regulatory Asset Base and Return on RAB for second Control Period at the time of determination of aeronautical tariff for third Control Period based on actual additions to RAB and actual depreciation during the second Control Period**

12. Cost of Debt

12.1. The Authority, in the Decision No. 12 of its Delhi Tariff Order 03 / 2012-13, decided to consider the actual cost of Rupee Term Loan, paid by DIAL for the years 2009-10 and 2010-11 as cost of debt for the period 2011-12 to 2013-14. The cost of debt (Rupee Term Loan) was taken at 12.17% per annum. Also, the Authority decided not to agree to the upward revision of 0.50% per annum in interest rates claimed by DIAL. The Authority decided to consider the rupee value of the ECB loan at Rs.1591.79 crore based on the Rupee - US Dollar exchange rate prevalent on the date of withdrawal. The Authority also decided, vide Decision No 12.c of Delhi Tariff Order 03 / 2012-13, not to consider any adjustments related to currency fluctuations on capital or interest payments or any other charges in respect of the ECB Loan. The cost of debt was considered for determination of WACC for the first Control Period.

a DIAL Submission on Cost of Debt

12.2. DIAL's submission on 11.11.2013 with respect to cost of debt is as below:

"Details of Debt Outstanding as of 30th Sep 2013 as per financials

Debt Facility	*Amount*
Rupee Term Loan (in Rs. Crores)	*3,004.64*
External Commercial Borrowing (in USD Million)	*432.62*

The cost of debt of DIAL is determined by the cost of the different tranches of the facility, as set out below.

1 Rupee Term Loan

DIAL has signed a rupee facility agreement with two domestic lenders for INR 3,004.64 Crores. The banks and institution have committed INR 3,004.64 Crores"

The weighted average cost of debt for the Rupee Term Loan is 11.54%. Interest rates have hardened over the recent past and various statements from RBI and other market players indicate that interest rates would continue to rise over the future. Considering the hardening trend of interest rates, we have forecasted a nominal increase of 25 basis points every year for each of the FY 2015-16 to 2018-19.The market is showing a trend of increasing cost and recently RBI has *also hiked the interest rates. We have enclosed the reports of RBI rate increase as also the analysis done in this regard by standard chartered bank.*

2 External Commercial Borrowing

In addition to Rupee Term Loans, DIAL has entered into an External Commercial Borrowing (ECB) Facility Agreement for USD 432.62 million.

Using the information above, the weighted average cost of debt for the ECB facility is 7.47% as on 30th September 2013. However because of the various IRS contracts (and different IRS rates for different period) the overall average varies over the control period. The half yearly weighted average of ECB is as below:

Half yearly ECB Cost (Margin + IRS)	*Weighted Average ECB Cost (% p.a.)*
Sep-13	*7.47%*
Mar-14	*7.49%*
Sep-14	*7.49%*
Mar-15	*7.49%*
Sep-15	*7.23%*
Mar-16	*7.41%*
Sep-16	*7.60%*
Mar-17	*7.80%*
Sep-17	*7.80%*
Mar-18	*7.79%*
Sep-18	*7.78%*
Mar-19	*7.77%*

It has been assumed that IRS will be renewed at rate of last contracted IRS. The same has been used for the purpose of calculating the weighted average cost of capital (WACC) above."

12.3. DIAL subsequently revised its submission based on availability of audited numbers for FY 2013-14. DIAL's submission on 23.07.2014 with respect to cost of debt is as below:

"Details of Debt Outstanding as of 31st March 2014 as per financials

Debt Facility	*Amount (INR Crores)*
Rupee Term Loan (in Rs. Crores)	*2,979.56*
External Commercial Borrowing (In USD Million: 403.89 Mn)	*2,443.14*

The cost of debt of DIAL is determined by the cost of the different tranches of the facility, as set out below.

1 Rupee Term Loan

DIAL has signed a rupee facility agreement with two domestic lenders for INR 2,979.56 Crores. The weighted average cost of debt for the Rupee Term Loan is 11.38%.

2 External Commercial Borrowing

In addition to Rupee Term Loans, DIAL has entered into an External Commercial Borrowing (ECB) Facility Agreement for USD 403.89 million.

Using the information above, the weighted average cost of debt for the ECB facility as on 31st March 2014 is as under:

Half yearly ECB Cost (Margin + IRS)	Weighted Average ECB Cost (% p.a.)
H2 ended Mar-14	7.10%
HI ended Sep-14	7.08%
H2 ended Mar-15	7.48%
Hl ended Sep-15	7.02%
H2 ended Mar-16	7.39%
Hl ended Sep-16	7.36%
H2 ended Mar-17	7.78%
HI ended Sep-17	7.52%
H2 ended Mar-18	7.77%
Hl ended Sep-18	7.45%
H2 ended Mar-19	7.74%

It has been assumed that IRS will be renewed at rate of last contracted IRS. The same has been used for the purpose of calculating the weighted average cost of capital (WACC) above."

b Authority's Examination of DIAL Submissions on Cost of Debt

12.4. The Authority has carefully examined DIAL submission with respect to cost of debt. The Authority has also noted DIAL submission of the bank debt schedule, bank borrowing rates and debt repayment schedule for 1st March 2015 to 31st March 2020 in the Tariff Model.

12.5. The Authority has noted the outstanding balance for both ECB and Rupee Term Loan from the Tariff Model submitted on 11.11.2013 for FY2012-2013 to FY2019-2020 as follows:

Table 33: Outstanding Balance of ECB and Rupee Term Loans as per the Tariff Model submitted by DIAL for FY2013-14 to FY2018-19 on 11.11.2013

INR crores	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
External commercial borrowing, INR crores						
Opening balance	1870.05	2552.03	2264.68	1971.84	1654.41	1319.57
Debt drawn for RTL Prepayment during the period	592.50					
Increase in liabilities (Exchange reinstatement)	324.69					
Debt repayment during the period	235.21	287.34	292.84	317.44	334.83	323.85
Closing balance	2552.02	2264.68	1971.84	1654.40	1319.57	995.72
Rupee term loan, INR crores						
Opening balance	3650.00	2961.41	2936.92	2912.44	2832.08	2619.02
Debt prepayment during the period	623.75					
Debt repayment during the period	64.84	24.48	24.48	80.36	213.06	296.88
Closing balance	2961.41	2936.92	2912.44	2832.08	2619.02	2322.14

12.6. The Authority has noted from the Tariff Model that DIAL has reduced its Rupee Term Loan from Rs. 3,650 crore at the end of FY2012-13 by Rs. 688.59 crore over FY 2013-14. The Authority understands from the Tariff Model that DIAL repaid Rs. 64.84 crore and prepaid Rs. 623.75 crore towards this loan.

12.7. The Authority has noted from the Tariff Model and DIAL's submissions that DIAL has considered the opening balance of ECB debt in rupee terms as Rs. 1870.05 crore as on 01.04.2013. The Authority notes that during the determination of tariff for the first Control Period, DIAL had submitted that it had raised an ECB of USD 350 million, which had worked out to Rs. 1591.79 crore, based on the currency exchange prevailing at that date. The Authority had decided in its Delhi Tariff order 03 / 2012-13 not to consider any foreign exchange fluctuation in capital or interest payments or any other changes in respect of the ECB. The Authority is in receipt of an auditor certificate from DIAL, which provides that DIAL has repaid USD 8.75 million in FY 2012-13 and USD 37.47 million in FY 2013-14. In line with its decision of not considering the foreign exchange fluctuation and the numbers available to it, the Authority proposes to consider Rs. 1591.79 crore as the opening balance of ECB loan as on 01.04.2012 and proposes to consider repayment of Rs. 39.79 crore (converting the value of USD 8.75 million at the same exchange rate at which ECB of USD 350 million was drawn by DIAL i.e. INR 45.48 per USD). Thus the closing balance for FY 2012-13 works out to Rs. 1,552.00 crore. Accordingly the Authority has considered this amount of Rs. 1,552.00 crore as the opening balance for FY 2013-14 instead of Rs. 1870.05 crore as submitted by DIAL.

12.8. The Authority has noted that DIAL has raised External Commercial Borrowing (ECB) of USD 100.12 million (working out to Rs. 592.50 crore in Rupee terms) in order to prepay the Rupee Term Loan. The Authority is in receipt of the Auditor's Certificate for Rs. 592.50 crore received by DIAL under ECB loan facility agreement dated 24.07.2013 and utilized towards prepayment of the Rupee Term Loan. The Authority notes that there is a typing error in the certificate that the number given in the Auditor Certificate of USD 110.1 is to be read as USD 110.1 million.

12.9. The Authority also noted the increase in ECB (in Rupee terms) by Rs. 324.69 crore on account of foreign exchange reinstatement and decrease in ECB (in Rupee terms) by Rs. 235.21 crore due to repayment. Thus, including the additional ECB raised for prepayment of the rupee term loan, the net increase in ECB by the end of FY 2013-14 was Rs. 681.98 crore.

12.10. The Authority has also noted that while the ECB term loan (in Rupee terms) raised by DIAL for prepayment of rupee term loan was Rs. 592.50 crore, the DIAL prepayment towards rupee term loan was Rs. 623.75 crore. The Authority sought information from DIAL explaining the gap of Rs. 31.25 crore paid towards rupee term loan. The Authority is in receipt of additional clarification from DIAL on 15.04.2014 and on 10.07.2014, the relevant extracts of which are reproduced below:

"And Rs. 31.25 Crore of loan was paid during Q1 of FY2013-14, which total to Rs. 623.75 Crores in first half"

"We would like to clarify that during FY2013-14 Rupee Term loan of Rs. 623.75 Crores and out of this Rs. 592.50 Crores was refinancing through External Commercial Borrowing and balance Rs. 31.25 Crores of Rupee term loan repayment was as per the agreed repayment schedule."

12.11. Subsequently, as FY 2013-14 came to a close, DIAL has made a revised submission based on actual values of debt repayments / reinstatements for the year. The

Authority has noted the revised submission made by DIAL on ECB and Rupee Term Loan in its Tariff Model submitted on 23.07.2014, which is as follows:

Table 34: Revised submission of Outstanding Balance of ECB and Rupee Term Loans as per the Tariff Model submitted by DIAL for FY2013-14 to FY2018-19 on 23.07.2014

INR crores	2013-14	2014-15	2015-6	2016-17	2017-18	2018-19
External commercial borrowing, INR crores						
Opening balance	1870.05	2443.14	2166.26	1884.09	1578.22	1255.59
Debt drawn for RTL Prepayment during the period	588.91					
Increase in liabilities (Exchange reinstatement)	210.82					
Debt repayment during the period	226.65	276.88	282.17	305.87	322.64	312.05
Closing balance	2443.14	2166.26	1884.09	1578.22	1255.59	943.54
Rupee term loan, INR crores						
Opening balance	3650.00	2979.56	2955.08	2930.59	2850.23	2637.17
Debt prepayment during the period	605.59					
Debt repayment during the period	64.84	24.48	24.48	80.36	213.06	296.88
Closing balance	2979.56	2955.08	2930.59	2850.23	2637.17	2340.30

12.12. The Authority has noted the following points between the two submissions:

12.12.1. The amount of rupee term loan prepaid in FY2013-14 stated in the revised submission is Rs. 605.59 crore i.e. Rs. 18.15 crore lower than that stated in the initial submission resulting in difference in values of outstanding rupee term loan for FY2013-14.

12.12.2. The repayment amounts stated for rupee term loans in both submissions are consistent for FY2013-14 and second Control Period.

12.12.3. The amount of ECB loan (in Rupee terms) raised for prepayment of rupee term loan in FY2013-14 is Rs.588.91 crore, not Rs. 592.50 crore as stated in the initial submission.

12.12.4. The increase in ECB loan (in Rupee terms) on account of reinstatement of foreign exchange fluctuations in FY2013-14 was Rs. 210.82 crore as against Rs. 324.69 crore as stated in initial submission.

12.12.5. The ECB loan was repaid to the extent of Rs. 226.65 crore in FY2013-14 as per revised submission as against Rs.235.21 crore as stated in initial submission.

12.12.6. The repayment amounts as stated (in Rupees) for ECB loans in DIAL's submissions are different in each year over the second Control Period.

12.12.7. As per the revised submissions, the gap between ECB loans (in Rupee terms) raised to prepay rupee term loan and actual prepayment of the rupee term loan is Rs. 16.68 crore instead of Rs. 31.25 crore as per 11.11.2013 submissions.

12.13. Furthermore, the Authority is in receipt of the Auditor's Certificate for rupee term loan outstanding as of 31st March 2014 to be Rs. 2,979.56 crore, in DIAL's submission dated 10.07.2014.

12.14. The Authority has sought Auditor's certificates / clarifications for:

12.14.1. Year-wise Repayment of rupee term loan and ECB loan in the first and second Control period

12.14.2. Prepayment of Rupee Term Loan in FY2013-14

12.14.3. ECB loan raised to prepay rupee term loan in FY2013-14

12.14.4. Clarification for gap in ECB loan raised for prepayment of rupee term loan and actual prepayment of rupee term loan

12.14.5. Increase in ECB loan on account of reinstatement of foreign exchange fluctuations in FY2013-14

12.14.6. Outstanding debt for rupee term loan and ECB loan in each year of the first and second Control period

12.15. The Authority is in receipt of the Auditor's Certificates on the debt repayment schedule for the Rupee Term Loan in the second Control Period and has noted that the repayment towards this debt considered by DIAL are consistent with the certificate.

12.16. The following response was received from DIAL regarding the inconsistency observed:

"*We would also like to clarify that USD 100.11 Million ECB was drawn during July 2014 and it was used for prepayment of Rupee term loan of Rs. 592.50 Crores. Additionally, INR 77.94 crores crore of rupee term loan was paid as normal repayment during FY2013-14.*

Further, it is to be noted that opening and closing figures of Rupee Term Loans and Foreign Currency during FY2013 -14 in financial model are matching with the Balance Sheet numbers.

In response to d(1), we would like to mention that the Authority may please refer to 'Capexfinancing' Sheet, (cell L305:L311) for the detailed break-up. The mismatch is because of the ECB reinstatement on the balance sheet date. The reasoning for each line item in financial model is produced as below: Opening balance of ECB	*1,870.05*	*Opening Balance matching with financials*
Debt repayment during the period	*(226.65)*	*ECB Repayment during the year is multiplied with the exchange rate as on 31.03.2014. Since the balance sheet date and actual date of repayments are different, the resulting variation has been recorded under debt drawn.*
Debt drawn for RTL Prepayment during the period	*588.91*	*Balancing Figures to match with the closing balance (reduced down by INR 3.59 crores), Actual prepayment however is INR 592.5 crores, and difference is on account of Forex fluctuation.*
Increase in liabilities (Exchange reinstatement)	*210.82*	*Forex Adjustment adjusted in the Gross Block*
Closing Balance of ECB	*2,443.14*	*Closing Balance matching with financials*

"

12.17. The Authority has noted the interest rates submitted by DIAL based on the outstanding balance from the Tariff Model dated 11.11.2013 for FY2013-14 to FY2019-20 given as below:

Table 35: Cost of debt as per the Tariff Model submitted by DIAL dated 11.11.2013 for FY2012-13 to FY2019-20

Interest rates during the period	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
External commercial borrowings	7.47%	7.49%	7.49%	7.41%	7.80%	7.79%	7.77%	7.73%
Rupee loan	11.54%	11.79%	12.04%	12.29%	12.54%	12.79%	13.04%	13.29%
Cost of Debt	10.2%	9.8%	10.1%	10.3%	10.8%	11.1%	11.5%	11.8%

12.18. The Authority has noted that these have been revised in DIAL's submission dated 23.07.2014 as below,

Table 36: Cost of debt as per the Tariff Model submitted by DIAL dated 23.07.2013

Interest rates during the period	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
External commercial borrowings	7.31%	7.10%	7.48%	7.39%	7.78%	7.77%	7.74%	7.70%
Rupee loan	11.54%	11.38%	11.63%	11.88%	12.13%	12.38%	12.63%	12.88%
Cost of Debt	10.11%	9.45%	9.87%	10.12%	10.58%	10.89%	11.23%	11.64%

12.19. The Authority has noted that DIAL has estimated annual interest rates on ECB loans for each of the years during the second Control Period and has computed the weighted average of the interest rates on the various ECB loans during the year to arrive at the average interest rate for ECB loans to be considered towards cost of debt. The Authority is in receipt of the Auditor's Certificate, providing interest rates on ECB loans from all banks for the period 1st April 2014 to 31st March 2021 and has considered the same.

12.20. The Authority proposes not to consider the reinstatement of loan on account of forex fluctuations to the tune of Rs. 210.82 crore in FY2013-14 continuing with its Decision No 12.c of Delhi Tariff Order No. 03 / 2012-13. As the Authority continues with its earlier decision of not considering any adjustments related to currency fluctuations on capital or interest payments or any other charges in respect of the ECB Loan, it proposes to consider the following schedule of debt including repayment:

Table 37: Outstanding Balance of ECB and Rupee Term Loans considered by the Authority for FY2013-14 to FY2018-19

INR crores	2013-14	2014-15	2015-6	2016-17	2017-18	2018-19
External commercial borrowing, INR crores						
Opening balance	1,552.00	1,964.70	1,753.76	1,538.84	1,301.93	1,051.01
Debt drawn for RTL Prepayment during the period	592.50	0.00	0.00	0.00	0.00	0.00
Increase in liabilities (Exchange reinstatement)	0.00	0.00	0.00	0.00	0.00	0.00
Debt repayment during the period	(179.79)	(210.94)	(214.92)	(236.91)	(250.91)	(242.95)
Closing balance	1,964.70	1,753.76	1,538.84	1,301.93	1,051.01	808.06

INR crores	2013-14	2014-15	2015-6	2016-17	2017-18	2018-19
Rupee term loan, INR crores						
Opening balance	3,650.00	2,979.56	2,955.08	2,930.59	2,850.23	2,637.17
Debt prepayment during the period	(605.59)	-	-	-	-	-
Debt drawdown during the period	0.00	0.00	0.00	0.00	0.00	0.00
Debt repayment during the period	(64.84)	(24.48)	(24.48)	(80.36)	(213.06)	(296.88)
Closing balance	2,979.56	2,955.08	2,930.59	2,850.23	2,637.17	2,340.30

12.21. The Authority has also noted DIAL's forecast of a 25 basis point per annum increase in the nominal interest rate on Rupee Term Loans during the second Control Period. The Authority has carefully examined the explanation provided by DIAL in this regard for the second Control Period. However, reference to some of the market views indicates that the market expects RBI to cut interest rates during the second Control Period in order to boost economic growth in the country. Thus, the Authority is of the view that there is no visible increase in interest rates in the near future. However, the Authority notes that it is not in a position to forecast the interest rates for next 5 years and accordingly, the Authority proposes to consider a ceiling of 50 basis points on the increment in the cost of debt over the second Control Period i.e., from current level of 11.38% to a ceiling of 11.88% over the second Control Period.

12.22. Based on the audited values, the Authority proposes to consider the outstanding debt, interest costs and cost of debt for the first Control Period on ECBs and Rupee Term Loan as below,

Table 38: Outstanding Debt and Cost of Debt as considered by the Authority for second Control Period

Interest rates during the period, %	2014-15	2015-16	2016-17	2017-18	2018-19
External commercial borrowings	7.08%	7.39%	7.78%	7.77%	7.74%
Rupee term loan	11.38%	11.38%	11.38%	11.38%	11.38%
Weighted Average Cost of Debt*	9.78%	10.01%	10.30%	10.44%	10.55%
* The weighted average cost of debt calculations are detailed in Table 42 below.					

Proposal No. 10. Regarding cost of debt to be considered for second Control Period

10.a. Based on the material available to it and its analysis, the Authority proposes:

i. **Not to consider the reinstatement of ECB loan on account of foreign exchange fluctuation and hence to consider Rs. 1552.00 crore as the opening balance of ECB loan as on 01.04.2014 as indicated in Para 12.7 above.**

ii. **To consider the cost of debt for Rupee Term loan over the second Control Period at 11.38%**

iii. **To adopt the weighted average cost of debt as per Table 38 for determination of weighted average cost of capital for the second Control Period.**

iv. **To true-up the cost of debt for Rupee Term Loan for the second Control Period based on evidential submissions along with suitable auditor certificates by DIAL at the time of determination of aeronautical tariff for the third Control Period subject to a ceiling of overall increase of 50 basis points**

13. Cost of Equity

13.1. The Authority, vide Decision No. 29 of its Delhi Tariff Order 03/2012-13, decided to adopt return on equity (post-tax cost of equity) at 16% for the purpose of determination of WACC for the first Control Period. This return on equity was applied on the actual book value of equity of DIAL.

DIAL Submission on Equity and Refundable Interest Free Security Deposit (RSD)

13.2. DIAL's submission with respect to Equity and treatment of RSD as Quasi Equity:

"1. Equity:

The total equity infused by shareholders is Rs. 2450 Crores by way of Equity.

2. Quasi Equity:

Under OMDA, DIAL has been given the right of commercial development of the 5% of the total land parcel. DIAL has, in the first phase of development, licensed 45.08 acres of land. DIAL adopted a rigorous, transparent and aggressively marketing process for monetization of the land (hospitality district). Despite the constraints of the 26/11 terrorist attack and the global financial meltdown at the time of monetization, DIAL got an amount of refundable deposits of Rs.1471.51 Crores from lease of CPD.

The amounts collected are outside the regulatory till. Contractually it was not mandated for DIAL to use this fund for financing the project. The amounts collected are from Non Transfer Assets. These Non-Transfer Assets are not to be used for cross subsidizing the AERO charges. However DIAL on its own used these amounts for financing its project cost.

As these funds have been utilized for financing the project, a fair return on these funds i.e. opportunity cost need to be provided. These funds are quasi-equity by nature given their super long tenor and being culled out from a bottom-line impacting revenue stream. The rationale of them being treated as Quasi Equity is as following:

These amounts are culled out from a bottom-line impacting revenue stream that would be available to shareholders. The amount is not repayable during the term of concession – same as in case of equity. Utilization of the money is *at the discretion of the shareholders and had no limitations. Money could have been invested in any other venture and/or developing Non Transfer Assets/Non Aeronautical Assets by DIAL and has opportunity cost.*

The amount has been used to finance the RAB and as such it needs to be serviced. Lenders have also treated this amount as equity in their assessment. The amount was generated through what are termed as Non-Transfer Assets. DIAL is permitted to monetize land of about 5% of total land of which, in the first instance, it monetized 45 acres and obtained these security deposits.

DIAL had raised debt to part fund the development of IGI Airport by a consortium of 10 banks. Nine out of ten banks are nationalized banks, last one being a publicly listed infrastructure investment firm. All the above lenders treated RSD (to be realized at a later time) as sponsor's contribution (part of equity) while determining D/E ratio. Hence, RSD funds must be treated as Quasi Equity."

13.3. DIAL's submission regarding the cost of equity is as below:

"DIAL had mandated an independent study by consultancy firm M/LeighFisher for the purpose of determination of Cost of Equity. A copy of the report is enclosed.

The study of LeighFisher is based on CAPM Model and considers in detail, the risk free rate in India, the risk premiums and airport betas. The study is specific to DIAL and the recommended cost of equity is 25.70% In line with this recommendation, we have taken a marginally lower number of 24% as the cost of equity."

a Authority's Examination of DIAL Submissions on Cost of Equity

13.4. The Authority has carefully examined the DIAL submission on the Cost of Equity. The Authority has noted that DIAL's submission of cost of equity at 24% based on recommendations of Leigh Fisher, is same as the submission it made at the time of the determination of aeronautical tariffs for the first Control Period.

13.5. At the time of the determination of aeronautical tariffs for the first Control Period, the Authority had examined the issue in detail in its Consultation Paper No.32/2011-12 dated 03.01.2012, which was commented upon by stakeholders – Cathay Pacific, British Airways, lATA, AOC, APAI, VOICE, APAO, ACI, Fraport, APAI, ASSOCHAM, FICCI, CII, and DIAL. Vide letter No.AV.24032/037/2011-AD dated 12.03.2012, MoCA had forwarded a report of M/s. SBI Capital Markets Ltd. (SBI CAPS) on the fair return on equity for the Indian Airport sector which had opined that a return on equity in the range of 18.5% to 20.5% would be reasonable for airport sector in India. The Authority had requested the National Institute of Public Finance and Policy (NIPFP) to conduct a study to estimate the fair rate of return especially for projects under PPP mode, namely, Mumbai, Delhi, Bangalore and Hyderabad. Accordingly, based on CAPM methodology NIPFP, gave its estimate and range of fair rates of return on equity as 12.70% to 14.06%, vide its report dated 13.12.2011. NIPFP further reviewed the SBI CAPS report and all other stakeholder comments upon Authority's request, concluding that the Authority should consider ROE range of 11%-14%. Considering the NIPFP report dated 19.04.2012 and other relevant factors pertaining to the riskiness of the airport, the Authority had decided to adopt a 16% return on equity for the first Control Period.

13.6. While determining the return on equity for the first control period, the Authority had concluded that a value of 16% for R_e represents a sufficiently generous allowance for the various uncertainties involved in the estimation of the number as well as it represents a reasonable incentive for prospective investors. Therefore, the Authority had decided to adopt a value of 16% as return on equity for calculation of WACC in respect of DIAL for the first Control Period. The Authority is of the opinion that less than 3 years have lapsed since the results of the study carried out by NIPFP were examined by the Authority. The Authority is of the view that the relevant factors and conditions on which the report was based have not changed since then and thus a reconsideration of the cost of equity at this stage is not required.

13.7. The Authority has carefully examined the current submissions of DIAL in terms of the arguments put forth by it for the return on equity to be considered at 24%. The Authority, in para 26 of its Delhi Tariff Order 03/2012-13, had extensively examined the arguments submitted by DIAL and dealt with the matter of return on equity. In absence of any fresh arguments from DIAL, the Authority is not persuaded to reconsider its earlier decision especially in the view of the fact that not much time has lapsed since the Authority's last determination of cost of equity in respect of the IGI Airport. The Authority is of the view that the relevant factors considered by it for arriving at 16% return on equity as reasonable has not undergone a change in the ensuing period. Hence, the Authority proposes to maintain the return on equity for DIAL at 16% and proposes to use this for the purpose of estimation of WACC. However, the Authority notes that relevant factors including risk parameters would evolve over a period of time and may necessitate a fresh study on applicable cost of equity for IGI Airport, Delhi. The Authority proposes to undertake such study at an appropriate time.

13.8. Further the Authority has carefully examined DIAL's submission with respect to treatment of RSD as Quasi Equity. The Authority notes that the arguments presented by DIAL on RSD as part of the current submissions are same as the arguments it had submitted at the time of determination of aeronautical tariff for the first Control Period. The Authority's examination of these arguments are presented in detail in its Consultation Paper No.32/2011-12 dated 03.01.2012 as well as its Delhi Tariff Order 03/2012-13. The Authority had considered the arguments submitted by DIAL for treatment of RSD as quasi equity such as DIAL being free to use this money at its will, there being an opportunity cost and treatment of RSD as quasi equity by other financial institutions such as lenders. The Authority had provided detailed examination of all these arguments in Chapter 15 of its Delhi Tariff Order 03/2012-13. Examining all these aspects and considering that there were no costs involved in raising RSD, the Authority had decided to treat RSD as a means of finance at zero cost vide its Decision No. 13 of the Delhi Tariff Order 03/2012-13.

13.9. The Authority's detailed examination of the issue of land monetization and the treatment of RSD is presented in para 14 below. Accordingly and in absence of any fresh argument from DIAL as part of current submissions, the Authority proposes to continue to treat RSD already raised by DIAL (at Rs 1,471.51 crore) as a means of finance at zero cost. The Authority further proposes to review and appropriately consider the additional RSD, if any, and applicable costs thereof, if any, to be raised by DIAL during the second Control Period after receipt of views from MOCA / AAI (Refer para 14.21 below).

Proposal No. 11. Regarding Cost of equity

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

i. **To adopt return on equity (post tax cost of equity) as 16% for the purpose of calculation of WACC.**

ii. **To consider RSD already raised by DIAL (at Rs. 1,471.51 crore) as a means of finance at zero cost.**

iii. **To review and appropriately consider the additional RSD, if any, and applicable cost thereof, if any, to be raised by DIAL during the second Control Period after receipt of views from MOCA / AAI (Refer para 14.21 below).**

iv. **To commission a fresh study to determine cost of equity applicable in respect of IGI Airport, Delhi at an appropriate time**

14. Land Monetization and its Treatment towards Target Revenue

14.1. During the exercise of determination of aeronautical tariff for the first Control Period, DIAL had submitted that the revenues from non-transfer assets should not be used for cross subsidising the aeronautical charges. The Authority, based on the submissions from DIAL at that stage, had noted that DIAL had generated receipts from monetisation of 45 acres of land and such monetisation resulted into Rs.1471.51 crore of Refundable Security Deposits (RSD) with DIAL at zero cost. The Authority had noted the submissions from DIAL that these monies pertaining to the security deposits are in the nature of capital receipts and cannot be treated as revenue. The Authority was also informed that in addition to capital receipts (which the Authority had considered as a means of finance towards capital project cost for the purpose of determination of DF which is a means of finance of the last resort). In addition to RSD, DIAL is also in receipt of annual rental of around Rs. 1.8 crore to Rs. 2 crore per acre from the sub-leases of this land. The Authority had not taken into account this revenue (totalling around Rs. 90 crore per annum) towards calculation of aeronautical tariff.

14.2. Based on examination of stakeholder comments and DIAL submissions, the Authority, vide Decision no 25.a. of its Delhi Airport Tariff Order 03 / 2012-13, decided to exclude the gross revenue from Non-Transfer Assets towards cross-subsidization of aeronautical cost while determining the target revenue.

14.3. The Authority, under the current exercise, has had reference to the financial statements of DIAL for FY 2012-13 and FY 2013-14, which record the Deposits from Commercial Property Developers as Rs. 1,471.51 crore as on respective dates of 31.03.2013 and 31.03.2014. The Authority had considered RSD as a means of finance for funding of the project cost of Rs. 12,502.86 crore and thus for the purpose of determination of DF. The Authority has noted that the land parcel of 45 acres has been monetized by DIAL.

14.4. The Authority has also noted from the auditor certificates as well as submissions of DIAL that following Revenue were realized by DIAL from Commercial Property Development:

Table 39: Revenue from Commercial Property Development (CPD) realized by DIAL during the first Control Period

INR crore	2009-10	2010-11	2011-12	2012-13	2013-14
Revenue from CPD	46.38	79.05	83.46	88.12	93.04

14.5. The Authority has further noted the projections made by DIAL for revenue from Commercial Property Development over the second Control Period, which were determined based on the CPD Agreements entered into by DIAL for the 45 acres of land monetised by it till date:

Table 40: Revenue from Commercial Property Development (CPD) projected by DIAL for the second Control Period

INR crore	2014-15	2015-16	2016-17	2017-18	2018-19
Revenue from CPD	98.24	103.73	109.53	115.66	122.08

14.6. The Authority presents below various considerations and its examination of provisions under SSA / OMDA for treatment of revenues realized by DIAL from monetisation of land.

14.7. Based on its reading of various Agreements (Lease Deed and OMDA), the Authority has noted as follows:

14.7.1. From Article 2.1.1 of the Lease Deed dated 25.04.2006 between Airport Authority of India and DIAL that the 'demised premises' is given to DIAL for duration of the term for the "sole purpose of Project", where the Project is defined as *"the design, development, construction, finance, management, operation and maintenance of the Airport, as provided for under the OMDA"*.

14.7.2. Moreover, as per Article 5.1 of the Lease Deed, the Lease Deed shall terminate automatically with the expiry or early termination of the OMDA.

14.7.3. As per Article 5.2.1 (i), *"on expiry of the term or early termination of the Lease Deed, the Lessee shall surrender to the Lessor the "Demised Premises" together with all assets buildings, fixtures, runways, all or any singular rights, liberties, privileges, easements and appurtenances whatsoever to the Demised Premises…"*.

14.7.4. As per Article 5.2.1 (ii) *"the Lessee shall, in accordance with the OMDA, transfer to the lessor, all the Transfer Assets together with all or any other* *singular rights liberties, privileges, easements and appurtenances whatsoever to the said Transfer Assets…".*

14.7.5. As per Article 5.2.1(iii), *"the lessor shall have the right but not the obligation to purchase, in accordance with the terms and conditions set forth in the OMDA, any and all Non-Transfer Assets (in part or in whole) free and clear of all Encumbrances, and the Lessee hereby undertakes and agrees to transfer to the Lessor, in accordance with the terms and conditions set forth in the OMDA, such Non-Transfer Assets (whether in whole or in part) that the Lessor may elect to purchase, free and clear of all Encumbrances."*

14.7.6. Article 5.2.1 (iii) however provides that *"in the event the Lessor elects not to purchase from the Lessee any and/or all Non-Transfer Assets, then the Parties shall enter into a revised lease deed ("Revised Lease Deed") in relation to such Non-Transfer Assets and the underlying land together with all assets, buildings, fixtures, all or any singular rights, liberties, privileges, easements and appurtenances whatsoever to the such Non-Transfer Assets on such commercial terms and conditions as may be mutually agreeable."*

14.7.7. Moreover as per Article 5.2.1 (iii), *"in the event the Parties do not, for whatsoever reason, agree on the terms and conditions of such Revised Lease Deed within six (6) months of the expiry or early termination of this Lease Deed, the Lessee hereby undertakes to provide Lessor vacant possession of such land."*

14.8. The Authority also noted the definitions of Non-Aeronautical assets and Non-transfer assets in OMDA as below:

14.8.1. Non-Transfer Assets shall means:

"All assets required or necessary for the performance of Non-Aeronautical Services at the Airport as listed in Part II of Schedule 6 as located at the Airport (irrespective of whether they are owned by the JVC or any third entity) provided the same are not Non-Aeronautical Assets."

14.8.2. Non Aeronautical Assets shall mean:

"1. all assets required or necessary for the performance of Non-Aeronautical Services at the Airport as listed in Part I of Schedule 6 and any other services

mutually agreed to be added to the Schedule 6 hereof as located at the Airport (irrespective of whether they are owned by the JVC or any third Entity); and

2. All assets required or necessary for the performance of Non-Aeronautical Services at the Airports as listed in Para II of Schedule 6 hereof as located at the Airport (irrespective of whether they are owned by the JVC or third Entity), to the extent such assets (a) are located within or form part of any terminal building; (b) are conjoined to any other Aeronautical Assets, asset included in paragraph (i) above and such assets are incapable of independent access and independent existence; or (c) are predominantly servicing/catering any terminal complex/cargo complex.

And shall specifically include all additional land (other than the Demised Premises), property and structures thereon acquired or leased during the Term, in relation to such Non-Aeronautical Assets"

14.9. The Authority notes from the provisions under OMDA that the non-transfer assets, which may be owned either by JVC or a third entity, are those assets which are built on the land earmarked for commercial development, for which Article 2.2.4 of OMDA states as under,

"It is expressly understood by the Parties that JVC shall provide Non-Aeronautical Services at the Airport as above, provided however that the land area utilized for provision of Non- Transfer Assets shall not exceed five percent (or such different percentage as set forth in the master plan norms of the competent local authority of Delhi, as the same may change from time to time) of the total land area constituting the Demised Premises. Provided however that the Non-Transfer Assets, if any, that form part of the Carved-Out Assets and/or situated upon the Existing Leases shall be taken into account while calculating the percentage of total land area utilized for provision of Non-Transfer Assets."

14.10. From the provisions under OMDA (reproduced under Lease Deed), the Authority notes that on expiry of the Term or early termination of this Lease Deed / OMDA and in the event of AAI electing not to purchase from the DIAL any and/or all Non-Transfer Assets, then the Parties shall enter into a revised lease deed ("Revised Lease

Deed") in relation to the Non-Transfer Assets and the underlying land together with all assets, buildings, fixtures, all or any singular rights, liberties, privileges etc. It may be noted that the issue of transfer of underlying land has been dealt with under the OMDA only in cases when the lessor (AAI) chooses not to purchase from lessee the lease assets. Revised Lease Deed needs to be signed for use of underlying land as well as the appertaining assets. This means that complete land which includes 5% of total land earmarked land for Non-Transfer Assets is to be surrendered so that a fresh lease can be entered into between the parties. As stated above it provides for a situation when AAI elects not to purchase non-transfer assets that clearly exclude underlying land. It also states that in the event the parties not agreeing to the terms and conditions of the Lease Agreement, the underlying land will revert back to AAI, and the JVC will have only the right of removing the relevant Non-Transfer Assets. From the careful examination of the above provisions, it is very clear that underlying land, over which the commercial development takes place, is not a non-transfer asset.

14.11. The Authority also notes that the land belongs to the Sovereign/AAI. Private airport operators have also been repeatedly stressing this point that they are, after all, not the owners of the land which will go back to the owner, namely, AAI. Further land, as a natural resource, was acquired by AAI or its previous incarnations, namely the International Airport Authority of India or the Civil Aviation Department of the Government of India, through the use of legislative power and instrument of the Land Acquisition Act (or given to it by the Government) for the public purpose of constructing an airport. With PPP, this public purpose is now sought to be achieved through the JVC. This is consistent with the requirement that parting with a resource by the government to a private party has to have some underlying public purpose and can be done only in public interest. This mechanism of JVC cannot alter the true colour of the underlying public purpose. It can never be construed that the land is gifted away to the JVC. The government would also concur with the view that that the commercial exploitation of land should yield monies for the airport and not to the promoters of JVC. If this is the correct logical position, land in itself cannot be construed as a non-transfer asset. Hence the Non-transfer Assets are such structures and buildings that are constructed on these lands and not the land per se.

14.12. This interpretation of Non-Transfer Assets is somewhat analogous to the concept of *land usufruct* where the lessee is permitted (by the lessor) to enjoy only the usufruct while the land belongs to the Crown or the Sovereign. Leased land (that is a natural resource) continues to remain with the AAI and only revenues from the structures built thereon (analogous to the concept of usufruct) can be considered to be enjoyed by the lessee, i.e. DIAL or MIAL (usufructuary).

14.13. The Authority notes from Article 2.1.1 of the Lease Deed dated 25.04.2006 between Airport Authority of India and DIAL that the 'demised premises' is given to DIAL for duration of the term for the "sole" purpose of Project. This sole purpose, which is public in nature, is sought to be achieved by the land leased to JVC. As noted above, land was acquired by AAI either through the use of legislative power or given to it by the Government for the public purpose There is some underlying intrinsic value to land, which is based on the twin parameters of Floor Space Index (FSI) and Permitted User. When Lease Deed says that the 'demised premises' is given for the "sole" purpose of the project, an interpretation would be that this intrinsic value of the underlying land is to be utilized for the purpose of the project, i.e. to make it possible to "*design, development, construction, finance, management, operation and maintenance of the Airport".* The Authority notes that this value can be extracted by different mechanisms and modalities, yet adoption of a particular modality should not alter the underlying intrinsic value of the land in question and seen from this perspective, there is equivalence of all the different modes of land monetisation and these can be said to be equivalent.

14.14. As regards the intrinsic value of the underlying land, the Authority notes that there can be different modes of land monetisation, for example, (1) capital receipts as security deposits (with or without interest); (2) A combination of capital receipts (security deposits) and revenue receipts (lease rentals) and (3) minimal security deposits and also minimal lease rentals but a revenue share agreements between the airport operator and the sub-lessees or developers (like hotels etc.).

14.15. Requirement of capital over successive phases of airport expansion would require land monetization to be in sync with capital requirements. The best match between the two would then be Mode-1 (Capital receipts through Security Deposits). It may, however, turn out that the sub-lessee developer may not be able to give upfront large amounts security deposits and would want to spread some part thereof through lease rentals (Mode-2). It may then have to be prescribed by the primary lessor (AAI/MoCA) that lease rentals obtained by DIAL on account of land monetization would also be applied towards the airport project. After the revenue share of AAI is paid (so that AAI's revenues are not affected), land monetization in Mode-3 would indicate that no capital (either in the form of capital receipts or lease rentals) would be available to the airport operator to be applied towards the project when the airport operator has entered into a revenue share arrangement with the sub-lessee, namely the developers of hotels, etc. In Mode-3, therefore, the link between the lease of land for the "sole" purpose of airport development and receipts obtained from land monetization gets uncoupled.

14.16. Revenue share from DIAL to AAI is not applied to the capital receipts but only on the lease rentals that DIAL gets from the developers, it being a revenue receipt. By changing the proportion of security deposits and lease rentals in land monetisation, the airport operator may impact that portion which goes entirely to the capital (viz. the security deposits) and maximise the lease rentals (revenue receipts). However, if the land is leased by AAI to the airport operator for the "sole" purpose of airport project, both the capital receipts and the revenue receipts from land would have to be applied to the airport project. (Alternatively, it will need to be stipulated by AAI/GOI that the land monetisation will be only in the form of capital receipts).

14.17. The Authority had a reference to Schedule 1 of SSA for the principles of tariff fixation in respect of IGI Airport, Delhi. The building blocks to be considered for determination of Target Revenue, as presented in para 3.12 above. The Authority notes that the building blocks include a cross-subsidisation of 30% of the gross revenue generated by the JVC from the Revenue Share Assets, the costs in relation to which shall not be included while calculating Aeronautical Charges. The definition of Revenue Share Assets does neither explicitly mention the Non-Transfer Assets nor the underlying land. The Authority also notes that formulation / mechanism for consideration of land monetisation towards determination of aeronautical tariff is not explicitly detailed in the SSA. On account of the absence of such formulation / detailed mechanism, the Authority is unable to deduce as to how it can give effect to the primary objective stated under the Lease Deed, i.e. use of the demised premises for the sole purpose of the project. Accordingly the Authority is unable to accord any treatment to the revenue generated by monetisation of land by DIAL for the purpose of determination of aeronautical tariff except for the consideration of refundable security deposits raised by DIAL of Rs. 1,471.51 crore as a means of finance at zero cost for the purpose of the determination of DF and calculation of WACC.

14.18. The Authority has examined the issue of treatment of RSD for the purpose of determination of aeronautical tariff in detail in its Consultation Paper 32 / 2012-13 as well as Delhi Tariff Order 03 / 2012-13. The Authority had noted that the RSD raised by DIAL is interest free (zero cost). The Authority does not find any fresh argument from DIAL on this issue as part of the current submissions and hence, the Authority is not persuaded to agree with DIAL's statement that the RSD amount collected are outside the Regulatory till as the amounts enumerate from non-transferable Asset (RSD).

14.19. As regards the lease rental generated by DIAL from the Commercial Property Development (from the exploitation of 45 acres of land earmarked for Non-Transfer Assets), the Authority, for the present, has not considered these amounts towards the determination of aeronautical tariff on account of the lack of explicit mention of the formulation / mechanism for such consideration in SSA / OMDA / Lease Deed. The Authority notes that this amount for the first Control Period (Refer para 14.4 above) totals to Rs. 390.05 crore. Based on the projections made by DIAL for revenue from Commercial Property Development for the second Control Period, the amount (Refer para 14.5 above) totals to Rs. 549.24 crore.

14.20. Considering the fact that Lease Deed and SSA have been signed by AAI and ministry of Civil Aviation, the Authority is of the view that AAI / Ministry of Civil Aviation are best placed to indicate to the Authority the quantum of revenue (100% or otherwise) from the land earmarked for commercial development to be considered towards cross-subsidisation so that the same is accounted for in the determination of aeronautical tariff. The Authority is also of the view that any exploitation of the remaining earmarked commercial land (from the limit of 5% prescribed under OMDA) without any capital investment need and / or without any link to defray 100% revenue for aero tariff needs to be addressed by AAI / MOCA. Moreover in case RSD is raised by DIAL but is not utilized for the capital investment, mechanism to account for such money as well as the interest thereon is also to be addressed by AAI / MOCA. The Authority proposes to seek the views / inputs from MoCA / AAI towards treatment of revenue realized by DIAL from monetisation of land under the exercise of determination of aeronautical tariff. Upon receipt of views / inputs from MoCA / AAI, it would accord appropriate treatment to such Revenue including future commercial exploitation.

14.21. To summarize, the Authority states as under:

14.21.1. Leased land is given to DIAL for the "sole" purpose of airport project and hence there should be no "leakage" from the proceeds of monetisation for purposes other than the airport project. Land monetisation should yield capital for successive phases of expansion of the airport. Hence the mode of land monetisation should ideally be only in the form of capital receipts (security deposits) and in sync with the capital requirements of successive phases of airport expansion. In case the same is not followed, the Authority would seek views from AAI / MoCA on mechanism for treatment of such monies realized by DIAL.

14.21.2. Provisions under OMDA seem to indicate that land per se is not to be regarded as part of the non-transfer asset. Hence the revenues attributable to monetisation of land per se should not be reckoned as revenues from non-transfer assets. However, in Mode 3 (Paras 14.14 and 14.15 above), there may be no proceeds from land for using for the airport project and such mode may decouple the lease of land from its sole purpose and hence would not be in public interest.

14.21.3. AAI / MoCA being the agencies of the sovereign to have leased the land to DIAL are best placed to prescribe the mechanism for land monetisation by

DIAL in future and the formulation for treatment of revenue generated from monetisation of land towards determination of aeronautical tariff in respect of IGI Airport, Delhi. The Authority proposes to write to AAI / MoCA for their considered view in this regard.

Proposal No. 12. Regarding Land Monetisation and its treatment towards Target Revenue

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

- **i. To request AAI and MoCA to provide their considered view on mechanism for land monetization by DIAL in future and the formulation for treatment of revenue generated by DIAL from monetisation of land earmarked for commercial development towards determination of aeronautical tariff in respect of IGI Airport, Delhi.**
- **ii. Pending the receipt of views of AAI/ MoCA, not to consider the amount of Rs. 390.05 crore for the first Control Period (revenues realized by DIAL from Commercial Property Development) and Rs. 549.24 crore for the second Control Period (revenues projected to be realized by DIAL from Commercial Property Development) towards determination of aeronautical tariff in respect of IGI Airport, Delhi**

15. Weighted Average Cost of Capital (WACC)

15.1. The Authority, vide Decision No. 29 of its Delhi Tariff Order 03/2012-13, determined the WACC for DIAL at 10.33% for the first Control Period. The Authority had also decided not to true-up the WACC of the first Control Period while determining the aeronautical tariffs for the second Control Period, vide its Decision 29f.

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

15.2. DIAL, in its submission dated 11.11.2013, stated as under on the issue of calculation of WACC:

"The SSA prescribed a nominal post-tax WACC methodology for determining the Return on RAB. A post-tax vanilla approach that is equivalent to above approach has been used to determine the WACC. The formula used is as below:

WACC = Kd X G + Ke X (1-G)

Where

Kd: Weighted average Pre-tax cost of debt used for funding the RAB

Ke: Post-tax cost of equity using the Capital Asset Pricing Model 'CAPM' Approach.

G: Gearing of Debt to total Equity/Quasi-equity utilised for RAB.

Security deposit as quasi equity: As explained earlier, DIAL has utilized the security deposits from lease of Non-Transfer Assets to part finance the capital expenditure programme for Phase 1. This has been done despite any mandate/requirement below any of the project agreements to utilize the deposit towards funding the aeronautical assets.

The aforesaid deposits are for the concession period co-terminating with the concession of DIAL and as such have been treated as quasi-equity. The reasons of this being treated as quasi-equity are as below:

- *These amounts are culled out from a bottom-line impacting revenue stream.*
- *The amount is not repayable during the term of concession – same as in case of equity.*

- *The utilization of the money is at the discretion of the shareholders and had no limitations.*
- *The money could have been invested in any other venture and/or developing Non Transfer Assets/Non Aeronautical Assets by DIAL and has opportunity cost of equity.*
- *The amount has been used to finance the RAB and as such it needs to be serviced.*
- *Lenders have also treated this amount as equity to compute debt-equity ratio for lending purposes.*

Therefore, security deposit from CPD is treated as quasi-equity and the cost of equity applied to this to compute WACC.

Based on the weighted average cost of debt for the Rupee Term Loan and the External Commercial Borrowing facility, a combined weighted average can be calculated in rupee-denominated terms, which will provide the overall cost of debt for DIAL's cost of capital calculation. The calculation is set out in the table below.

In Crores	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Equity funding					
Share capital	*2,450.00*	*2,450.00*	*2,450.00*	*2,450.00*	*2,450.00*
Internal accruals (Cumulative)*	*345.87*	*499.31*	*663.34*	*895.58*	*1145.73*
Refundable lease deposits	*1,471.51*	*1,471.51*	*1,471.51*	*1,471.51*	*1,471.51*
Total	*4,267.38*	*4,420.82*	*4,584.85*	*4,817.09*	*5,067.24*
Return on equity	*24.0%*	*24.0%*	*24.0%*	*24.0%*	*24.0%*
Debt funding					
*ECB debt***	*2264.68*	*1971.84*	*1654.41*	*1319.57*	*995.72*
Cost of ECB %	*7.49%*	*7.41%*	*7.80%*	*7.79%*	*7.77%*
Rupee debt	*2,936.92*	*2,912.44*	*2,832.08*	*2,619.02*	*2,322.14*
Cost of Rupee debt	*12.04%*	*12.29%*	*12.54%*	*12.79%*	*13.04%*
Total debt funding	*5201.60*	*4884.28*	*4486.48*	*3938.59*	*3317.86*

Total Capital employed	*9468.98*	*9305.10*	*9071.34*	*8755.68*	*8385.11*
WACC	*17.56%*				

**It is assumed that DIAL will be able to generate surplus cash from its operating activities (based on the current X factor proposed by us) However, based on the final X factor approved by Authority if surplus is not available then additional debt will need to factored in the means of finance and WACC computation. Currently it has been assumed that the future capitalization will be done from internal accrual as surplus is available. "*

15.3. Based on availability of audited values for FY 2013-14, DIAL has revised its calculation of WACC in its submission dated 23.07.2014. The revised submission is presented as below:

"Based on the weighted average cost of debt for the Rupee Term Loan and the External Commercial Borrowing facility, a combined weighted average can be calculated in rupee-denominated terms, which will provide the overall cost of debt for DIAL's cost of capital calculation. The calculation is set out in the table below.

In Crores	*FY2015*	*FY2016*	*FY2017*	*FY20 1B*	*FY2019*
Equity funding					
Share capital	*2,450*	*2,450*	*2,450*	*2,450*	*2,450*
*Internal accruals *(Cumulative)*	*333*	*529*	*731*	*964*	*1214*
Refundable lease deposits	*1,472*	*1,472*	*1,472*	*1,472*	*1,472*
Total	*4,255*	*4,451*	*4,653*	*4,885*	*5,135*
Return on equity	*24.0%*	*24.0%*	*24.0%*	*24.0%*	*24.0%*
Debt funding					
*ECB debt***	*2,166*	*1,884*	*1,578*	*1,256*	*944*
Cost of ECB %	*7.48%*	*7.39%*	*7.78%*	*7.77%*	*7.74%*
Rupee debt	*2,955*	*2,931*	*2,850*	*2,637*	*2,340*
Cost of Rupee debt	*11.63%*	*11.88%*	*12.13%*	*12.38%*	*12.63%*
Total debt funding	*5,121*	*4,815*	*4,428*	*3,893*	*3,284*
WACC	*17.54%*				

"It is assumed that DIAL will be able to generate surplus cash from its operating activities (based on the current X factor proposed by us) However, based on the final X factor approved by Authority if surplus is not available then additional

debt will need to factored in the means of finance and WACC computation. Currently it has been assumed that the future capitalization will be done from internal accrual as surplus is available."

b Authority's Examination of DIAL Submissions on Weighted Average Cost of Capital (WACC)

15.4. The Authority has carefully examined DIAL's submission regarding WACC and in light of the discussion on cost of debt in para 12 above and cost of equity in para 13 above, the Authority presents its examination in paras below.

15.5. The Authority proposes to consider the return on equity at 16% and treat RSD as means of finance at zero cost as stated in Paras 13.7 and 13.8 above for the second Control Period as was also considered in the first Control Period. The average cost of debt of rupee term loan and ECB as estimated for the second Control Period is also given in Para 12.22, which are proposed to be considered for WACC calculations for the second Control Period.

15.6. As regards the quantum of equity to be considered, the Authority in its Delhi Tariff Order 03 / 2012-13 had decided not to consider Rs 150 crores paid by DIAL as an Upfront Fee to AAI for the purpose of calculation of WACC. The Authority notes from the Tariff Model that DIAL has considered the paid-up equity at Rs 2,450 crore, which includes Rs 150 crore of Upfront Fee for the purpose of WACC Calculation. The Authority is not persuaded to reconsider its earlier decision and hence proposes to consider paid-up equity at Rs 2,300 crore after removing the Upfront Fee of Rs 150 crore.

15.7. Further, the Authority has also noted from the tariff model that DIAL has considered the capital additions being made over the second Control period to have been funded from its internal accruals for respective years. DIAL has stated its assumption in its submissions that DIAL will be able to generate surplus cash from its operating activities (based on the current X factor proposed by DIAL). However, based on the final X factor approved by the Authority if surplus is not available then additional debt will need to be factored in the means of finance and WACC computation.

15.8. The Authority notes that DIAL has used the term internal accrual to refer to the internal resource generation. The Authority has not found definition of the term "internal accruals". However, it understands that this term is used interchangeably with "internal resource generation" (IRG). The IRG comprises (a) Profit After Tax (PAT) (b) depreciation and (c) deferred liabilities, if any.

15.9. The Authority is of the view that the Profit After Tax, which is decided by the firm to be appropriated in the Reserves and Surplus of the firm (and thereafter forms part of the Net Worth, which is the sum of paid-up equity and accumulated retained earnings), belongs to equity investors and would be eligible for equity return. Depreciation is non-cash expenditure and it reflects the reduction in the value of assets (reflected in the difference between the Gross Block and the Net Block) and cannot be considered as eligible for equity return.

15.10. Thus the Authority is of the view that only the Reserves and Surplus should be considered as eligible for equity return. To this Reserves and Surplus, the Authority will add the Profit after Tax as estimated by it to be realized by DIAL over the second Control Period. Such closing Reserves and Surplus will be considered for addition in paid-up equity for respective years for consideration towards the net value of equity and as eligible for an equity return. The Authority notes that there could be a situation when the Reserves and Surplus is negative and when added to paid-up equity, it would result in a value less than the paid-up equity. The situation could also be such that a further negative value of Reserves and Surplus would result in a situation of negative Net Worth for the airport operator. In such cases of resultant negative closing Reserves and Surplus for a year, the Authority would protect the paid-up equity and would consider the value of paid-up equity as the net equity.

15.11. The Authority has noted from the Financial Statement of DIAL for FY 2013-14 that opening balance of Reserves and Surplus for DIAL for FY 2013-14 comes to a negative of Rs. 969.86 crore. Profit after Tax for DIAL, based on its calculation of X factor, reduces the negative balance of Reserves and Surplus or in other words it partly recoups the losses in the previous years to that extent. So far as the accumulated Reserves and Surplus for DIAL is negative, question of having funded the additions to the assets from PAT (though positive for the particular year) does not arise. In such case, the Authority proposes to consider closing equity as per the present level of paid-up equity.

15.12. In the context of IGI Airport, Delhi, the Authority notes that the revenue generated by DIAL from monetisation of land also contributes to its Reserves and Surplus. As of now pending receipt of clarification/inputs from MOCA/AAI on treatment of revenue from monetization of land (Refer paras 14.19 to 14.21 above), the Authority has not considered such revenue towards computation of aeronautical tariffs. In line with the same, the Authority proposes not to consider the contribution of the revenue from monetization of land towards Reserves and Surplus for DIAL at the beginning of the second Control Period. However the Authority, at this stage, does not have the required information to segregate such contribution and has considered the Reserves and Surplus, as reflected in the books of DIAL. Upon receipt of clarification/inputs from MOCA/AAI on treatment of revenue from monetization of land, the Authority will accord an appropriate treatment to the Reserves and Surplus.

15.13. The Authority has computed the Reserves and Surpluses for the duration of the second Control Period based on its proposed determination of X factor and proposes to consider this towards determination of equity for the purpose of calculation of WACC. This computation in respect of DIAL is presented in the Table below:

Table 41: Authority's computation of Equity to be considered towards WACC in respect of DIAL in the second Control Period

In Crore	FY2014-15	FY2015-16	FY2016-17	FY2017-18	FY2018-19
Paid-up Equity					
Opening Paid-Up Equity	2,300.00	2,300.00	2,300.00	2,300.00	2,300.00
Additions to Paid-Up Equity	-	-	-	-	-
Closing Paid Up Equity	2,300.00	2,300.00	2,300.00	2,300.00	2,300.00
Reserves and Surplus to be considered towards equity					
Reserves and Surplus brought forward	(969.86)	(909.21)	(1,601.88)	(2,178.14)	(2,682.78)
Profit for the Year appropriated to Reserves and Surplus	60.65	(692.67)	(576.26)	(504.64)	(379.08)
Reserves and Surplus carried forward	(909.21)	(1,601.88)	(2,178.14)	(2,682.78)	(3,061.86)
Reserves and Surplus to be considered towards equity	-	-	-	-	-
Equity considered for calculation of WACC	2,300.00	2,300.00	2,300.00	2,300.00	2,300.00

15.14. Accordingly the cost of equity of 16% will be considered on equity balance of Rs. 2,300 crore every year in the second Control Period. The Authority has determined the cost of debt for DIAL as given in the Table 38 above for the second Control

Period. The Authority has determined the total capital employed and WACC for the second Control Period to be as below,

Table 42: Total Capital Employed and WACC as considered by the Authority for second Control Period

In Crore	FY2014-15	FY2015-16	FY2016-17	FY2017-18	FY2018-19
Equity funding					
Share capital	2300.00	2300.00	2300.00	2300.00	2300.00
Reserves and Surplus (Cumulative)	0.00	0.00	0.00	0.00	0.00
Total	2,300.00	2,300.00	2,300.00	2,300.00	2,300.00
Return on equity	16.00%	16.00%	16.00%	16.00%	16.00%
Debt funding					
ECB debt	1753.76	1538.84	1301.93	1051.01	808.06
Cost of ECB %	7.08%	7.39%	7.78%	7.77%	7.74%
Rupee debt	2955.08	2930.59	2850.23	2637.17	2340.30
Additional Rupee Debt for proposed capex during Second Control Period	0.00	0.00	197.93	165.07	47.70
Cost of Rupee debt	11.38%	11.38%	11.38%	11.38%	11.38%
Total debt Outstanding	4708.84	4469.43	4350.09	4051.19	3545.86
RSD	1471.51	1471.51	1471.51	1471.51	1471.51
Return on RSD	0.00%	0.00%	0.00%	0.00%	0.00%
Total Capital employed	8,480.35	8,240.94	8,121.60	7,822.70	7,317.37
WACC	10.00%	9.99%	9.99%	9.98%	9.97%
Average WACC	**9.99%**				

15.15. As regards truing up of WACC, the Authority had presented its arguments in Paras 26.85, 26.86, 26.87 and 26.88 of its Delhi Tariff Order 03/2012-13 indicating that the Authority's objective is to maintain the incentive for the Airport Operator to obtain funds for financing the airport at the least possible cost. At the time of determination of tariffs for the first Control Period, the Authority had determined that if the WACC is trued up, it may lead to less than optimum effort on the part of airport operator to obtain finance at the least possible cost. After examining issue of truing up of WACC, the Authority felt that WACC once determined, after appropriate review of the means of finance and their respective costs, should not be altered during the control period nor trued up at the commencement of the next control period. Maintaining its earlier position, the Authority proposes not to true up the WACC in the second Control Period except for the actual values of Reserves and Surplus realized by DIAL during the second Control Period to the extent utilized in Capital Expenditure.

15.16. However for the second Control Period, the Authority notes that DIAL may consider any of the following as a means of finance to fund the proposed capital expenditure over the second Control Period:

15.16.1. Additional debt

15.16.2. Additional RSD

15.16.3. Additional paid-up equity

15.16.4. Funds from Reserves and Surplus, if positive and to the extent utilized in Capital Expenditure

15.17. The Authority understands that with the final change in X- Factor for the second control period, DIAL may need to raise funds for future capital expenditure from sources beyond its internal accruals. Accordingly, the Authority proposes to true-up WACC for the second Control Period for these elements namely:

15.17.1. New debt subject to the ceiling on cost of debt for Rupee Term Loan of actuals as of 01.04.2014 plus 50 basis points

15.17.2. New RSD (in addition to Rs. 1,471.51 crore already considered by the Authority as a means of finance while determining DF)

15.17.3. Fresh paid-up equity (in addition to Rs. 2,300.00 crore already considered by the Authority (after removing upfront fee of Rs. 150 crore from the paid-up equity of Rs 2,450 crore) as a means of finance while determining DF)

15.17.4. Funds from Reserves and Surplus on actuals, if positive, during the second Control Period

Proposal No. 13. Regarding Weighted average cost of capital (WACC) to be considered for determination of Return on RAB for the second Control Period

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

i. To consider WACC of 9.99% for the second Control Period as detailed in Table 42.

ii. Not to true-up WACC for the second Control Period at the time of determination of aeronautical tariffs for the third Control Period except for the elements mentioned in para 15.17 above.

16. Depreciation

a DIAL Submission on Depreciation

16.1. DIAL's submission dated 11.11.2013 regarding depreciation is as below:

"Depreciation is the Return of Capital and is dependent on the life of the underlying assets. Depreciation has been computed as per the Companies Act.

A new companies act (Companies Act 2013) has been promulgated. The depreciation forecast made for the control period II is based on the provisions specified in the Schedule II of the Companies Act, 2013. The effective date of its implementation is expected from 01/04/2014 for its notification in the Official Gazette.

The Useful life of an asset taken is the useful life of an asset as indicated in Part C of Schedule II of Companies Act, 2013. Further, the carrying amount of the asset as on the effective date is depreciated over the remaining useful life of the asset as per the Schedule II. Statement showing comparison between the useful lives (existing & new schedule) is as below:

SLM Depreciation Rate as per Companies Act, 1956 and Companies Act, 2013

Asset Classification	*Companies Act, 1956*		*Companies Act, 2013*
	Rate	*Useful life (Years)*	*Useful life (Years)*
Plant & Machinery	*4.75%*	*21.1*	*15*
Buildings	*3.34%*	*30*	*30*
Roads	*3.34%*	*30*	*5*
Furniture	*6.33%*	*15.8*	*10*
Plant & Machinery (Server/Networks)	*16.21%*	*6*	*6*
Plant & Machinery (Computers)	*16.21%*	*6*	*3*
Intangible-Airport Rights	*1.67%*	*60*	*60*
Vehicles- 4 Wheelers, Buses, Trucks	*9.50%*	*10.5*	*8*
Vehicles – 2 Wheelers	*9.50%*	*10.5*	*10*
Runway, Taxiway and Apron	*3.34%*	*30*	*10*

For the purpose of tariff calculation, no depreciation has been charged on asset funded from Development Fund.

Depreciation Forecast

In Crores	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Dep. on Aero assets	*695.34*	*618.82*	*574.93*	*576.50*	*532.22*

Dep. On Hypothetical Regulatory Asset Base	*87.58*	*76.13*	*69.43*	*68.36*	*61.82*
Depreciation for the period	*782.92*	*694.95*	*644.36*	*644.86*	*594.04*

"

16.2. DIAL's revised submission dated 23.04.2014 regarding depreciation is as below:

"New Companies Act (Companies Act 2013) has been now notified. Therefore, the depreciation forecast made for the Control Period II is based on the provisions specified in the Schedule II of the Companies Act, 2013. The effective date of its implementation is from 01/04/2014.

As per the Act, any Regulatory Authority may determine depreciation rates for sector specific assets. Further, the Authority in its recent Consultation Paper (Cons. Paper No.5/2014-15) has indicated that after consultation they would issue the relevant depreciation rate for specific assets like Runway, Taxiway and Apron. In the meanwhile, we propose to consider useful life of asset as indicated in Part C of Schedule II of Companies Act, 2013. However, as and when the new rates are notified by the Authority we would consider the same for accounting purpose and the difference in the allowed and actual charged could be true up at the end of the control period.

Based on the Auditor's report following is the likely depreciation of Tangible Assets existing as on 31st March 2014 for the next control period. The Depreciation on the additions is separately calculated in model:

Asset Block	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*
Buildings and Roads	*314.88*	*236.29*	*160.66*	*159.68*	*159.13*
Runways & Taxiways	*344.19*	*344.19*	*344.19*	*336.45*	*242.83*
Plant and Machinery	*231.27*	*231.23*	*231.15*	*231.10*	*230.99*
Computing Equipment	*17.65*	*2.72*	*1.13*	*0.93*	*0.68*
Office Equipment	*24.67*	*0.63*	*0.35*	*0.19*	*0.05*
Furniture & Fittings	*21.26*	*21.20*	*21.00*	*20.75*	*19.02*
Vehicles	*4.78*	*3.70*	*2.49*	*1.98*	*1.11*
Total	*958.69*	*839.97*	*760.97*	*751.09*	*653.81*

Asset Block	2014-15	2015-16	2016-17	2017-18	2018-19

Intangible	8.55	8.55	8.55	8.55	8.55

"

b Authority's Examination of DIAL Submissions on Depreciation

16.3. The Authority has carefully examined DIAL submissions regarding depreciation in the second Control Period. The Authority's examination of these submissions is presented below.

16.4. The Authority has noted that DIAL has projected depreciation for the second Control Period as per the provisions under the Companies Act 2013. The Authority is also in receipt of the Auditor's certificate on the projected depreciation. The Authority proposes to consider values as per Auditor's certificate.

16.5. The Authority notes that the formula for determination of tariffs in the SSA requires the Authority to consider depreciation calculated in the manner as prescribed in Schedule XIV of the Indian Companies Act, 1956. SSA also mentions that

"In the event, the depreciation rates for certain assets are not available in the aforesaid Act, then the depreciation rates as provided in the Income Tax Act for such asset as converted to straight line method from the written down value method will be considered. In the event, such rates are not available in either of the Acts then depreciation rates as per generally accepted Indian accounting standards may be considered."

16.6. The Authority notes that the Indian Companies Act, 1956 has been replaced with Indian Companies Act 2013. The Authority believes that while the SSA refers to Schedule XIV of the Indian Companies Act, 1956, the spirit of the formula written in SSA would have been be to adopt applicable depreciation rates as prescribed under the Companies Act at any point of time. The SSA may not have envisaged a change in Indian Companies Act, 1956 and therefore it would not be prudent for the Authority to continue to apply depreciation rates as per the Indian Companies Act, 1956, which has been superseded by Indian Companies Act, 2013.

16.7. The Authority has sought from DIAL the Board resolution on adopting depreciation rates as per the new Companies Act 2013 in its books from FY 2014-15 onwards. The Authority is in receipt of the clarification by DIAL dated 10.07.2014 as below:

“We would like to confirm the DIAL Board has adopted the New Companies Act, 2013 including the new depreciation rate during the Board meeting for Q4 of FY2013-14. Extracts of Minutes of Board meeting as follows:

“AI TO TAKENOTE OF THE NEW DEPRECIATION SCHEDULE BASED ON USEFUL LIFEOF ASSETS

Mr. G R K Babu explained to the Board that under the New Companies Act, 2013 the depreciation to be charged on Fixed Assets has undergone substantial change from fixed percentage to useful life of the assets. The same are prescribed in Schedule II of the Companies Act 2013.

The Board took note of the change in the depreciation rates and adopted the same for the purpose of preparation of financial statements. "

16.8. The Authority has also noted Auditor’s report on examination of information related to depreciation to be considered for the second Control Period and the useful life of select assets provided by DIAL in its 23.07.2014 submission.

16.9. The Authority has noted that DIAL in the first Control Period had considered the assets of runway, taxiway and apron with the useful life of 30 years and had accordingly considered a rate of depreciation of 3.33%. For the second Control Period, DIAL has referred to the provision of useful life of roads in the Companies Act 2013 and has adopted the same for runway, taxiway and apron. However, DIAL, in its submission dated 23.07.2014, also stated as under,

“As per the Act, any Regulatory Authority may determine depreciation rates for sector specific assets. Further, the Authority in its recent Consultation Paper (Cons. Paper No.5/2014-15) has indicated that after consultation they would issue the relevant depreciation rate for specific assets like Runway, Taxiway and Apron. In the meanwhile, we propose to consider useful life of asset as indicated in Part C of Schedule II of Companies Act, 2013. However, as and when the new rates are notified by the Authority we would consider the same for accounting purpose and the difference in the allowed and actual charged could be true up at the end of the control period.”

16.10. The Authority, in its Order No 08/2014-15 dated 10.06.2014 in the matter of Determination of Aeronautical Tariffs in respect of Kempegowda International

Airport (Earlier Bengaluru International Airport), Bengaluru, for the first Control Period (01.04.2011 to 31.03.2016), has deliberated on the issue of rates of depreciation to be considered by the for the purpose of tariff determination. The Authority had noted that the category of runway, taxiway, Apron is not mentioned specifically in the Companies Act 2013. It was also not so in the previous Companies Act i.e. Companies Act 1956. The Authority has been of the considered view that it would be preferable to have, as far as practicable, a broad year to year consistency in the depreciation rate charged by the companies as certified by the relevant statutory auditors and what the Authority would take into account in its process of tariff determination. The Authority has separately initiated the process of determining appropriate rates of depreciation to be adopted for the regulatory purpose in line with the provision of the Companies Act 2013. The Authority expects that such an exercise would take some time. However, the Authority has noted that DIAL in its submission for the first Control Period had adopted depreciation rate of 3.33% (based on useful life of 30 years for runway, taxiway and apron). Hence, the Authority proposes to consider the useful life of assets of DIAL pertaining to runway, taxiway and apron at 30 years instead of 10 years considered by DIAL in its submission. Thus the rates of depreciation considered by the Authority in respect of DIAL are as follows:

Table 43: Rates of Depreciation considered by Authority in respect of DIAL for the second Control Period

Asset classes	Rates of Depreciation (SLM)	Rates of Depreciation (WDV)
Building	3.3%	10.0%
Runway, Taxiway & Apron	3.3%	10.0%
Plant & Machinery	6.7%	15.0%
Computer (Software show as intangible in financial)	16.7%	60.0%
Furniture & Fixtures	10.0%	10.0%
Office Equipment	20.0%	15.0%
Vehicles	12.5%	15.0%
Land	0.0%	0.0%
Intangibles	1.7%	10.0%

16.11. The Authority notes that DIAL has subsequently revised its submission on depreciation by considering useful life of 30 years for runway, taxiway and apron.

DIAL has submitted the revised values of depreciation for the second Control Period. Further, the Authority proposes to adopt the depreciation rates as per Companies Act 2013 except for assets pertaining to runway, taxiway and apron as discussed in Para 16.9 above.

16.12. The Authority notes that DIAL has calculated the depreciation on respective class of assets based on the rates of depreciation as discussed in paras above. The revised split submitted by DIAL between new additions and existing assets is as given below:

Table 44: Depreciation for existing and new assets submitted by DIAL for the second control period

Asset Class	2014-15	2015-16	2016-17	2017-18	2018-19
Building	197.58	197.42	196.93	195.80	194.46
Runway, Taxiway & Apron	93.64	93.64	93.64	93.64	93.64
Plant & Machinery	231.27	231.23	231.15	231.10	230.99
Computer (Software show as intangible in financial)	17.65	2.72	1.13	0.93	0.68
Furniture & Fixtures	21.26	21.20	21.00	20.75	19.02
Office Equipment's	24.67	0.63	0.35	0.19	0.05
Vehicles	4.78	3.70	2.49	1.98	1.11
Depreciation on Assets proposed to be added by DIAL during the second Control Period					
Building	-	4.12	8.14	12.31	16.90
Plant & Machinery	-	4.96	9.80	14.82	20.34
Furniture & Fixtures	-	0.77	1.53	2.31	3.17

16.13. The Authority notes that while calculating the depreciation to be considered for determination of ARR from the depreciation recorded in the books of DIAL, following adjustments need to be made:

16.13.1. Depreciation on assets disallowed as per the Authority's Order No 28 / 2011-12 dated 08.11.2011 in the matter of levy of Development Fee by DIAL at IGI Airport, New Delhi, needs to be removed

16.13.2. Depreciation on foreign exchange fluctuations capitalized by DIAL needs to be removed

16.13.3. Depreciation on Assets funded out of DF needs to be removed

16.13.4. Depreciation on intangible assets (such as interest on account of DF securitization, VRS payments to AAI, Upfront Fee etc.) either disallowed or expensed out by the Authority vide its Delhi Tariff Order 03 / 2012-13, needs to be removed

16.13.5. The depreciation derived after the above adjustments needs to be allocated into aeronautical and non-aeronautical components.

16.14. The Authority understands from discussions with DIAL that DF is reduced from the gross block in the books of DIAL in a manner that the gross block gets adjusted by such amount in the same year and hence the depreciation charged in the books of DIAL for that year also gets correspondingly adjusted. The Authority notes that since DIAL adjusts its gross block by the amount of DF, depreciation being charged in the subsequent years are also correspondingly adjusted. Thus the Authority notes that except if the Authority decides to consider a different amount of DF adjustment to be made in a year than that considered by DIAL for that year, the depreciation charged by DIAL in its books need not be adjusted for DF separately. The Authority has sought this understanding to be confirmed by DIAL. DIAL, vide its submission dated 19.09.2014 in response to the Authority's clarification, has stated as under:

"…we would like to clarify that the Auditor Certificate for Depreciation and Amortization during 1st Control Period submitted to the Authority is as per the Audited Financials and these do not include assets capitalized out of DF Funds."

16.15. As regards the adjustment on account of disallowed assets, foreign exchange fluctuation and certain elements of intangible assets, the Authority has made reference to the books of DIAL for such amounts. The Authority notes that the assets disallowed by it during the DF determination for DIAL continue to be recorded as assets in the books of DIAL and depreciation corresponding to such amount needs to be adjusted for each year. As these assets are not separately recorded in the books of DIAL, the Authority proposes to consider average rate of depreciation for DIAL for a year to be considered for application on the amount of disallowed assets and subsequent adjustment from the depreciation charged by DIAL in that year.

16.16. As regards the adjustment on account of foreign exchange fluctuation and certain elements of intangible assets, the Authority has made reference to the books of DIAL for such amounts. The Authority notes that while such amounts are identifiable from the books of DIAL, depreciation being charged for such amounts is not separately identified. Hence, the Authority proposes to consider average rate of depreciation for DIAL for a year to be considered for application on the amount of foreign exchange fluctuation and certain elements of intangible assets and subsequent adjustment from the depreciation charged by DIAL in that year.

16.17. Having adjusted the depreciation on above accounts, the ratio for allocation of this depreciation into aeronautical and non-aeronautical components needs to be applied. The Authority has noted in its Proposal No. 5 above that the allocation of assets into aeronautical and non-aeronautical is to be considered at 89.25% and 10.75% respectively. However this allocation is based on the overall assets of DIAL. As the depreciation charged in the books of DIAL is net of DF adjustment, the allocation ratio to be considered for depreciation should also be derived after netting off the DF assets. The Authority notes that DIAL has calculated such allocation ratio at 86.77%. The Authority based on its adjustment of assets has worked out a value of 85.92% (as elaborated in para 16.18 below), which it proposes to consider for allocation of depreciation into aeronautical and non-aeronautical components.

16.18. The Authority notes that this allocation ratio of 85.92% has been derived from adjustment of DF assets and other disallowed assets made in the value of 89.25%. The value of 89.25% was based on different allocations to be considered for different classes of assets. For example, the assets recorded as Runway, taxiway and apron will have an allocation of 100% into aeronautical assets whereas other classes of assets will have lower allocations. The Authority notes that application of respective allocations on respective class of assets will have the same effect as application of this average allocation on all assets taken together as this average has been derived by consideration of respective weightages and respective allocations. Accordingly the Authority has considered this average allocation ratio for all classes of assets for the purpose of allocation of depreciation into aeronautical and non-aeronautical components.

16.19. As regards depreciation on HRAB, the Authority as per decision 10.b of Delhi Tariff Order 03/2012-13 proposes to depreciate the Hypothetical RAB at the overall depreciation rate for aeronautical assets over each year of the second control period.

16.20. Further continuing with its earlier decision to true-up depreciation, the Authority proposes to true up the difference between the depreciation calculated based on actual date of commissioning/ disposal of assets and the amount of depreciation calculated considering that such asset has been commissioned/ disposed of half way through the Tariff Year by adjusting at the end of the Control Period the Future Value of such difference.

16.21. Accordingly, the Authority proposes to consider the total depreciation for second Control Period as below,

Table 45: Depreciation computed by Authority to be considered for the second Control Period

Depreciation (INR Crore)	2014-15	2015-16	2016-17	2017-18	2018-19
RAB	508.21	481.96	486.77	493.11	498.37
HRAB	28.61	26.71	26.44	26.25	25.96
Total	536.82	508.67	513.21	519.36	524.33

Proposal No. 14. Regarding depreciation for the second Control Period

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

i. To consider depreciation rates as per the useful life of assets specified in the Companies Act 2013 for the second Control Period except for assets pertaining to runway, taxiway and apron, which are to be considered at useful life of 30 years.

ii. To adjust the depreciation reflected in the books of DIAL for elements presented in para 16.13 above.

iii. To consider allocation ratio for depreciation into aeronautical and non-aeronautical components after adjusting the depreciation as in proposal ii above.

iv. To commission study to determine appropriate rates of depreciation to be adopted for the regulatory purpose in line with the provision of the Companies Act 2013.

v. To consider the depreciation for the second Control Period as presented in Table 45.

vi. To true up the difference between the projected depreciation (calculated presently considering that such asset has been

commissioned/ disposed-of half way through the Tariff Year) and actual depreciation for the Tariff year by adjusting such difference at the end of the Control Period

17. Operating Expenses

a DIAL Submission on Operating Expenses

DIAL Submission on Allocation of Operating Expenses

17.1. DIAL's submission on the Cost Allocation mechanism, followed by it for allocation of operating expenses into aeronautical and non-aeronautical categories, is as below:

"Costs Allocation

a) Staff costs

The allocation of Manpower costs has been made directly in line with the split of activities undertaken by the respective departments, which are as below:

Department	*30-Sep-13 Manpower Number*	*Ratio of AERO*	*AERO Manpower Number*
Operations	*609*	*100%*	*609*
Commercial - Non-Aero	*29*	*0%*	*0*
Commercial – Aero	*46*	*100%*	*46*
Finance & Accounts	*58*	*89.31%*	*52*
Security	*516*	*89.31%*	*461*
Quality, Service & Delivery	*14*	*89.31%*	*13*
Guest Relations	*24*	*89.31%*	*21*
Corporate Relations	*18*	*89.31%*	*16*
Corporate Communication	*8*	*89.31%*	*7*
Legal	*10*	*89.31%*	*9*
Project & Engg.	*29*	*89.31%*	*26*
IT	*19*	*89.31%*	*17*
CPD	*16*	*0.00%*	*0*
Ethics &Intelligence & GMRVF	*22*	*89.31%*	*20*
MAG	*6*	*89.31%*	*5*
BCM/CEO Office	*12*	*89.31%*	*11*
SPG/Business Integration & Planning	*9*	*89.31%*	*8*
HR & FMS	*31*	*91.48%*	*28*
Total Overall Allocation of HR Cost	*1476*	*91.48%*	*1349*

b) Non Staff costs

There has been a stepwise process of allocation of expenses amongst aero and non-aero segments. The same has been explained herewith:

1 Firstly the total expenses of each department like Operations, Maintenance, etc. have been identified.

2 Thereafter each and every expense of that department has been identified at activity level (fund centre). In this exercise the expenses have been identified *and related to various activities like airside expenses, terminal expenses, runway lighting expenses, procurement expenses etc.*

3 Thereafter the activities are allocated amongst aero and non-aero based on following principles:

a. The activities that can be directly attributable to aero assets have been classified as aero like operation and maintenance of runways and taxiways etc.

b. The activities that can be directly attributable to non-aero assets have been classified as non-aero like commercial/retail promotions etc.

c. Terminal costs have been allocated based on the area mix for the respective terminal as certified by M/s Jacobs Consultancy into aero and non-aero.

d. Remaining unallocated common expenses of support functions like finance and accounts, legal, corporate communication, corporate relation, CEO office etc. have been allocated based on the overall asset value allocation as mentioned in the foregoing section.

4 The details of allocation based on September 2013 costs as below:

COST CENTRE	CLASSIFICATION		% of AERO		ADMINISTRATIVE EXPENSES		OPERATING EXPENSES	
			TOTAL	AERO	NON AERO	TOTAL	AERO	NON AERO
AIR- FIRE STATIONS	Aero	100%	0.00	0.00	0.00	0.00	0.00	0.00
QUALITY & SERVICE DE	Aero	100%	1.15	1.15	0.00	0.00	0.00	0.00
SUP- APDE-AIRSIDE AG	Aero	100%	0.00	0.00	0.00	5.79	5.79	0.00
SUP- APDE-AIRSIDE CI	Aero	100%	0.00	0.00	0.00	2.57	2.57	0.00
SUP- APDE-ELECTRICAL	Aero	100%	0.00	0.00	0.00	0.00	0.00	0.00
SUP- CITY SIDE	Aero	100%	0.00	0.00	0.00	0.56	0.56	0.00
SUP- LANDSCAPE	Aero	100%	0.00	0.00	0.00	1.97	1.97	0.00
SUP-AIRSIDE OPERATIO	Aero	100%	0.03	0.03	0.00	2.94	2.94	0.00
SUP-APDE MT	Aero	100%	0.15	0.15	0.00	1.76	1.76	0.00
SUP-APDE-AIRSIDE AGL	Aero	100%	0.00	0.00	0.00	0.00	0.00	0.00
SUP-APDE-AIRSIDE OTH	Aero	100%	0.00	0.00	0.00	0.00	0.00	0.00
SUP-AVIATION SERVICE	Aero	100%	0.02	0.02	0.00	0.16	0.16	0.00
SUP-COM-AERO-UN-BDGT	Aero	100%	0.09	0.09	0.00	0.00	0.00	0.00
SUP-COM-LAND	Aero	100%	3.29	3.29	0.00	0.51	0.51	0.00

COST CENTRE	CLASSIFICATION		% of AERO		ADMINISTRATIVE EXPENSES		OPERATING EXPENSES	
			TOTAL	AERO	NON AERO	TOTAL	AERO	NON AERO
MANAGEM								
SUP-COMM-AERO COMMON	Aero	100%	0.00	0.00	0.00	0.00	0.00	0.00
SUP-COMM-AIRLINE MAR	Aero	100%	0.00	0.00	0.00	0.00	0.00	0.00
SUP-COO-AIRSIDE	Aero	100%	0.00	0.00	0.00	0.00	0.00	0.00
SUP-COO-AOCC	Aero	100%	0.05	0.05	0.00	0.08	0.08	0.00
SUP-COO-FIRE	Aero	100%	0.08	0.08	0.00	0.29	0.29	0.00
SUP-COO-SLOTS	Aero	100%	0.00	0.00	0.00	0.11	0.11	0.00
SUP-CUSTOMER CARE	Aero	100%	0.27	0.27	0.00	0.00	0.00	0.00
SUP-EMERGENCY PLANIN	Aero	100%	0.01	0.01	0.00	-0.01	-0.01	0.00
SUP-ENVIORNMENT SUPP	Aero	100%	0.01	0.01	0.00	0.00	0.00	0.00
SUP-HAJ AFFAIRS	Aero	100%	0.00	0.00	0.00	0.00	0.00	0.00
SUP-OPERATION - BHS	Aero	100%	0.00	0.00	0.00	0.00	0.00	0.00
SUP-S&C-SAFETY	Aero	100%	0.03	0.03	0.00	0.01	0.01	0.00
SUP-T3 REV.AUXSERVIC	Aero	100%	0.00	0.00	0.00	3.85	3.85	0.00
SUP-T3 REV.BHS	Aero	100%	0.00	0.00	0.00	0.00	0.00	0.00
T3-LANDSIDE WORKS	Aero	100%	0.00	0.00	0.00	0.36	0.36	0.00
HR – HQ	Common HR	91.38 %	0.03	0.02	0.00	0.00	0.00	0.00
HR- HUMAN RESOURCES	Common HR	91.38 %	5.84	5.34	0.50	16.49	15.07	1.42
HR-CDC/TRAINING	Common HR	91.38 %	0.00	0.00	0.00	0.00	0.00	0.00
HR-CORPORATE HR	Common HR	91.38 %	0.00	0.00	0.00	0.00	0.00	0.00
HR-DUMMY HCM PAYROLL	Common HR	91.38 %	0.00	0.00	0.00	0.00	0.00	0.00
HR-EMPLOYEE RELATION	Common HR	91.38 %	0.00	0.00	0.00	0.00	0.00	0.00
HR-INDUSTRIAL RELATI	Common HR	91.38 %	0.00	0.00	0.00	0.00	0.00	0.00
HR-RECRUITMENTS	Common HR	91.38 %	0.03	0.03	0.00	0.00	0.00	0.00
FINANCE & ACCOUNTS	Overall Common	89.31 %	3.90	3.48	0.42	53.45	47.74	5.71
ADMIN DEPARTMENT	Overall Common	89.31 %	0.00	0.00	0.00	0.00	0.00	0.00
ALLOC BUSS SUPPRT	Overall Common	89.31 %	0.00	0.00	0.00	0.00	0.00	0.00
CAG-COMMON	Overall Common	89.31 %	0.00	0.00	0.00	0.00	0.00	0.00
CENTRAL STORES DEPT	Overall	89.31	0.03	0.02	0.00	0.08	0.08	0.01

COST CENTRE	CLASSIFICATION		% of AERO		ADMINISTRATIVE EXPENSES		OPERATING EXPENSES	
	Common	%	TOTAL	AERO	NON AERO	TOTAL	AERO	NON AERO
CORP. COST	Overall Common	89.31 %	17.30	15.45	1.85	0.00	0.00	0.00
CORPORATE COMMON	Overall Common	89.31 %	0.01	0.01	0.00	0.00	0.00	0.00
CORPORATE RELATION	Overall Common	89.31 %	0.91	0.81	0.10	0.00	0.00	0.00
CORPORATE RELATIONS	Overall Common	89.31 %	0.00	0.00	0.00	0.00	0.00	0.00
CSPD – HQ	Overall Common	89.31 %	0.00	0.00	0.00	0.00	0.00	0.00
F&A-SECRETARIAL	Overall Common	89.31 %	0.06	0.06	0.01	0.00	0.00	0.00
FACILITIES & ADMINIS	Overall Common	89.31 %	3.00	2.68	0.32	1.59	1.42	0.17
FOOD & BEVERAGE	Overall Common	89.31 %	-0.12	-0.11	-0.01	0.00	0.00	0.00
GCCL-CORPORATE- DEV	Overall Common	89.31 %	0.03	0.03	0.00	0.00	0.00	0.00
GCCL-GBC-HR	Overall Common	89.31 %	0.00	0.00	0.00	0.00	0.00	0.00
GCCL-L & OD	Overall Common	89.31 %	0.00	0.00	0.00	0.00	0.00	0.00
GCM OFFICE	Overall Common	89.31 %	0.00	0.00	0.00	0.00	0.00	0.00
GMRVF-EDU-SUP TO GOV	Overall Common	89.31 %	0.00	0.00	0.00	0.00	0.00	0.00
GMRVF-UN-BUDGETED	Overall Common	89.31 %	0.05	0.04	0.01	0.00	0.00	0.00
GROUP CHAIRMAN OFFIC	Overall Common	89.31 %	0.00	0.00	0.00	0.00	0.00	0.00
MARKETING COMMUNICAT	Overall Common	89.31 %	0.00	0.00	0.00	0.00	0.00	0.00
NON AERO-RETAIL - CO	Non Aero	89.31 %	0.03	0.03	0.00	0.00	0.00	0.00
PROPERTY DEVELOPMENT	Overall Common	89.31 %	0.00	0.00	0.00	0.00	0.00	0.00
RETAIL COMMON	Non Aero	89.31 %	1.02	0.91	0.11	0.20	0.18	0.02
RETAIL DEVELOPMENT	Non Aero	89.31 %	0.00	0.00	0.00	0.00	0.00	0.00
SAP-CCC-IT & SYSTEMS	Overall Common	89.31 %	0.00	0.00	0.00	0.00	0.00	0.00
SECURITY & VIGILENCE	Overall Common	89.31 %	0.03	0.03	0.00	7.64	6.83	0.82
SFD	Overall	89.31	0.00	0.00	0.00	0.00	0.00	0.00

COST CENTRE	CLASSIFICATION		% of AERO		ADMINISTRATIVE EXPENSES		OPERATING EXPENSES	
			TOTAL	AERO	NON AERO	TOTAL	AERO	NON AERO
	Common	%						
SUP - BUSINESS CHAIR	Overall Common	89.31 %	2.35	2.10	0.25	0.00	0.00	0.00
SUP- AIRPORT SECTOR	Overall Common	89.31 %	-0.03	-0.03	0.00	0.00	0.00	0.00
SUP- NUB & PROJECT O	Overall Common	89.31 %	0.00	0.00	0.00	0.01	0.01	0.00
SUP- PROJECT FINANCE	Overall Common	89.31 %	6.82	6.09	0.73	0.00	0.00	0.00
SUP-BUS-CHAIRUN-BDGT	Overall Common	89.31 %	4.57	4.08	0.49	0.22	0.20	0.02
SUP-CEO OFFICE	Overall Common	89.31 %	0.28	0.25	0.03	0.00	0.00	0.00
SUP-CEO-GRUP-UN-BDGT	Overall Common	89.31 %	0.33	0.29	0.03	0.00	0.00	0.00
SUP-COM-PROCUREMENT	Overall Common	89.31 %	0.23	0.21	0.03	0.02	0.02	0.00
SUP-COO OFFICE	Overall Common	89.31 %	0.09	0.08	0.01	0.00	0.00	0.00
SUP-COO-GRUP-UN-BDGT	Overall Common	89.31 %	-0.01	-0.01	0.00	0.44	0.39	0.05
SUP-CORP COMMU	Overall Common	89.31 %	0.40	0.36	0.04	0.00	0.00	0.00
SUP-CORP COM-UN-BDGT	Overall Common	89.31 %	0.27	0.24	0.03	0.00	0.00	0.00
SUP-CORPORATE - IT	Overall Common	89.31 %	0.01	0.01	0.00	0.00	0.00	0.00
SUP-ETHC-INT-UN-BDGT	Overall Common	89.31 %	0.00	0.00	0.00	0.00	0.00	0.00
SUP-ETHICS&INTEL-BUD	Overall Common	89.31 %	0.15	0.13	0.02	0.00	0.00	0.00
SUP-F&A-UN-BDGT	Overall Common	89.31 %	0.01	0.01	0.00	0.00	0.00	0.00
SUP-GUE RELA-UN-BDGT	Overall Common	89.31 %	0.00	0.00	0.00	0.00	0.00	0.00
SUP-GUEST RELATIONS	Overall Common	89.31 %	0.23	0.20	0.02	0.76	0.68	0.08
SUP-IT DEPARTMENT	Overall Common	89.31 %	1.95	1.74	0.21	9.47	8.46	1.01
SUP-IT JV	Overall Common	89.31 %	0.00	0.00	0.00	27.60	24.65	2.95
SUP-IT-UN-BDGT	Overall Common	89.31 %	0.00	0.00	0.00	0.00	0.00	0.00
SUP-LEGAL	Overall Common	89.31 %	3.24	2.89	0.35	0.00	0.00	0.00
SUP-MAG	Overall	89.31	0.02	0.02	0.00	0.00	0.00	0.00

COST CENTRE	CLASSIFICATION		% of AERO			ADMINISTRATIVE EXPENSES	OPERATING EXPENSES	
	Common	%	TOTAL	AERO	NON AERO	TOTAL	AERO	NON AERO
SUP-MAG-UN-BDGT	Overall Common	89.31 %	0.04	0.04	0.00	0.00	0.00	0.00
SUP-MD-AIRPORT DEVEL	Overall Common	89.31 %	0.00	0.00	0.00	0.00	0.00	0.00
SUP-MD-SPG	Overall Common	89.31 %	0.01	0.01	0.00	0.00	0.00	0.00
SUP-SEC VIGI-UN-BDGT	Overall Common	89.31 %	0.09	0.08	0.01	0.14	0.13	0.02
SUP-TERMINAL	Overall Common	89.31 %	0.00	0.00	0.00	0.00	0.00	0.00
SUP-TERMINAL OPERATI	Overall Common	89.31 %	0.07	0.07	0.01	2.72	2.43	0.29
SUP-TERMINAL STANDAR	Overall Common	89.31 %	0.00	0.00	0.00	0.00	0.00	0.00
SUP-TQM-UN-BDGT	Overall Common	89.31 %	0.00	0.00	0.00	0.00	0.00	0.00
VARALAKSHMI FOUNDATI	Overall Common	89.31 %	0.28	0.25	0.03	0.00	0.00	0.00
SUP- APDE-T2-ELECTRI	Common T2	84.20 %	0.00	0.00	0.00	0.00	0.00	0.00
SUP- APDE-T2-MECHANI	Common T2	84.20 %	0.00	0.00	0.00	1.10	0.93	0.17
SUP-APDE-T-2-CIVIL M	Common T2	84.20 %	0.00	0.00	0.00	0.42	0.35	0.07
SUP-APDE-T-2-E&M	Common T2	84.20 %	0.00	0.00	0.00	0.24	0.20	0.04
SUP-APDE-T-2-ELECTRO	Common T2	84.20 %	0.00	0.00	0.00	0.00	0.00	0.00
SUP- APDE-T1-ELECTRI	Common T1	84.00 %	0.00	0.00	0.00	0.00	0.00	0.00
SUP- APDE-T1-MECHANI	Common T1	84.00 %	0.01	0.01	0.00	2.51	2.11	0.40
SUP-APDE-T-1-CIVIL	Common T1	84.00 %	0.04	0.03	0.01	1.25	1.05	0.20
SUP-APDE-T-1-E&M	Common T1	84.00 %	0.00	0.00	0.00	0.00	0.00	0.00
SUP-APDE-T-1-ELECTRO	Common T1	84.00 %	0.00	0.00	0.00	0.53	0.45	0.09
SUP -T3 REV.ELECTRIC	Common T3	82.32 %	0.03	0.03	0.01	6.51	5.36	1.15
SUP- T3 REV.MECHANIC	Common T3	82.32 %	0.00	0.00	0.00	3.07	2.53	0.54
SUP-APDE-T3-FINISHES	Common T3	82.32 %	0.55	0.45	0.10	0.91	0.75	0.16
SUP-T3 AIRSIDE PLANN	Common T3	82.32	0.00	0.00	0.00	0.00	0.00	0.00

COST CENTRE	CLASSIFICATION		% of AERO		ADMINISTRATIVE EXPENSES		OPERATING EXPENSES	
			TOTAL	AERO	NON AERO	TOTAL	AERO	NON AERO
		%						
SUP-T3 CIVIL MNT	Common T3	82.32%	0.00	0.00	0.00	1.08	0.89	0.19
SUP-T3 CUSTOMER REL	Common T3	82.32%	0.00	0.00	0.00	0.00	0.00	0.00
SUP-T3 FACILITIES	Common T3	82.32%	0.00	0.00	0.00	7.31	6.02	1.29
SUP-T3 OPS	Common T3	82.32%	0.10	0.08	0.02	5.85	4.81	1.03
SUP-T3 REV.AIRPORT S	Common T3	82.32%	0.00	0.00	0.00	12.00	9.88	2.12
SUP-T3 STD & POLICIE	Common T3	82.32%	0.00	0.00	0.00	0.00	0.00	0.00
CPD	Non Aero	0%	0.00	0.00	0.00	0.00	0.00	0.00
CPD UNBUDGETED	Non Aero	0%	0.18	0.00	0.18	0.00	0.00	0.00
SUP- JOINT VENTURE	Non Aero	0%	0.01	0.00	0.01	0.00	0.00	0.00
SUP-APDE-UN-BDGT	Non Aero	0%	0.38	0.00	0.38	0.04	0.00	0.04
SUP-COM RTAL-UN-BDGT	Non Aero	0%	0.02	0.00	0.02	0.18	0.00	0.18
Total			60.09	53.76	6.32	184.82	164.55	20.27
				89.48%	10.52%		89.03%	10.97%

Conclusion

Based on the foregoing, the allocation of costs is set out in the table below.

Summary of Aero cost	***%***
Administration Expenses	
Aero	*89.48%*
Non Aero	*10.52%*
Operating Expenses	
Aero	*89.03%*
Non Aero	*10.97%*

."

DIAL Submission on Rationale for escalation in Operating Expenses

17.2. DIAL has submitted that the O&M expense for FY 2012-13 and half year of FY 2013-14 is not representative of actual amount that was required to be spent. DIAL's arguments for this statement are as under:

"SSA allows for the recovery of operating and maintenance expenses pertaining to aeronautical services as part of building block for tariff determination.

In accordance with the principle of efficiency as laid down in Schedule 1 of the SSA, only efficient costs are to be considered in the tariff building block while determine the target revenue. Therefore, the target revenue itself incorporates the efficiency factor and no additional improvement factor should be imposed on DIAL.

DIAL tariff was approved w.e.f May 15th 2012. However, due to advance booking of tickets and slowdown in the traffic, the revenue accruing to DIAL was much lower than envisaged. This resulted in cash crunch in the organisation. O&M expense of FY 12-13 and half year of 2013-14 is not representative of actual amount that was required to be spent. This is because of the following reasons.

1. Paucity of Funds:

DIAL tariff was approved w.e.f May 15th 2012. However, due to advance booking of tickets and slowdown in the traffic, the revenue accruing to DIAL was much lower than envisaged. This resulted in cash crunch in the organization. This also resulted in postponement of critical operations and maintenance activities. However once the cash position improves, these activities will be undertaken. O&M expense of FY 12-13 and half year of 2013-14 is not representative of actual amount that was required to be spent.

2. The existing costs of were based on contracts which are 4-5 years old and was part of procurement of equipment and as such quoted very low:

As a part of the cape for Terminal 3 / other contracts and its associated works various, Electro – Mechanical and Airport Systems were procured and commissioned. At that time a 5 year AMC cost was quoted along with the main system package purchase cost. Since, main equipment supply and its subsequent 5 year AMC was bundled together, most of the vendors have kept a low price on the provision of AMC of such equipment / systems so as to be successful to win capital project. Such practice of keeping low value of AMC is very common and vendors often adopt such practices of having lower value of AMC to make their consolidated project value attractive and comparable. Equipment vendor are often unable to reduce system price beyond one point *due to various bought out material / equipment involved in packaging the bid. The area where they can play is mainly AMC cost. We expect considerable rise in the AMC charges after the expiry of the contract in the year 2014-15 and such increase in cost could be of the order of 25% to 30%.*

3. The Spare parts costs are going to rise enormously. Earlier it was part of the annual package:

The earlier contracts were under manufacturer's warranty. Now the operation and maintenance is going to be without this warranty. This will entail additional cost of spare parts. This will become a major opex cost item, as the facility gets older.

4. Airside Infrastructure getting too old:

The infrastructure on airside was constructed in 1980's and 1990's and has outlived their life. This entails costs of maintenance that is very high compared to a new infrastructure. As such a regular time bound operation, maintenance and its administration mean a continuously increasing cost year on year.

5. Old refurbished Terminals:

Some of terminals like T1C, T1A and T2 etc. are very old terminals that were refurbished. However these refurbishments have shorter life span and as such need very high level of repair and maintenance to keep them in operation.

Safety and Security:

The old airside and terminal infrastructure becomes risky, as it gets older. The airport needs the highest level of safety and security and nothing could be left to chance, as the resultant impact of such lapses is huge. As such to enable the safety and security the opex will be on continuous increase.

7. The new infrastructure and movable assets procured by DIAL also will be 11-12 year old by end of control period:

The infrastructure procured by DIAL post privatization also is now getting older. Some of equipment procured are 6-7 years old and need cape. By end of control period these equipment will be 12 years old and since it is not possible to *replace all the equipment. So many of equipment will need to be maintained and as such the maintenance cost will witness a quantum jump.*

It is requested that the uncontrollable costs should be allowed to be trued up based on the actual spend. These could be in form of security costs, statutory operating costs (including but not limited to DGCA, Customs, Immigration, etc.), property taxes, safety and environment cost, utilities cost variation due to change in rates (Electricity/Water/Fuel), cost variance due to increase in service levels etc. This is in line with the tariff determination finalized in first control period. Further, we request that any change in direct and indirect tax rates maybe allowed as pass-through."

17.3. DIAL submission with respect to forecast of operating expenses is as below:

"In this section of the regulatory filing, we present forecasts of total expenditure, with explanations to support these. Total expenditure is broadly classified as follows:

1. Manpower/Personnel expenditure

2. Operating expenditure

3. Administration Expenditure

4. Utilities

Basis of Forecast:

We have forecasted the expenditure based on the half yearly numbers of September 2013. These numbers have been extrapolated for the full year of 2013-14 to arrive at the base number on which the forecast for the next control period is done.

The necessary growth drivers have been applied on these base numbers and the same are discussed in subsequent part of filing.

DIAL Submission on Manpower Expenses

17.4. DIAL submission with respect to sub-component manpower expenses is as below:

"Manpower is a very critical component for successful operations of service-oriented industry like airport. In DIAL, The human resource department

manages the employee relations, retention and new recruitments. DIAL considers its manpower as its biggest asset.

Total Personnel expenditure covered under this section includes salaries, wages & bonus, contribution to PF, Gratuity Expense, post-employment benefits, employer contribution towards labour welfare fund & Employee State Insurance.

Basis of Forecast:

1 We have taken the actual expenditure for the 6 months ending 30th September 2013 as the base number for the forecast purpose. This we have extrapolated to full year to arrive at 2013-14 manpower cost numbers.

2 We have estimated a 5% p.a. real increase in salaries and wages cost. This real increase has been considered keeping in mind the competitive environment DIAL is subject to and also addressing the managing of attrition levels being currently experienced. The airport industry in India is getting transformed and is maturing leading to high competition for the skilled talent, which is quite scarce.

3 Due to increase level of activity due to increased traffic, we have assumed that some additional augmentation of manpower will be necessitated. This is necessary to enable maintenance of the same quality levels. We have assumed that there will be an increase equivalent to 50% of the forecasted traffic growth (passenger growth).

4 The inflationary increase in these numbers has not been incorporated on the premise that CPI (inflation) will be a top up allowed over and above X factor.

The historical base for projections of Control period II has been taken from the following data:

Year	*Manpower Employed*	*Manpower cost (in Crs)*
FY2013 (Actual)	*1458*	*123.72*
FY2014 (H1 ended 30th Sep'13)	*1476*	*64.46*
Extrapolated manpower Cost for 2013-14		*128.92*

17.5. DIAL has also made the following submission with respect to sub-component manpower expenses:

"Recently we have been mandated to employ following additional manpower:

1 BCAS required the screening to be done on a 100% basis rather than on random basis as was the practice earlier. This requires substantially high manpower.

2 The judgement of Supreme Court to regularize the trolley workers.

Based on the above, we contemplate following additional manpower and manpower cost:

Department	*Purpose*	*Add. Manpower to be employed*	*Average salary per employee p.a.*	*Reasons for deployment*	*Additional Cost*
Operations	*Baggage Screening*	*92*	*Rs. 3 lakhs*	*BCAS requirement of 100% Screening at stage 1.*	*Rs. 2.8 Crs.*
Operations	*Trolley operators*	*73*	*Rs. 2.3 lakhs*	*Court verdict*	*Rs. 1.6 Crs.*

Hence we have recalculated manpower cost of 2013-14 to be utilised as the base for the forecasted manpower cost for the next control period as under:

Year	*Manpower Numbers*	*Manpower cost (in Crs)*
FY2013 (Actual)	*1458*	*123.72*
FY2014 (H1 ended 30th Sep'13)		*64.46*
Extrapolated manpower Cost for 2013-14		*128.92*
Additional manpower Cost	*165*	*4.40*
The Total manpower cost for future projections	*1646*	*133.32*

An overview of the forecast for the period starting from 2014-15 to 2018-19 is as under:

INR Crore	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019 (IN CRS.)*
Personnel expenditure/Manpower Cost	*143.21*	*153.82*	*165.23*	*177.48*	*190.64*

"

DIAL Submission on Operating Expenses

17.6. DIAL submission with respect to sub-component Other Expenses is as below:

"Operation and maintenance have the following main components:

1. Housekeeping Cost

A. Components of Housekeeping cost:

The entire operation at the airport is carried out by Operations department. This department is one of the most crucial functions ensuring that airport day to day functions in a safe, efficient and smooth environment. The department has set out the following objectives w.r.t. Airport Operation for both Airside and Terminal:

- *Keep safety and security as the first priority*
- *Operate as an efficient airport dedicated to exceptional customer service*
- *Become a cost and price competitive airport*
- *Maintain strong relationships with "neighbors", communities, and industries*

Airport Operations is divided into various sub-functions:

a. Airside Operation looks after the various activities on the airside. It includes activities like Follow-me vehicles to guide aircraft, Bird Chasing, Wildlife monitoring etc. The department has outsourced activities like vehicle hire, Bird Chasing, Wildlife, and other operational services in the airside. These services are all manpower intensive and have been contracted for one year and come up for renegotiation every year. So these contracts costs are likely to increase in line with labour cost. Airside planning team manages the air survey, airside simulation, aerodrome license and safe airside operation.

b. Airport Operation Control Centre (AOCC): This is the nerve centre of the airport operation as it provides essential support to terminal as well as airside and keeps an eye on various activities taking place anywhere is the airport. This requires highly trained manpower and regular training of these personnel are carried out. Slot department is part of AOCC that manages slot of airlines with the help of sophisticated software. Annual license fee and maintenance of software is done on contractual basis.

c. Airfield Rescue Fire Fighting (ARFF) is the main fire-fighting unit at the airport. They have been equipped with all modern equipment and provide safety to the entire airport. Their costs include the training, uniform and various and the material required for fire fighting.

d. Aviation Services: Monitoring the activities of Ground Handling Agents, Flight Caterers and Aviation Fuel agencies at the Airside as per the SLAs mentioned in the concessionaire agreement. BHS operation is there to take care of housekeeping activities of baggage handling area and storage of early baggage arrival.

e. Safety: Mainly covers safety measures.

f. Environment: The activities include:

- *Fulfil & Monitor all the Environmental Legal Requirements and Compliance mentioned in Environmental Clearance of Ministry of Environment and Forest (MoEF), Consent to Operate of Delhi Pollution Control Committee (DPCC) and Environmental Regulations and Requirements of Directorate General of Civil Aviation (DGCA) and Ministry of Civil Aviation (MoCA) and related compliance Fee to Pollution Control Board.*
- *Environment Management and Monitoring of Air Quality, Water, Ambient and Aircraft Noise monitoring and management, DG sets monitoring, Greenhouse Gas Quantification and Management, Wet Scrubber operation and management, Noise and Emission Modelling, Energy Reductions Initiatives, ISO 14001, 14064 and Airport Carbon Accreditation System Implementation and Audits.*
- *Water and Waste Management, Sewage Treatment Plant (STP) compliance monitoring, Rainwater Harvesting Structure (RWHS) implementation and monitoring, Solid Waste Management System, Hazardous Waste Management System, E waste Management System implementation and monitoring and its Infrastructures developments and Green Building Criteria Fulfilments.*

- *Airfield Environment Management Committee (AEMC) Management and Monitoring and Conducting training and workshops to enhance environment work culture at airport to achieve sustainability of airport operation by balancing all Environmental, Stakeholders and Community requirements w.r.t Pollution, Recourse use and Compliance.*

g. ***Terminal Operations:*** *Mainly covers all housekeeping contracts which are there for upkeep of terminal standard (OMDA/ASQ)and other services like wheelchair, trolleys, maintenance of play area, medical facilities, Inter Terminal bus service and other passenger facilitations.*

h. ***COO Office:*** *Responsible for overall Operations. Mainly covers special projects, process improvement like CoDM, Capacity enhancement, Technical consultancy etc.*

B. Forecast methodology of housekeeping costs:

We have divided the total expenditure in three parts:

a. Contracted Costs – Long-term contracts.

b. Recurring annual costs.

c. Other Costs

a. Contracted Costs – Long-term contracts.

Various contracts of operations were signed long time back. There is no escalation assumed in these contracted amounts till the time the contract is in place. However when these contracts are coming for renewal it is assumed that the renewal will be at a higher cost compared to the current contracted costs because of the following reasons:

a. The facility has become old and requires higher cost.

b. Inflationary increase of last few years will require reset of prices. The economic environment has undergone a huge change.

c. Many items were under warranty and defect liability period and now their operations and maintenance will be full responsibility of DIAL.

d. One time escalation @20% is considered when the existing contract is renewed.

INR Crores	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019 (IN CRS.)*
Long term Contracts House keeping	*34.72*	*37.29*	*40.03*	*43.02*	*46.23*

b. Recurring annual costs.

Other contracts are normal contracts that are renewed for short term normally on an annual basis or on, as may be required basis. It is assumed that there will be following escalations in these costs:

1. A real increase of 5% is considered. This is required to take care of additional expenditure required to be incurred for the machinery getting older. As in case of old machinery and buildings with passage of time the amount of expenditure for maintenance and upkeep keeps increasing.

In case of the manpower component of these costs a real increase is required which is over and above the inflationary increase. There is also an impact because of the mandatory increase in minimum wages as well.

2. An additional increase for additional upkeep with additional passenger also is considered. It is assumed that the costs are semi variable in nature vis-a-vis traffic. The additional traffic means that the operating cost will need to be increased. This may be in form of more number of times an area is cleaned, the more repair and maintenance required due to extra wear and tear due to higher usage etc.

We have assumed an extra cost equivalent to half of the expected traffic growth (Passenger Traffic Growth).

c. Other Costs

Apart from the above there were several projects which have been held up due to financial constraints which if not undertaken can impact the safety and security of airport and also these are essential and mandated costs. These costs will need to be incurred on a recurring basis.

i. Delhi Pollution Control Board Committee: Rs. 20 lakhs/year.

This is an annual fee, statutorily required and is akin to consent to operate (environment)

ii. Inter – Terminal Bus Service (Between T1-T3): Rs. 1.5 Crores /year.

The number of transfer passengers connecting between Terminal 3 and Terminal 1 has substantially increased. Indigo and Spice Jet are now operating International flights, which operate from Terminal 3.

In order to keep to the OMDA standards for connecting passengers and to offer the transfer passengers' convenient transportation between the two Terminals it is proposed to operate three air-conditioned, dedicated buses on 24x7 basis.

The schedule for one loop per bus (T3 - T1D – T1C – T3) takes one hour including the stops for de-barding and boarding. The transfer connection is offered free to the transfer passengers.

Each loop is 17kms, daily trips 67 total km. per day 1139 x 365 = 415735 km. per year.

iii. Deep Cleaning – by deep-cleaning machine: Rs. 24 lakhs/year;

Chemicals: Rs. 25 lakhs/year.

Deep cleaning of the aircraft bays needs to be done on a permanent basis as there are many oil leakages from equipment and aircraft. This is required to avoid the oil to penetrate the concrete causing permanent damage to the surface. This facility is required now as the problem is reaching dangerous level due to the facility getting older. This facility was not there and as such these costs were not part of base cost on which extrapolation being done.

iv. Bird Hazard mitigation, wildlife management: Rs. 1 Crore/year.

We need to ensure that the airport is a safe airport, we need to intensify the bird management because of introduction of 3 runway operation and increase in bird activity. Also important is the fact that the damage due to bird hit tantamount to a huge cost to airlines and as such utmost precautions need to be taken.

v. NOC Fire Certificate: Rs. 25 Lakhs/year

Fire NOC for all the buildings within IGI Airport

Following are the YOY additional expenditure:

INR in Crores	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019 (IN CRS.)*
Additional Expenditure as given above	*3.70*	*3.97*	*4.26*	*4.58*	*4.92*

The historical base for projections of Control period II has been taken from the following data:

Year	*Cost (In Crores)*
FY2013 (Actual)	*35.21*
FY2014 (H1 ended 30th Sep'13)	*18.74*
FY2014 (extrapolated)	*37.48*
Other Costs as enumerated above	*3.44*
Base Number on which future forecast done	*40.92*

Conclusion:

Based on the aforesaid assumptions, forecast for the period starting from 2014-15 to 2018-19 is as under:

INR in Crores	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Long term Contracts	*34.72*	*37.29*	*40.03*	*43.02*	*46.23*
Routine Contracts/ad-hoc	*6.50*	*6.98*	*7.50*	*8.06*	*8.65*
Additional Expenditure	*3.70*	*3.97*	*4.26*	*4.58*	*4.92*
Total	*44.92*	*48.24*	*51.79*	*55.65*	*59.80*

"

17.7. DIAL submission with respect to sub-component maintenance expenses is as below:

"The maintenance department looks after the entire repair and maintenance of the airport site primarily covering:

- *Airside:*

All Airside (including 3 operating runways, taxiways, aprons, parking bays, aerobridges, hangars, drains, general airfield upkeep, power sub-stations, water & waste management and all other allied airside infrastructure for all civil, electrical and mechanicals works)

- *Terminal:*

Terminal Buildings includes all existing terminals for all civil, electrical and mechanicals works and

- *City Side*

Upkeep and maintenance of access roads, landscaping and traffic management

Under the Maintenance department, there are various sub-functions that relate to the maintenance of earmarked activities. These sub-functions (cost - centre) contribute to the overall maintenance costs. The activities undertaken are unique which require specialized engineering and technical skills. The main functions are as under:

1. Airside

a. Air Ground Lighting (AGL) 09/27 and 10/28 –

This department predominantly looks after the maintenance of existing runway namely R/w 09/27 and R/w 10/28 and the associated set of taxiways. The primary cost of this function, comprises of regular maintenance related to the Airfield Ground Lighting (AGL) including replacement of approach lights, power backup etc. Runway and taxiway are under the control of ATC Tower and regular checks are initiated so as to ensure a smooth and safe airfield-operating environment. Apart from above, necessary inventory levels and consumable are also maintained internally as these are required for conducting speedy and efficient maintenance.

b. Air Ground Lighting (AGL) 11/29:

This department looks after the repair and maintenance of new R/w 11/29 and its associated taxiways. The budget of this department comprises of AGL Comprehensive Maintenance Contract (CMC), sub-station maintenance contract and Power backup (UPS) maintenance contract. Apart from above there is provision for housekeeping, replacement of UPS batteries and provisioning of spares and consumables.

c. Airport Systems:

Terminal 3 and all new airfield infrastructure development have been procured with the best available technologies and equipment's for augmenting the airport infrastructure to a world class airport. All these sophisticated equipment like Baggage Handling System (BHS) including X-ray/on-line screening machines, Passenger Boarding System, Visual Docking Guidance System (VDGS), travellator and Escalators (VHT), Terminal and Airfield Resource Management System, etc. are specialized and domain specific resources sourced from respective OEM vendors. Since, the spares and upkeep of such equipment requires skilled know how, we have Comprehensive Maintenance Contracts (CMC) for all such airport systems.

d. Airside Civil:

This department looks after regular maintenance and usually services the request of the Operation Department for the following works:

- *Runway marking Painting;*
- *Pavement repairs;*
- *Joint filling;*
- *Fencing;*
- *Gate Repairs;*
- *Drain cleaning;*
- *Bitumen repair;*
- *Building Painting;*
- *Fence painting etc.*
- *Airside Building for sub stations*

Most of these works are carried out based on requirement and past experience of the domain department. The estimation of these expenses is based on the historical spends achieved during the preceding year.

e. Electrical 10/28:

This department looks after the repair and maintenance of the electrical works of substation and associated facilities of R/w 10/28.

2. Terminals

a. Terminal 1

- *T1 Civil*
- *T1 Mechanical*
- *T1 Electrical*

This department takes care of all the repair and maintenance of the T1 terminal. The costs herein include the civil costs that include regular civil work which include waterproofing, sewage, road repair. Major costs herein comprises of annual repair and maintenance contract that is a rate contract.

This department also looks after the electrical and mechanical repair, maintenance related to T1 plant and machinery, baggage-handling, consumables etc. The cost herein comprises of AMC related to electrical, manpower, BHS, city side maintenance, etc.

b. Terminal 2

- *T2 Civil*
- *T2 Mechanical*
- *T2 Electrical*

This department takes care of all the repair and maintenance of the T2 terminal. The costs herein include the civil costs that include regular civil work which include waterproofing, sewage, road repair. Major cost herein comprises of annual repair and maintenance contract that is a rate contract.

This department also looks after the electrical and mechanical repair, maintenance related to T2 plant and machinery, baggage-handling, consumables etc. The cost herein comprises of AMC related to electrical, manpower, BHS, city side maintenance, etc.

c. Terminal 3

- *T3 Civil*
- *T3 Electrical.*
- *T3 Mechanical*

- *Finishes*

This department takes care of the entire repair and maintenance of T3 building that comprises of the AMC of the baggage handling equipment, electrical parts, consumables, street lights and Power Backup system. The mechanical department pre dominantly looks after the air conditioning, Public health and Hygiene, Fire detection and protection system, etc.

i. ***T3 Auxiliary** : This department accounts for the electricity and water of T3*

    b. *STP/WTP*

    c. *ASB Building*

    d. *Airport Connection Building (ACB)*

ii. ***Procurement:** This department is the centralised department for procurement of all the spare and consumables related to repair and maintenance.*

iii. ***Engineering:** This department takes care of all engineering related inputs related to repair and maintenance.*

iv. ***Central store:** This department maintains the inventory of all types of spares required for various equipment and operation related material.*

v. ***Landscape:** It includes the maintenance cost of city side and indoor landscaping.*

3. Landside: -

It includes the maintenance cost of city side road, signage, street lighting, drainage system etc.

***Motor Transport (MT):** Transport department looks after the repair and maintenance of airport vehicles used on the airside like:*

- *Fire tenders and other supporting fighting vehicles;*
- *Follow-me vehicles*
- *Runway rubber removal vehicles;*
- *Runway marking machines;*

- *Runway Friction Tester*
- *Heavy earth moving machines; maintenance and general consumables.*

Forecast methodology:

We have divided the total expenditure in two parts:

1 Contracted Costs – Long Term Contracts

2 Recurring annual costs /Contracts

3 Other Costs not part of opex spent earlier.

1. Contracted Costs – Long Term Contracts

Various contracts for maintenance were signed long time back. These contracts were part of asset capitalization contracts. The vendors bidding for the projects were compulsorily asked to bid for maintenance as well. Since the vendors were desirous of bagging the asset contract they may have offered very low maintenance costs. Now since they have no such compulsion, it is expected that they will bid significantly higher; which will be the true economic cost of these contracts.

The regular maintenance of specialised airport systems was outsourced to either the OEM or the third parties through competitive bidding in the year 2009/2010. The AMC were negotiated as part of the equipment procurement that included pre-agreed schedule of maintenance, DLP and service levels. All the contracts are for a period of 5 years that would lapse in the middle of the control period (End of FY 14-15).

As a part of the Capex for Terminal 3 and its associated works various Electro – Mechanical and Airport Systems were procured and commissioned. 5 year AMC cost was quoted along with the main system package purchase cost. Since, main equipment supply and its subsequent 5 year AMC was bundled together, most of the vendors have kept a low price on the provision of AMC of such equipment / systems. Such practice of keeping low value of AMC while major equipment packages are negotiated is very common in India. Vendors in India often adopt such practices of having lower value of AMC to make their *consolidated project value attractive and comparable. Equipment vendor are often unable to reduce system price beyond one point due to various bought out material / equipment involved in packaging the bid. The area where they can play is mainly AMC cost.*

We expect considerable rise in the AMC charges after the expiry of the contract in the year 2014-15 and such increase in cost could be as high as 25% to 30%. There is no escalation assumed in these contracted amounts till the time the existing contract is in place. However when these contracts are coming for renewal it is assumed that the renewal will be at a higher cost compared to the current contracted costs because of the following reasons:

1. *The facility has become old and requires higher cost.*
2. *Inflationary increase of last few years will require reset of prices. The economic environment has undergone a change*
3. *Many items were under warranty and defect liability period and now their operations and maintenance will be full responsibility of DIAL.*
4. *One time escalation @20% is considered when the existing contract is renewed.*
5. *In addition to the contracted works, the maintenance department also carries out need based maintenance through running maintenance contracts (RMC) which are normally of short duration of approximately a year.*
6. *Detail of such contracts is as under:*

INR in Crores	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Long term contracts Maintenance	*70.44*	*79.43*	*88.67*	*96.18*	*103.33*

2. Recurring annual Contracts/Costs

Other contracts are normal contracts that are renewed on an annual basis or on, as may be required basis. It is assumed that there will be following escalations in these costs:

1. A real increase of 5% is considered.

This is required to take care of additional expenditure required to be incurred for the machinery getting older. As in case of old machinery and buildings with passage of time the amount of expenditure for maintenance and upkeep keeps increasing.

Further in case of the manpower component of these costs a real increase is required which is over and above the inflationary increase.

There is an impact because of the mandatory increase in minimum wages as well.

2. An additional increase for additional upkeep with additional passenger also is considered. It is assumed that the costs are semi variable in nature vis-a-vis traffic. The additional traffic means that the operating cost will need to be increased. This may be in form of more number of times an area is cleaned, the more repair and maintenance required due to extra wear and tear due to higher usage etc.

We have assumed an extra cost equivalent to half of the expected traffic growth (Passenger Traffic Growth).

3. Other Costs.

Apart from the costs forecasted above, additional cost also needs to be incurred at airport. The details of such expenditure are as under:

1. Repair of Air Side taxiway Pavement works, earthworks along RWA and TWA:

The Airside pavement north of T3 terminal is taken over from AAI in 2006.

This comprises two runways, two parallel taxiways, more than 30 taxiways and apron stand area of close to 700000 sq.mts. Most of the surface is developed by AAI and have served a life varying from 10 to 30 years.

During the last 6 years, the most damaged taxiways and Runway 10-28 were taken for repair and DIAL is planning to repair further taxiways in the next 5 years. However, in view of not disturbing the operation, it's not possible to take the entire pavement repair together and for this reason, some temporary *repair works are to be done for the surface with minimum cost as projected year on year.*

2. Repair of Landside road works including forecourt repairs at T1C:

The road leading to terminal 1 is old and needs an overlay to sustain the increasing passenger traffic.

It is proposed to spend for repair on this road.

3. Landscaping – Earth works:

There is a need for the area around T3 to be further developed with landscaping to maintain the aesthetics of the airport. Hence large earthwork is required in the first control year with small developments for next two years. Further maintenance expense will be met through AMC contracts for landscaping

4. Finishing works – T1C – replacement/revamp of ceiling, wall, toilets, signage:

The toilet fixtures, signage, ceiling of terminal 1 C (domestic arrival terminal), requires modification and up gradation. Modification will be carried out in the first year followed by need-based modification in the subsequent years. This is necessitated, as the facility was a revamped facility.

5. Finishing works – T1D – replacement/revamp of ceiling, toilets, signage:

The toilet fixtures, signage, ceiling of terminal 1 (Domestic departure terminal), requires modification and up gradation based on passenger and other stakeholder feedback. Major repair will be carried out in the first year followed by need-based repair in the subsequent years

6. Finishing works – T3 – replacement/revamp of ceiling, wall, and toilets:

Terminal 3 with large area and many toilet blocks needs continuous improvement works and it is proposed to revamp the ceiling and toilet blocks in some areas on continuous basis as improvement.

7. Special repair work of BHS at T1C:

The arrival baggage handling system (8 belts) at Terminal 1 C was installed during AAI period and outlived its life. It is proposed to repair the baggage handling system in phases for better passenger service

8. Repair of old Electrical system including cabling at T1C/D and T2 airside:

The Electrical system in T1 and airside area is old and needs continuous maintenance. For this purpose, the Electrical cable and panel boards with old type switches needs to be repaired. It is proposed to take up this up gradation work in phases in the next 5 years

9. Repair of Drainage system at 10/28 side and Landside:

The drainage system in the airside parallel to Runway 10-28 and 09-27 is old and in order to have proper rainwater drainage and rain water harvesting, the existing drains needs to be strengthened. It is proposed to take up the work in phases with major repair work in the first year.

10. Provision of Fire protection system in the old buildings and Offices:

The old buildings and offices at IGI airport is not having fire protection system. It is proposed to improve the fire detection and protection capability, it is proposed to do a thorough study of all the buildings in the operational area and work out all the requirements to have safe and protected buildings. The work is proposed to be taken in phases.

11. CMS, licensing, repair improvement for AGL, Electrical HVAC and STP systems:

All the systems at IGI airport like AGL, HVAC and STP are provided with control and monitoring systems. These systems are proprietary software and needs license renewal at periodic intervals. Further, with changes for operational improvement, process modification, new works, these software needs to be upgraded whenever a repair takes place.

12. Replacement CCR, AGL cable etc. for Runway 09 and domestic bays:

Runway 09-27 is the oldest runway at IGI airport. Repair of AGL system by changing the entire cable, CCR and power supply system is essential to ensure safe airfield ground lighting system availability. Replacement is proposed in phases.

Apart from the above there were several projects which have been held up due to financial constraints which if not undertaken can impact the safety and *security of airport. These kinds of costs will need to be incurred on a recurring basis. The details of these additional expenditure is as under:*

	(INR Crores)	*FY-2015*	*FY-2016*	*FY-2017*	*FY-2018*	*FY-2019*
1	*Repair of Air Side taxiway Pavement works, earthworks along RWA and TWA*	*10*	*10*	*10*	*10*	*10*
2	*Repair of Landside road works including forecourt repairs at T1C*	*1*	*1*	*2*	*2*	*2*
3	*Landscaping – Earth works*	*1*	*1*			
4	*Finishing works – T1C – repair of ceiling, wall, Toilets, signage,*	*1*	*1*	*1*	*1*	*1*
5	*Finishing works – T1D repair of ceiling, Toilets, signage,*	*1*	*1*	*1*	*1*	*1*
6	*Finishing works – T3 – repair of ceiling, wall, Toilets,*	*3*	*3*	*2*	*2*	*2*
7	*Special repair work of BHS at T1C*	*1*	*1*	*1*	*1*	*1*
8	*Replacement of old Electrical system including cabling at T1C/D and T2, airside*	*3*	*3*	*3*	*3*	*3*
9	*Repair of Drainage system at 10/28 side and Landside*	*2*	*2*	*2*	*2*	*2*
10	*Provision of Fire protection system in the old buildings and Offices*	*2*	*2*	*1*	*1*	*1*
11	*CMS licensing ,modification for AGL, Electrical HVAC and STP systems*	*2*	*2*	*2*	*2*	*2*
12	*Repair CCR, AGL cable etc for Runway 09 and domestic bays*	*2*	*2*	*2*	*2*	*2*
	Total Additional cost	*29*	*29*	*27*	*27*	*27*

Historical cost and the forecasted cost for 2013-14 are as under:

In Crores	*maintenance*
Maintenance Cost FY2013	*96.95*
Half Year FY2014 (H1)	*49.22*
Extrapolated for full Year	*98.44*
Base on which growth forecasted	*98.44*

The breakup of the long term contracts in above is as under:

In Crores	*maintenance*
2013-14 Long Term Contracts	*65.70*
Other expenditure	*32.74*
Total	*98.44*

Conclusion:

Based on the aforesaid assumptions the forecast for the period starting from 2014-15 to 2018-19 is as under:

INR in Crores	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019 (IN CRS.)*
Long term contracts	*70.44*	*79.43*	*88.67*	*96.18*	*103.33*
Routine Contracts/ad-hoc	*35.17*	*37.78*	*40.58*	*43.59*	*46.82*
Additional expense	*29.00*	*29.00*	*27.00*	*27.00*	*27.00*
Total	*134.61*	*146.21*	*156.25*	*166.77*	*177.15*

17.8. DIAL submission on maintenance cost of security equipment is as below:

"Following is the maintenance expenditure of security equipment's is forecasted for next 5 years. It is assumed that these expenses will not be allowed as part of determination of PSF security charges.

SNo. INR Crs	*Name of Item*	*2014 - 15*	*2015 - 16*	*2016 - 17*	*2017 - 18*	*2018 – 19 .*	*BCAS Circular*
Pre embarkation security check equipment (PESC)							*INR Rs. Crores*
1	*Maintenance of 3 Nos. of 100100T X-BIS for random checking at Entry points of T3 & T1 Departure Building*	*0.18*	*0.20*	*0.22*	*0.24*	*0.27*	*AVSEC Order No.21/2011*
2	*Cabin Baggage X-Ray machines(6046i) Expansion : 7 Nos. 4 No's for SHA (Dom and Int) 3 No's for Staff Entry (Arrival Side),Int'l to Int'l Transfer & Domestic Airside gate*	*0.21*	*0.23*	*0.25*	*0.28*	*0.31*	*AVSEC Order No.21/2011*
3	*Maintenance of 03 ETD for random checking at entry points of T3 and T1 departure building*	*0.23*	*0.25*	*0.27*	*0.30*	*0.33*	*AVSEC Order No.21/2011 and BCAS Circular 25 / 2004*
4	*Ion Scan 500DT ETD 3 No's for Domestic and International SHA at T-3 (Future Expansion)-Maintenance*			*0.27*	*0.30*	*0.33*	*AVSEC Order No.21/2011 and BCAS Circular 25 / 2004*
5	*Ion Scan 500DT ETD 1 No's for Haj operations and VIP Movements at T-1-Maintenance*	*0.08*	*0.08*	*0.09*	*0.10*	*0.11*	*AVSEC Order No.21/2011 and BCAS Circular 25 / 2004*
6A	*Maintenance of NIJ 0602 Standard DFMD: Total 23 Nos. 6 No's for Domestic and International SHA expansion at T-3 . 17 No's for different locations at T-3 immediately.-*	*0.06*	*0.06*	*0.07*	*0.07*	*0.08*	*BCAS Circular 25 / 2004*

6B	Maintenance of NIJ 0602 Standard DFMD: Total 16 Nos. 6 No's for SHA at T-1, 10 No's for different locations at T-1	0.04	0.04	0.05	0.05	0.06	BCAS Circular 25 / 2004
7	Maintenance of HHMD: Total 162 Nos. 12 No's for Domestic and International SHA-Future Expansion. 150 No's for different locations of T-3, immediate.	0.24	0.27	0.29	0.32	0.35	BCAS Circular 25 / 2004
8	Maintenance of HHMD:65 Nos. 12 No's for SHA . 53 No's for different locations of T-1	0.10	0.11	0.12	0.13	0.14	BCAS Circular 25 / 2004
9	GE CTX machines	0.43	0.48	0.52	0.57	0.63	
10	GE Itemaiser	0.17	0.19	0.21	0.23	0.25	
INR Crs	Name of the Item	2014 - 15	2015 - 16	2016 - 17	2017 - 18	2018 – 19 .	BCAS Circular
PIDS System							INR Rs. Crores
1	CMC to Magal for PIDs operations	2.50	2.75	3.02	3.31	3.64	BCAS Circular 2/2007
2	Power maintenance	0.00	0.00	0.00	0.00	0.01	BCAS Circular 2/2007
3	CMC to PIDS UPS system	0.02	0.03	0.03	0.03	0.03	BCAS Circular 2/2007
4	CMC to AC system for PIDs power cabinet	0.00	0.00	0.00	0.00	0.00	BCAS Circular 2/2007
INR Crs.	Name of the Item	2014 - 15	2015 - 16	2016 - 17	2017 - 18	2018 – 19	BCAS Circular
CCTV System							INR Rs. Crores
1	CCTV-T1A & 1C	0.15	0.16	0.18	0.20	0.22	BCAS Circular 2/2007
2	CCTV-T1D	0.70	0.77	0.84	0.93	1.02	BCAS Circular 2/2007
3	CCTV-T2/AOCC+Cargo	0.60	0.66	0.72	0.79	0.87	BCAS Circular 2/2007
4	CCTV-T3	4.00	4.39	4.83	5.30	5.82	BCAS Circular 2/2007
5	MLCP +3rd lane CCTV+network	0.60	0.66	0.72	0.79	0.87	BCAS Circular 2/2007
6	NUB CCTV CMC contract	0.05	0.05	0.06	0.07	0.07	
7	Installation of surveillance CCTV system at Isolated bays			0.30	0.33	0.36	
8	CCTV system for Approach roads as per Delhi Police requirement			0.18	0.20	0.22	
9	Additional 542 Cameras in Terminal - 3		0.16	0.18	0.19	0.21	
10	Additional 50 Cameras in Terminal - 1			0.90	0.99	1.09	
11	Additional 20 Cameras from Gate No. 15 to BPCL & HPCL Fuel Tank for strengthening of Security at IGI Airport			0.18	0.20	0.22	
12	CCTV coverage of vital installations (WTP, STP, MRSS,		0.15	0.16	0.18	0.20	

	SSB. MSB etc.) for strengthening of Security at IGI Airport						

INR Crs.	***Name of the Item***	***2014 - 15***	***2015 - 16***	***2016 - 17***	***2017 - 18***	***2018 – 19***	***BCAS Circular***
ACS System							
1	*ACS-T3*	*3.00*	*3.29*	*3.62*	*3.97*	*4.37*	*BCAS Circular 2/2007*
2	*ACS-NUB*	*0.25*	*0.27*	*0.30*	*0.33*	*0.36*	*BCAS Circular 2/2007*
3	*Replacement of damaged readers and other parts 130 No of access control procurement for damage cases*		*0.23*	*0.26*	*0.28*	*0.31*	*BCAS Circular 2/2007*
4	*Phase wise replacements of ACS Readers and accessories*		*0.10*	*0.11*	*0.12*	*0.13*	*BCAS Circular 2/2007*
5	*New BCAS Requirement(Extra ACS installation project as per BCAS guideline) including turnstile and ACS reader*		*0.30*	*0.33*	*0.36*	*0.40*	*BCAS Circular 2/2007*
INR Crs.	***Name of the Item***	***2014 - 15***	***2015 - 16***	***2016 - 17***	***2017 - 18***	***2018 – 19***	***BCAS Circular***
BDDS Equipment's							
1	*AMC BDDS Equipment*	*0.24*	*0.26*	*0.29*	*0.32*	*0.35*	*BCASCAS-3/2007/DIC-111B (BDDS) dated 3-8-2007*
INR Crs.	***Name of the Item***	***2014 - 15***	***2015 - 16***	***2016 - 17***	***2017 - 18***	***2018 – 19***	***BCAS Circular***
Physical Security system Vehicle Checks (LPR & DIC)							
1	*T 3 entry, Exit naka, MLCP, Airside gate no 10 &11*	*0.54*	*0.59*	*0.65*	*0.72*	*0.79*	
2	*T1D Entry naka*	*0.03*	*0.03*	*0.04*	*0.04*	*0.04*	
INR Crs.	***Name of the Item***	***2014 - 15***	***2015 - 16***	***2016 - 17***	***2017 - 18***	***2018 – 19***	***BCAS Circular***
TCV & SLCV							
1	*CMC of TCV and SLCV*	*0.65*	*0.71*	*0.78*	*0.86*	*0.95*	
	Total Maintenance Cost	***15.07***	***17.50***	***21.05***	***23.12***	***25.39***	

Conclusion:

Following is the Security equipment Maintenance Cost:

INR Crores	*2014 - 15*	*2015 - 16*	*2016 - 17*	*2017 - 18*	*2018 – 19*
Security Equipment maintenance Cost	*15.07*	*17.50*	*21.05*	*23.12*	*25.39*

However we shall like to clarify that the security related operating expenses are dynamic in nature and the requirement of the same varies with perceived security threat and mandates from various agencies. As such we request a full true up of security related operating expenses.

Maintenance Cost : Airport IT outsource cost

IT function was outsourced through a competitive bidding process with WIPRO in 2009. Wipro had won the competitive bidding and was selected as the preferred bidder to provide IT services.

After selection of the bidder, DIAL entered into a Joint venture with the bidder.

IT costs are forecasted based on payments due from DIAL to the joint venture company providing IT services. This is based on the following methodology:

Head	*Explanation*	
Agreed Cost as per agreement	*A*	*This is called subsistence level. This is based on* *1 The repayment liability of JV towards the capital cost.* *2 Interest Cost of the Capex incurred by JV.* *3 Other expenditure of JV.*
Amount Recovered by JV for providing Services	*B*	*The JV provides service to various users and this revenue is used to net off the amount payable to the JV by DIAL*
Net Payment to be made by DIAL	*C=A-B*	*This is the net amount payable by DIAL*

The current subsistence level contracted is as under:

IT JV contracted cost	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019 (IN CRS.)*
Subsistence as per agreement	*154.87*	*165.15*	*150.59*	*150.18*	*123.67*	*43.41*

The historical costs of IT (JV) paid by DIAL are as under:

(All amount in Crs)

IT JV net cost	*FY2013 In Crores*
Subsistence as per agreement	*157.27*
Total Subsistence	*157.27*
Non Cute revenue	*16.63*
Cute revenue	*88.24*
Total revenue of JV	*104.87*
Net Expenditure payable by DIAL to JV	*52.40*

However since most of IT systems get worn out due to heavy use and technological obsoleting the following additional Capex will need to be done by IT JV in the current control period

S.No	System	Capex Basis	Amount (INR Crs)
1	SI	Nil	0
2	Network	20x8600(20), 6xFW(3.5), 200x5600(20), 800xAPwifi(4.0), 5000xUTP(1.5), OFC(4)	54
3	Control Centres	V wall(2.0), LCD(1.8),	3.8
4	Help Desk	Remedy-(10),	10
5	CUSS & CUPPS	512xCUPPS(42),	42
6	BRS & MDS	Included in CUPPS	0
7	FIDS	1000xFIDS(22)	22
8	Telephony	5xEPABX(8)	8
9	PAVA	10000xSpk(10)	10
10	MATV	200xDisplay(3.5)	3.5
11	INK	Nil	0
12	EPOS	400xEPOS(4)	4
13	CCTV	3500xCCTV(30)+Storage(4)	34
14	ACS	4000xACS(18)	18
15	BMS	40000xEndpoints(6)	6
16	APPS	Nil	0
17	SADS	Nil	0
18	MPAS	3-4G(5.5)	5.5
19	MSI	20% of new CAPEX	48
20	TMRS	2000xTMRS(3)	3
21	MCS	Nil	0
22	Desktop/Laptop	AOCC(0.15), NOC(0.1), TSC(0.1), EMC(0.1), SOCC(0.1)	0.55
23	Server-DC	250xSvr(12), STS(1), HITACHI(2)	15
24	License-Renewal	Lic(2.75*5)	13.75
25	DC Furniture	Flooring/Ceiling/Raceways/Trays/ Racks	0.75
Grand TOTAL			301.85

The above Capex by IT JV will entail following additional subsistence level expenditure. This is the amount payable by JV towards repayment of loan and interest cost.

IT JV net cost	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019 (IN CRS.)
Additional subsistence level	18			36	94.80	94.80	94.80

Based on the above following is the IT (JV) cost forecast:

IT JV net cost (IN CRS.)	*FY2013*	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Subsistence as per existing agreement	*157.27*	*154.87*	*165.15*	*150.59*	*150.18*	*123.67*	*43.41*
Addl. Subsistence forecasted due to new Capex			*18*	*36*	*94.80*	*94.80*	*94.80*
Total Subsistence	*157.27*	*154.87*	*183.15*	*186.59*	*244.98*	*218.47*	*138.21*
Non Cute revenue	*16.63*	*16.63*	*16.63*	*16.63*	*16.63*	*16.63*	*16.63*
Cute revenue	*88.24*	*92.29*	*96.54*	*100.98*	*105.63*	*110.49*	*115.57*
Total Projected revenue	*104.87*	*108.93*	*113.17*	*117.62*	*122.26*	*127.12*	*132.20*
IT Outsource exp. Of DIAL	*52.40*	*45.94*	*69.98*	*68.97*	*122.72*	*91.35*	*6.01*

Maintenance Cost: Insurance

The following are the insurance policies taken for the airport. The respective insurance cost as a percentage for the same is also given in the table:

Policy	Details	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
Property Damage (PD)	% of amount of asset insured	0.035%	0.038%	0.042%	0.046%	0.051%	0.056%
Business Interruption (BI)	% of Gross Revenue	0.035%	0.038%	0.042%	0.046%	0.051%	0.056%
AOL/3rd Party Liability Policy	Premium amount on sum insured of $750Mn	$0.35 Mn	$0.38 Mn	$0.38 Mn	$0.38 Mn	$0.38 Mn	$0.38 Mn
Terrorism Policy	Premium as percentage to IAR policy value (i.e., PD + BI)	0.019%	0.021%	0.021%	0.021%	0.021%	0.021%

Forecast assumptions for insurance policy:

As percentage of insurance premium over insured assets with increase to take care of reinstatement value increase due to current trend of reduction in *discount percentages due to Insurance regulatory clampdown on existing higher discounts.*

Based on above assumptions following is the insurance forecast:

In Crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Insurance	*10.35*	*12.04*	*13.12*	*14.37*	*15.81*	*17.53*

Water:

The water supply at airport is provided by Delhi Jal board (DJB). DJB is committed to give us a water supply of 3 MLD per day. The current supply is very low and efforts are on to augment the supply and as such 2012-13 numbers are not representative of the true cost of water. Going forward as per the rates prescribed by DJB, there is a year on year escalation of 10% is envisaged.

Based on the above following are the amounts forecasted towards water charges

FY	*Water demand/per day*	*Yearly Water Volume MLD*	*Rate*	*Water Charges IN INR*
2014-15	*3MLD*	*1095*	*146.41*	*160,318,950*
2015-16	*3MLD*	*1095*	*161.05*	*176,350,845*
2016-17	*3MLD*	*1095*	*177.16*	*193,985,930*

However, there is some internal maintenance expenditure related to water and recoveries as well.

(In Crores)	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Water cost	*16.04*	*17.63*	*19.38*	*21.32*	*23.45*
Maintenance Cost	*3.96*	*4.25*	*4.57*	*4.90*	*5.27*
Recovery	*(5.46)*	*(5.86)*	*(6.30)*	*(6.76)*	*(7.27)*
Net payable	*14.54*	*16.02*	*17.65*	*19.46*	*21.45*

The net amount forecasted to be payable by DIAL is as under:

(In Crores)	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Water cost	*14.54*	*16.02*	*17.65*	*19.46*	*21.45*

"

DIAL submission on Administration Cost

17.9. DIAL submission regarding administration expenses is as under:

"The administrative cost category contains a number of types of costs, like consultancy expenses, advertisement, travel and communication costs, business promotion etc. The majority of these costs are attributable to the airport as whole. The expenses incurred during the year 2012-13 detailed as under:

Forecast assumptions:

1. A real increase of 5% is considered. In case of the manpower component of these costs a real increase is required which is over and above the inflationary increase. There is an impact because of the mandatory increase in minimum wages. Apart from above the administrative cost is expected to increase and this increase of 5% is bare minimum required over and above inflationary increase.

2. We have not incorporated Inflation in any of our forecast and it is assumed that inflationary increase will be allowed over and above the x – factor.

The historical costs and its future forecast is as under: (All amount in Rs. crs)

INR in Crores	*FY2013*	*FY2014 (H1)*	*FY2014 extrapolated*
Administration cost (Without Property Tax and other finance charges)	*140.95*	*64.9*	*129.8*

Administrative Cost: IT Cost – DIAL

DIAL as part of maintenance has to spend a significant amount on various licences and permissions. These costs are on rise and an additional provision needs to be made for the same. Details of the increases are as under:

Type	*Details of license*	*2012-13 Rates*	*2013-14 rates*	*Increase Amount*	***Reasons of increase***
In Crores					
License	*Application /Software Licenses for Various Airport Systems*	*2.59*	*3.29*	*0.70*	*Implementation of Certified Software License Management Program to regularize licenses use, standardization.*
License	*Wireless Frequency (Regulatory License for operating Walky-Talky at Airport)*	*0.36*	*1.13*	*0.77*	*Multi-fold increase in Government Royalty on License Cost since Apr-2012.*
AMC	*Application*	*4.95*	*9.22*	*4.27*	*Application scope increased,*

	/Software Maintenance				*along with enhancement of support services for improved SLA.*
AMC	*Hardware Maintenance*	*10.84*	*14.88*	*4.04*	*Increased Hardware together with enhanced SLA.*
Total		***21.22***	***31.00***	***9.78***	

As such an additional provision needs to be made for the above items in the base cost on which we are extrapolating 2013-14 costs.

An overview of the forecast for the period starting from 2014-15 to 2018-19

INR Crores	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Administration cost	*146.56*	*153.89*	*161.58*	*169.66*	*178.14*

Administrative Cost: Property Tax:

DIAL has to pay property tax to:

1. *Municipal Corporation of Delhi (MCD); and*
2. *Delhi Cantonment Board (DCB).*

The amount of property tax as per Demand Notices raised by MCD is Rs. 22.18 Crore per annum (For F.Y 2012-13). The future projections are based on same amount only.

A notice has been received from the DCB for payment of property tax. The methodology and valuation for property tax is not firmed up but based on the principles applied in case of MCD, the amount payable has been calculated on a proportion basis. It is assumed that same principles, rates and classifications as adopted by MCD will be used by DCB.

Thereafter it is estimated that DIAL will need to pay approx. Rs. 33.61 crores annually based on the current property tax rates. In future there can be additional demands of property tax. The following is the forecast of property tax:

Year	***MCD***	***DCB***	***Total***
In Crores			
FY2015	*22.18*	*11.43*	*33.61*
FY2016	*22.18*	*11.43*	*33.61*
FY2017	*22.18*	*11.43*	*33.61*
FY2018	*22.18*	*11.43*	*33.61*
FY2019	*22.18*	*11.43*	*33.61*

We request for a 100% true up of property tax.

The following are the amounts of property tax payable for last control period:

The following were the demands of property tax

INR Crores	*FY 2010*	*FY 2011*	*FY 2012*	*FY 2013*
Prop. Tax demand	*10.06*	*21.15*	*23.77*	*22.18*

The following were the amounts paid

INR Crores	*FY 2010*	*FY 2011*	*FY 2012*	*FY 2013*
Amount paid	*(2.51)*	*(5.29)*	*(2.96)*	*(1.38)*

The following demand still remains and its NPV is as under. Since DIAL may need to pay these amounts in current control period the same need to be allowed. These amounts may be trued up based on actual payment at end of control period.

INR Crores	*FY 2010*	*FY 2011*	*FY 2012*	*FY 2013*
Prop. Tax demand	*10.06*	*21.15*	*23.77*	*22.18*
Amount paid	*(2.51)*	*(5.29)*	*(2.96)*	*(1.38)*
Prop. Tax demand Outstanding (87.54%)	*7.54*	*15.86*	*20.80*	*20.80*
Compounding factor	*1.63*	*1.48*	*1.34*	*1.22*
Present Value as on Mar-14	*12.33*	*23.50*	*27.94*	*25.32*
NPV as Mar-14	*89.09*			

Other Finance Charges:

As part of the borrowing cost, DIAL had paid an upfront fee to lenders.

Name of Banker	*Nature of expenses*	*Start Date*	*End Date*	*Amount paid Upfront fee/ Processing Charges (INR)*
ICICI Bank-Singapore	*Upfront Fee*	*1/7/2010*	*12/17/2019*	*106,353,000*
Axis Bank	*Upfront Fee*	*3/25/2010*	*3/3/2020*	*105,318,540*
Total (A)				*211,671,540*
IDFC	*Documentation, structure & Upfront Fee @0.60% on Rs. 2550 Crores*	*4/1/2013*	*3/31/2028*	*205,000,000*
IDBI	*Upfront & Underwriting Fee on ECB 302 Million*	*6/30/2013*	*12/31/2024*	*102,732,870*
ICICI	*Upfront Fee on RTL Loan of Rs. 493.75*	*7/31/2013*	*3/31/2028*	*39,500,000*

	Crores				
Total (B)	*347,232,870*				
Total (A+B)	*558,904,410*				

The above is monetized over the years as under:

INR Crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
ICICI Bank-Singapore	*1.07*	*1.07*	*1.07*	*1.07*	*1.07*	*1.07*
Axis Bank	*1.06*	*1.06*	*1.06*	*1.06*	*1.06*	*1.06*
Total (A)	*2.13*	*2.13*	*2.13*	*2.13*	*2.13*	*2.13*
IDFC	*1.37*	*1.37*	*1.37*	*1.37*	*1.37*	*1.37*
IDBI	*0.67*	*0.89*	*0.89*	*0.89*	*0.89*	*0.89*
ICICI	*0.18*	*0.27*	*0.27*	*0.27*	*0.27*	*0.27*
Total (B)	*2.21*	*2.53*	*2.53*	*2.53*	*2.53*	*2.53*
Total (A+B)	*4.34*	*4.65*	*4.67*	*4.65*	*4.65*	*4.65*

The above expenditure is charged as other finance charges.”

DIAL submission on Utilities

17.10. DIAL submission regarding utilities is as under:

“Utility costs are calculated at gross level less recovery from the airlines and concessionaires.

Utility Cost- Electricity:

1. *The electricity rates have escalated on a CAGR of 7.51% p.a. during last two fiscal.*
    - *Apr 2010 – Rs. 4.70 per unit*
    - *Apr 2011 – Rs. 4.70 per unit*
    - *Sep 2011 – Rs. 5.75 per unit*
    - *Jul 2012 – Rs. 6.75 per unit*
    - *Mar 2013 – Rs. 6.75 per unit*
    - *Aug 2013 – Rs. 7.10 per unit*

    CAGR from Apr 2010 to Mar 2013 is equal to 7.51%.
2. *We have assumed that same rate of escalation will continue in future.*
3. *We also contemplate an average 5% YOY increase in electricity unit consumption due to higher activity at airport*

4. *We request for a 100% true up of utility rates. The historical costs and its future forecast is as under: (All amount in Crs.)*

In Crores	*FY2013*	*Half Year Sept 2013*	*FY2014 (extrapolated)*
Net electricity cost	*95.96*	*63.45*	*126.90*

Conclusion:

Based on the aforesaid assumptions the forecast for the period starting from 2014-15 to 2018-19 is as under:

in Crores	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Net Electricity cost	*143.25*	*161.71*	*182.55*	*206.07*	*232.62*

Utility Cost - Fuel:

1 The fuel (HSD) rates historically have escalated on a CAGR of 25.28% p.a. during last two years.

- *Apr 2011 – Rs. 36.97 per litre*
- *Apr 2012 – Rs. 39.96 per litre*
- *Mar 2013 – Rs. 59.72 per litre*

2 We have assumed that same rate of escalation will continue in future.

3 We have also assumed that there will be a 5% y-o-y increase in consumption of fuel.

4 We request for a 100% true up of fuel rates.

The historical costs and its future forecast are as under:

INR in Crores	*FY2013*	*Half year – Sept 2013*	*2014 (extrapolated)*
Net Fuel cost	*2.16*	*1.21*	*2.42*

An overview of the forecast for the period starting from 2014-15 to 2018-19 is as under:

INR in Crores	*2015*	*2016*	*2017*	*2018*	*2019*
Net Fuel cost	*3.18*	*4.19*	*5.51*	*7.25*	*9.53*

"

17.11. DIAL submission regarding the summary of Operating Cost Forecast is as below:

"

In INR Crores	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
Manpower cost					
Salaries, wages and bonus	121	130	140	150	161
Operation support cost	8	8	9	9	10
Contribution to provident and other fund	5	5	5	6	6
Gratuity expense	2	2	2	2	3
Other post-employment benefits	3	4	4	4	4
Staff welfare expenses	5	5	5	6	6
Subtotal Manpower cost	143	154	165	177	190
Operating expenses	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
IT JV Expenses - Contracted	70	69	123	91	6
Airport operator fees	117	145	161	179	198
Repairs and maintenance	150	164	177	190	203
Manpower outsourcing charges	45	48	52	56	60
Housekeeping expenses	45	48	52	56	60
Security related expenses	11	12	13	14	15
Insurance	12	13	14	16	18
Water Charges	15	16	18	19	21
Consumables	2	2	2	2	2
Subtotal Operating expenses	467	517	612	623	583
Administrative Expenses	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
Professional and consultancy expenses	88	93	97	102	107
Travelling and conveyance	13	14	15	15	16
Rent	8	8	8	9	9
Advertising and sales promotion	1	1	1	1	1
Communication costs	2	2	2	3	3
Printing and stationery	1	1	1	1	1
IT related expenditure	18	19	20	21	22
Property Tax	34	34	34	34	34
Property tax – first control period	89	0	0	0	0
Other Admin Expenses	15	15	16	17	18
Other Finance Charges	5	5	5	5	5
Subtotal Administrative Expenses	274	192	200	208	216
Utilities cost	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
Power charges	143	162	183	206	233
Fuel charges	3	4	6	7	10
Subtotal Utilities cost	146	166	188	213	242
Total Operating Cost	1030	1029	1165	1222	1232

17.12. DIAL's revised submission on 23.07.2014 regarding cost allocation is as below:

"Costs Allocation

a) Staff costs

The allocation of Manpower costs has been made based on activities undertaken by the respective departments. Auditors have certified the manpower in each department. The following allocation is based manpower employed as on 31st March 2014:

Department	*31-Mar-14 Manpower Number*	*Ratio of AFRO*	*AERO Manpower Number*
Operations	*422*	*100%*	*422*
Commercial - Non-Aero	*72*	*0%*	*0*
*Finance & Accounts**	*55*	*89.24%*	*49*
*Security**	*54*	*89.24%*	*48*
*Quality, Service & Delivery**	*12*	*89.24%*	*11*
*Guest Relations**	*23*	*89.24%*	*21*
*Corporate Relations**	*18*	*89.24%*	*16*
*Corporate Communication**	*9*	*89.24%*	*8*
Legal .*	*8*	*89.24%*	*7*
*Project & Engg.**	*28*	*89.24%*	*25*
*IT**	*19*	*89.24%*	*17*
CPD	*16*	*0%*	***o***
*Ethics &intelligence & GMRVF**	*21*	*89.24%*	*19*
*MAG**	*5*	*89.24%*	*4*
*8CM/CEO Office**	*12*	*89.24%*	*11*
*SPG/Business Integration & Planning**	*18*	*89.24%*	*16*
HR & FMS	*31*	*91.65%-*	*28*
Baggage Screeners	*431*	*100%*	*431*
Trolley Operator	*195*	*100%*	*195*
*Total Overall Allocation of **HR** Cost*	*1449*	*91.65%*	*1328*

"b) Non Staff costs

The revised allocation of operating and administration expenses (based on 2013-14 operating expenses) has been independently verified by statutory auditors. The allocation of expenses, for the year ended March 31st 2014, into aeronautical and non-aeronautical as certified by the statutory auditors is as under:

Summary of Aero cost	*%*
Administration Expenses	
Aero	*89.68%*
Non Aero	*10.32%*

Operating Expenses	
Aero	89.19%
Non Aero	10.81%

"

17.13. DIAL's revised submission on 23.07.2014 regarding forecast of expenditure is as below:

"We have revised the forecast for the next control period based on the audited numbers of 2013-14. Following is a summary of the revised forecast:

In INR Crores	FY 14	FY 14	FY 15	PY 1G	FY 17	FY 18	FY 19
Manpower Cost	Earlier Submitted	Actual	Revised Projection				
Salaries, wages and bonus	113	107	119	128	137	147	158
Operation support cost	7	4	4	4	4	5	5
Contribution to provident & other	4	4	4	4	5	5	5
Gratuity expense	2	1	1	1	1	1	1
Other post-employment	3	3	3	3	4	4	4
Staff welfare expenses	4	5	5	6	6	7	7
Subtotal Manpower cost	**133**	**123**	**136**	**146**	**157**	**169**	**181**
Operating expenses							
IT IV Expenses - Contracted	46	52	78	77	132	102	17
Airport operator fees	100	100	120	137	178	198	219
Repairs and maintenance	152	127	178	167	183	194	207
Manpower outsourcing charges	42	41	44	48	51	55	59
Housekeeping expenses	41	36	43	46	50	53	57
Security related expenses	11	12	13	14	15	16	17
Insurance	10	8	12	13	15	16	18
Water Charges	13	0.3	27	30	33	36	40
Consumables	2	3	3	4	4	4	5
Subtotal Operating expenses	**417**	**383**	**519**	**536**	**661**	**674**	**639**
Administrative expenses							
Professional & consultancy expenses	84	97	102	107	112	118	123

Travelling and conveyance	*13*	*14*	*15*	*16*	*16*	*17*	*18*
Rent	*7*	*8*	*8*	*8*	*9*	*9*	*10*
*Advertising & **sales** promotion*	*1*	*5*	*5*	*6*	*6*	*6*	*6*
Communication costs	*2*	*2*	*2*	*2*	*2*	*2*	*2*
Printing and stationery	*1*	*2*	*2*	*2*	*2*	*2*	*2*
IT related expenditure	*18*	*8*	*8*	*9*	*9*	*10*	*10*
Property Tax	*34*	*61*	*34*	*34*	*34*	*34*	*34*
Other Admin Expenses	*14*	*26*	*28*	*29*	*31*	*32*	*34*
Other Finance Charges	*4*		*5*	*5*	*5*	*5*	*5*
Subtotal Administrative	***178***	***223***	***208***	***217***	***226***	***235***	***245***
Utilities costs							
Power charges (net of solar)	*127*	*104*	*116*	*131*	*143*	*157*	*179*
fuel charges	*2*	*2*	*3*	*4*	*5*	*7*	*9*
Subtotal Utilities cost	***129***	***106***	***119***	***135***	***148***	***164***	***188***
Total Operating Cost	***857***	***835***	***982***	***1,034***	***1191***	***1242***	***1254***

17.14. DIAL's revised submission on 23.07.2014 regarding forecast of manpower expenses is as below:

"Manpower Cost

The manpower cost was INR 122.65 Crores for FY14. The forecasted figures for FY15 -19 have been updated based on the actual numbers of FY14.

INR crores	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*143.21*	*153.82*	*165.23*	*177.48*	*190.64*
Revised Submission	*136.14*	*146.24*	*157.08*	*168.73*	*181.24*

"

17.15. DIAL's revised submission on 23.07.2014 regarding forecast of operating costs is as below:

"Housekeeping Cost: The actual housekeeping cost was INR 36.14 crores For FY14. The forecasted figures for FY15-19 have been updated based on the actual numbers of FY14.

Further, we would like to inform the Authority that out of Additional House Keeping expenses, Delhi Pollution Control Board Committee fee was paid during FY2014. Rest all other Additional expense have been deferred and are expected to be incurred from FY2015 onwards.

In the earlier filing based on the half yearly numbers, we had forecasted the housekeeping cost as follows:

INR crores	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*44.92*	*48.24*	*51.79*	*55.65*	*59.80*
Revised Submission	*43.02*	*46.21*	*49.61*	*53.31*	*57.28*

Manpower outsourcing expenses: The Manpower outsourcing expense was INR 41.31 Crores for FY14. The forecasted figures for FY 15-19 have been updated based on the actual numbers of FY14. Revised Manpower outsourcing expenses for FY15-19 is as follows:

INR crores	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*44.81*	*48.14*	*51.71*	*55.54*	*59.66*
Revised Submission	*44.37*	*47.66*	*51.20*	*54.99*	*59.07*

Maintenance Cost:

The maintenance cost was INR 127.35 Crores for FY14. The forecasted figures for FY15-19 have been updated based on the actual numbers of FY14. Further, Additional maintenance cost projected in FY14 is shifted to the next financial year (FY15), because it could not be undertaken due to cash crunch. The revised forecast is as under:

INR crores	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*134.61*	*146.21*	*156.25*	*166.76*	*177.14*
Revised Submission	*162.86*	*149.71*	*162.00*	*170.80*	*181.48*

Maintenance Cost of Security equipment's: The forecasted maintenance cost of security equipment has not undergone any change. The revised submission is as follows:

INR crores	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*15.07*	*17.50*	*21.05*	*23.12*	*25.39*

Revised Submission	15.07	17.50	21.05	23.12	25.39

Maintenance Cost: Airport IT outsource cost:

IT Cost	FY2013	FY2014	FV2015	FY2016	FY2017	FY2018	FY2019
Total Subsistence	***157.27***	***154.87***	***183.15***	***186.59***	***244.98***	***218.47***	***138.21***
Non Cute revenue	*16.63*	*16.63*	*16.63*	*16.63*	*16.63*	*16.63*	*16.63*
Cute revenue	*88.24*	*92.29*	*96.54*	*100.98*	*105.63*	*110.49*	*115.57*
Projected revenue	*104.87*	*108.93*	*113.17*	*117.62*	*122.26*	*127.12*	*132.20*
IT Outsource exp.	*52.40*	*45,94*	*69.98*	*68,97*	*122.72*	*91.35*	*6,01*

Forecast working of IT Cost is revised based on 2013-14 financials is as under:

IT Cost (In Crores)	*FY2013*	*FY2014*
| Subsistence as per agreement	*157.27*	*153.93*
Total Subsistence	*157.27*	*153.93*
|Non Cute revenue	*16.63*	*26.46*
Cute revenue	*88.24*	*75.55*
Total revenue of JV	*104.87*	*102.01*
Net Expenditure payable by DIAL to JV	*52.4*	*51.92*

Based on the above following is the IT (JV) cost forecast:

IT Cost (In Crores)	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Subsistence as per existing agreement	*165.15*	*150.59*	*150.18*	*123.67*	*43.41*
Addl. Subsistence as filed earlier	*18*	*36*	*94.8*	*94.8*	*94.8*
Total Subsistence	*183.15*	*186,59*	*244.98*	*218.47*	*138.21*
Revised Non Cute revenue	*26.46*	*26.46*	*26.46*	*26.46*	*26.46*
Revised Cute revenue	*79.03*	*82.66*	*86.46*	*90.44*	*94.6*
Total Projected revenue	*1105.49*	*109.12*	*112.92*	*116.9*	*121.06*
Revised IT Outsource exp.	*77.66*	*77.47*	*132.06*	*101.57*	*17.15*

Security related expenses:

The Security related expense was INR 12.09 Crores for FY14. The forecasted figures for FY15 -19 have been updated based on the actual numbers of FY14. Revised Security related expenses for FY15-19 is as follows:

INR crores	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*11.34*	*12.18*	*13.09*	*14.06*	*15.10*

Revised Submission	*12.99*	*13.95*	*14.98*	*16.09*	*17.29*

Insurance Cost:

The Insurance cost was INR 7.51 crores For FY14. The forecasted figures for FY15 -19 have been updated based on the actual numbers of FY14. Current insurance cost is based on revised capital expenditure and revenue numbers updated based on FY2013-14 numbers. Revised insurance cost for FY15-19 is as follows:

INR crores	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*12.04*	*13.12*	*14.37*	*15.81*	*17.53*
Revised Submission	*11.77*	*13.37*	*14.68*	*16.20*	*18.01*

Water:

Earlier Submission

INR crores	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*14.54*	*16.02*	*17.65*	*19.46*	*21.45*

New Submission

In our previous submission sewerage charge payable to DJB were not included. Now are updating the model for the aforesaid charges. These charges are 60% of water volumetric charges. So, we propose to incorporate correct rates for projecting for water charges.

ANNEXURE 9: DJB Water rate card

Based on the above following are the amounts forecasted towards water charges

FY	*Water demand per day*	*Yearly Water Volume MLD*	*Rate*	*Water Charges (INR crores)*
2014-15	*3MLD*	*1095*	*234.25*	*25.65*
2015-16	*3MLD*	*1095*	*257.68*	*28.22*
2016-17	*3MLD*	*1095*	*283.45*	*31.04*
2017-18	*3MLD*	*1095*	*311.79*	*34.14*
2018-19	*3MLD*	*1095*	*342.97*	*37.56*

However, there is some internal maintenance expenditure related to water and recoveries as well

Consumables:

The Consumables cost was INR 3.22 crores For FY14. The forecasted figures for FY15 -19 have been updated based on the actual numbers of FY14. Revised consumables cost for FY15-19 is as follows:

INR crores	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*1.83*	*1,96*	*2.11*	*2.26*	*2.43*
Revised Submission	*3.46*	*3.72*	*3.99*	*4.29*	*4.60*

"

17.16. DIAL's revised submission on 23.07.2014 regarding administrative expenses is as below:

Administrative cost: Property Tax:

Property Tax for 2013-14 was 60.92 Crores. Property tax forecast however remains the same, as submitted earlier.

INR crores	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*33.61*	*33.61*	*33.61*	*33.61*	*33.61*
Revised Submission	*33.61*	*33.61*	*33.61*	*33.61*	*33.61*

Other finance charges

The forecasted other finance charges have not undergone any change as submitted earlier

INR crores	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*4.65*	*4.67*	*4.65*	*4.65*	*4.65*
Revised Submission	*4.65*	*4.67*	*4.65*	*4.65*	*4.65*

Other administrative expenses:

Other Administrative expenses were INR 161.81 Crores for FY14. The forecasted figures for FY15-19 have been updated based on the actual numbers of FY14. Revised Other Administrative cost for FY15-19 is as follows:

INR crores	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*146.56*	*153.89*	*161.58*	*169.66*	*178.14*

New Submission	*169.90*	*178.40*	*187.32*	*196.68*	*206.52*

Utility Cost

Power cost: Earlier Submission

INR crores	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Net electricity cost	*143.25*	*161.71*	*182.55*	*206.07*	*232.62*

New Submission

Operating expense of Solar Plant:

As indicated earlier, we propose to set up solar power plant at IGI Airport, New Delhi. Following would be likely additional operating expenses for maintaining and operating these power plants.

FY15-16	*0.09*	*0.05*	*0.14*
FY16-17	*0,44*	*0.19*	*0.62*
FY17-18	*0.80*	*0.35*	*1.14*
FY18-19	*0.84*	*0.41*	*1.25*
FY15-16	*0.09*	*0.05*	*0.14*

Further, we estimate following savings on account of reduced electricity consumption

INR crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Power cost	*104.38*	*117.83*	*133.01*	*150.15*	*169.50*	*191.34*
Solar operating cost		*0.14*	*0.14*	*0.62*	*1.14*	*1.25*
Solar Saving	*(0.47)*	*(2-13)*	*(2.13)*	*(8.09)*	*(13.42)*	*(13.42)*
Net Power cost	***103.91***	***115.84***	***131.02***	***142.68***	***157.22***	***179.17***

Fuel cost was INR 2.35 Crores for FY14. The forecasted figures for FY15-19 have been updated based on the actual numbers of FY14. Revised Other Administrative cost for FY15-19 is as follows:

INR crores	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*3.18*	*4.19*	*5.51*	*7.25*	*9.53*
New Submission	*3.09*	*4.07*	*5.35*	*7.04*	*9.26*

"

b Authority's Examination of Operating Expenses

17.17. The Authority has carefully examined DIAL's submissions regarding the components of operating expenses. The Authority's examination on projections for operating expenses for the second Control Period is given below.

Allocation of Operating Expenses

17.18. The Authority has noted DIAL's submission dated 11.11.2013 and its revised submission dated 23.7.2014 with regards to allocation of operating expenses. The Authority has noted that the allocation of operating expenses for the second Control Period has changed when compared to the allocation of operating expenses during the first control period as per the Delhi Tariff Order 03/2012-13.

17.19. The Authority also notes from submissions by DIAL that, all its operating expenses have been grouped into seven heads. Of these seven heads, four heads namely, manpower, utilities, administration and other operating expenses have been independently analysed and divided into aeronautical and non-aeronautical components. As regards the three heads of Property tax, Payment to AAI for VRS and Airport Operator Fee, DIAL has applied weighted average of allocations of the initial four heads for distribution into aeronautical and non-aeronautical values.

17.20. Manpower expense: The Authority has noted that DIAL has allocated manpower expense into aeronautical and non-aeronautical components based on the allocation of individual activities undertaken by the respective departments. The Authority is in receipt of the Auditor's Certificate that certifies the number of employees under each department. DIAL's submission on allocation of manpower expenses is reproduced as under:

> *"The departments dealing with Aeronautical activities have been taken at 100% Aeronautical cost, Non Aeronautical departments are considered at 0% Aeronautical and common departments have been allocated based on the asset ratio as certified by the Auditors."*

17.21. Administration expenses and other operating expenses: The Authority has noted the Auditor's Certificate submitted by DIAL which provides details of allocation of administration expenses and other operating expenses as per cost centres as on 31st March 2014. The Authority has noted that the allocation of administration expenses towards aeronautical activities has been submitted as 89.68% and that of other operating expenses towards aeronautical activities 89.19% in its submission dated 23.7.2014.

17.22. Utilities expense: With regards to the allocation of utilities expense, the Authority notes DIAL's submission dated 15.04.2014 is as under:

"Further, all the Utility cost is net of recovery done from the utilities provided to Concessionaires and Business operators at the airport. And, DIAL does not undertake any Non-Aeronautical business activity. Hence, these costs should be 100% Aeronautical cost."

17.23. The Authority has noted from the Tariff Model that DIAL has calculated the weighted average of the allocation of manpower, utilities, administration, and other operating expenses to aeronautical activities in FY2014-15, which DIAL has worked out to be 91.6%. This weighted average value has been considered by DIAL as applicable for allocation of airport operating fee, property tax and VRS payment to AAI towards aeronautical activities. DIAL's submission dated 15.04.2014 in this regard is reproduced as below,

"Rest all other costs, i.e., 'Property tax', 'Airport Operator fee' and 'AAI-VRS Payment' are based on the 5 year average of overall mix of Manpower cost, Operating cost, Administration cost, and Utility cost"

17.24. However, the Authority notes that while DIAL's submission mentions 5 year average of overall mix, the number considered in the Tariff Model as submitted by DIAL is average for FY 2014-15 only. The 5 year average from the numbers submitted by DIAL in its Tariff Model works out to 91.25%.

17.25. These seven heads along with their values as per the first Control Period, as per DIAL initial submission and their updated values as of 31.04.2014 are as presented in Table 46 below:

Table 46: Difference in allocations of operating expenses considered by DIAL

Operating Expenses	Methodology of Allocation	Aero Allocation (As per Delhi Tariff Order No.03)	Aero Allocation (As per DIAL Submission 11th Nov 2013)	Aero Allocation (As per DIAL Submission 23rd July 2013)
Manpower cost	Analysis of Manpower	89.79%	91.38%	91.65%

Operating Expenses	Methodology of Allocation	Aero Allocation (As per Delhi Tariff Order No.03)	Aero Allocation (As per DIAL Submission 11th Nov 2013)	Aero Allocation (As per DIAL Submission 23rd July 2013)
Operating expenses	Department wise analysis	91.89%	89.03%	89.19%
Administration expenses	Department wise analysis	70.28%	89.48%	89.68%
Utilities cost	Net cost of utilities	100.00%	100.00%	100.00%
Property tax	Overall Operating ratio	87.54%	91.38%	91.25%
Airport operator fee	Overall Operating ratio	87.54%	91.38%	91.25%
AAI - VRS Payment	Overall Operating ratio	87.54%	91.38%	91.25%

17.26. The Authority has deliberated on the matter of change in allocation for the forecasted values as submitted by DIAL as compared to the allocation as accepted by it for first Control Period in its Delhi Tariff Order 03/2012-13. The Authority has asked DIAL to provide justification and reasoning for the change in allocation of its operating expense for each head independently. DIAL has responded to the query as given below

"DIAL has followed the same methodology as done during the 1st Control Period. The following methodology was adopted:

1. *First the total expenses of each department like Operations, Maintenance, etc. have been identified.*
2. *Thereafter each and every expense of that department has been identified at activity level (fund centre). In this exercise the expenses have been identified and related to various activities like airside expenses, terminal expenses, runway lighting expenses, procurement expenses etc.*
3. *Thereafter the activities are allocated amongst aero and non-aero based on following principles:*
    a. *The activities which can be directly attributable to aero assets have been classified as aero like operation and maintenance of runways and taxiways etc.*

b. *The activities which can be directly attributable to non-aero assets have been classified as non-aero like commercial/retail promotions etc.*

c. *Terminal costs have been allocated based on the area mix for the respective terminal as certified by M/s Jacobs Consultancy into aero and non-aero.*

d. *Remaining unallocated common expenses of support functions like finance and accounts, legal, corporate communication, corporate relation, CEO office etc. have been allocated based on the overall asset value allocation as mentioned in the foregoing section. "*

17.27. The Authority has examined the submission of DIAL, but the Authority finds that the response does not provide the reasons for change in allocations of individual heads. Further, the Authority is not persuaded to accept the arguments in DIAL's submission with respect to need for change in the allocation percentages for the second Control Period. Hence, the Authority proposes to consider allocation of operating expenses for the second Control Period as per its Delhi Tariff Order 03 / 2012-13 in respect of tariff determination the first Control Period.

17.28. The Authority has also noted that Payment to AAI for VRS as an expense has been allocated by DIAL at the weighted average value of the operating expenses and the same was considered by the Authority in its Delhi Tariff Order 03 / 2012-13. The Authority has reconsidered its approach and is of the opinion that VRS expense is on account of manpower and its related costs and accordingly proposes to consider the allocation of VRS payment to AAI into aeronautical and non-aeronautical components at the rate of allocation of manpower costs in the second Control period.

17.29. As regards the allocation of Airport Operator Fee into aeronautical and non-aeronautical components, the Authority notes that there can be two approaches. One of these approaches would be to consider the weighted average ratio of 87.54% for allocation of Airport Operator Fee into aeronautical and non-aeronautical components for the second Control Period. The second approach would be to consider 3% of aeronautical revenue as aeronautical component of Airport operator

Fee. Airport operator fee is being paid by DIAL is at 3% of Gross revenue of Airport. Accordingly it would be appropriate to apportion the Airport operator Fee between Aeronautical and non-aeronautical cost in the ratio of their respective revenues. The allocation will be finalised based on stakeholder comments on these two approaches (refer para 17.38 below). The difference in Airport operator fee for the second control period based on both of these approaches is as given in the table below:

Table 47: Table Representing Difference in Airport Operator Fee Based on the Two Approaches

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19
Airport Operator Fee (3% of Aero Revenue)	84.87	76.73	31.68	35.09	38.88
Airport Operator Fee (3% of Gross Revenue allocated at 87.54%))	105.18	98.21	62.25	68.36	74.84

17.30. The Authority notes that DIAL has projected this expense for the second Control Period at 3% of gross revenue for respective years and then has applied the ratio for allocation of this expense into aeronautical and non-aeronautical components. The Authority proposes to seek comments from the stakeholders on this approach of allocation for the second Control Period. For the time being, the Authority has considered 3% of aeronautical revenue as aeronautical component of Airport operator Fee.

17.31. The proposed allocation is as given below:

Table 48: Allocation of Operating Costs between aeronautical and non-aeronautical as considered by the Authority for the second Control Period

Operating Expense Head	Proposed Aero Allocation
Manpower cost	89.79%
Operating expenses	91.89%
Administration expenses	70.28%
Utilities cost	100.00%
Property tax	87.54%
Airport operator fee	3% of Aeronautical Revenue as defined under OMDA
AAI - VRS Payment	89.79%

Observation on DIAL's argument on FY 2012-13 and FY 2013-14 not being representative years

17.32. With regards to DIAL's claims regarding paucity of funds and lower than optimum spending on operating expense, the Authority notes that it had commissioned a study on efficient costs with respect to DIAL by ICWAI. The submissions from ICWAI state that the costs incurred by DIAL in FY 2012-13 are efficient costs. Accordingly the Authority proposes to consider the operating costs for the year FY 2012-13 as efficient in case of DIAL. The Authority has also noted from the actual operating costs incurred by DIAL in FY 2013-14 that these costs are higher by a differential equivalent to inflation plus 0.97%, as explained in para 17.80 below. Thus the Authority proposes to consider operating costs of FY2013-14 as reasonable.

17.33. The Authority has examined DIAL's submission on other aspects of operating expenses for the 2nd Control Period in the following paras.

Observation on DIAL submission on Manpower Cost

17.34. The Authority has noted from DIAL submissions that the total manpower cost during FY2012-13 and FY2013-14 is Rs. 123.72 crore and Rs.122.65 crore respectively. The Authority has sought Auditor's Certificates from DIAL for these numbers. Vide its submissions dated 07.04.2014 and 23.7.2014, DIAL has provided Audited Certificates for these numbers.

17.35. The Authority notes DIAL's submission dated 11.11.2013 that additional manpower will be required to maintain quality levels as traffic is expected to grow in the second Control Period. The Authority also notes DIAL's assumption that increase required in manpower will be equivalent to 50% of the projected increase in passenger traffic. However, considering the 24x7 operations carried out at DIAL currently, the Authority is of view that proper justification is needed for man power additions.

17.36. The Authority has also has noted that DIAL recorded a number of Rs. 4.4 crore towards additional salaries, wages and bonus in FY2013-14 and has made projections of this amount for the remaining years of the second Control Period. The Authority sought further clarifications from DIAL in this regard. DIAL provided clarifications vide its submission dated 07.04.2014 that this cost was on account of the additional manpower of 165 persons (92 for Baggage Screening and 73 for Trolley Operations) as per regulatory orders as explained in Para 17.5 above. The Authority has noted that DIAL is required to increase its manpower count during the second Control Period on account of increase in manpower employed for 100% baggage screening and inclusion of trolley workers in DIAL manpower count as per BCAS regulatory requirement and Supreme Court judgment respectively. Given that the expense is of mandatory nature on account of regulatory requirements, the Authority proposes to accept DIAL's submission on the additional manpower cost for the second Control Period.

17.37. The Authority has also noted that DIAL has assumed a 5% year-on-year real increase in salaries and wage costs on account of attrition levels and competitive environment. DIAL had also asked for an increase for CPI over this value. While the Authority notes the justification submitted by DIAL, it is not persuaded to allow a 5% year-on-year real increase in salaries and wage costs at the outset.

Airport Operator Fee

17.38. The Authority has noted from the Tariff Model that the Airport Operator Fee is calculated as 3% of the total revenue. The Authority is also in receipt of Auditor's certificate that the Airport Operator fee paid by DIAL for FY2012-13 was Rs. 45.92 crore and for FY2013-14 was Rs. 100.07 crore. The Authority has had reference to the provisions of the Airport Operator Agreement signed by DIAL with Fraport AG Frankfurt Airport Services Worldwide in this regard and notes that the Agreement provides for payment of Airport Operator Fee in a year at 3% of Gross Revenue realized by DIAL as defined under OMDA during the previous year. However an alternate approach has been considered by the Authority pending stakeholder consultation as discussed in para 17.28 above.

17.39. As regards the revenue to be considered for calculation of Airport Operator Fee, the Authority has determined such revenue based on the X factor proposed by it. The Authority notes that the actual revenue realized by DIAL in the second Control Period may result in different Airport Operator Fee from that considered by the Authority in its calculations. Thus, the Authority proposes to true up the amount of Airport Operator Fee as actual paid for the 2^{nd} Control Period at the time of determination of tariffs for the 3^{rd} Control Period based on the final approach followed by DIAL.

Other Maintenance and Operating Expenses

Housekeeping costs

17.40. The Authority is in receipt of Auditor's Certificate certifying the value for housekeeping costs incurred during FY2012-13 and FY2013-14.

17.41. The Authority has noted the DIAL submission related to Housekeeping costs, which comprise costs on account of existing long term service contracts, renewal of long term service contracts, recurring annual costs and other costs and forecast of increase of such expenses. The Authority is in receipt of Auditor's Certificate on existing housekeeping costs (as on 31.03.2014). DIAL, vide its submission dated 07.04.2014, submitted the following clarification,

"Statutory Auditors have validated the contract period, contracted sum, last month payment along with the contractual cost for next control period for all the existing contracts (Long term as well as others).

From this Auditor certificate, DIAL has considered only the long term contracts (i.e., Page 5 of Annexure J of the filing for 2nd control period) covering Contracts of term more than 2 years). This is an extract derived by DIAL from the Auditor Certificate (hence not stamped by the Auditors).

One of the contracts by name of 'Spectro-Environment monitoring' valued at Rs. 0.39 Crore for FY2013-14 was inadvertently missed out.

In case of 'PDC' contract values, an exchange rate of Rs.84.674/EUR, has been considered based RBI rate as on 30th Sep 2013"

17.42. The Authority has noted that DIAL expects housekeeping costs under long term contracts to increase due to inflation and increase in operations and maintenance cost and accordingly DIAL has considered escalation of 20% on renewal of existing contracts and 5% per annum in recurring annual costs as well as the other costs.

17.43. The Authority notes that housekeeping & maintenance to meet the requirements for 24x7 operations is already in place at IGI Delhi Airport and thus no significant increase appears to be required in resources for housekeeping and maintenance activity. Moreover as per general trend of market competition, business productivity, learning curves, economies of scale, volume discounts and mechanized systems etc., the Authority finds the increase in costs of the order of 20 % to be on the higher side. The Authority expects DIAL to undertake due diligence while renewing contracts.

17.44. However, DIAL has submitted that it has planned to incur an additional expense on account of housekeeping due to the following activities for which provision needs to be made - Delhi pollution control Board Committee, inter terminal bus service, deep cleaning machine, bird hazard mitigation and wild life management and NOC fire certificate. Considering the nature of activities pertain to safety and security related aspects, the Authority proposes to permit the expenditure planned for these activities for the year FY2014-15 and proposes to apply 8% rate of increase per year for this component of housekeeping costs as explained in para 17.84 below.

Repair & Maintenance

17.45. The Authority has noted the DIAL submission regarding Repairs and Maintenance expenses which includes actual value of existing long term contracts, projected value of long term contracts upon renewal, recurring annual costs, additional expenses and maintenance expenses towards security related equipment.

17.46. The Authority is in receipt of the Auditor Certificate on the break-up of operating expenses however the Auditor has certified the repairs and maintenance cost of plant & machinery, building and others which is different from the classification followed by DIAL in its submission, without which the numbers cannot be reconciled. The Authority is also in receipt of the Auditor's Certificate for Project and Engineering Annual Maintenance Contracts certifying contract tenure and values. The Authority sought clarifications from DIAL as the numbers from the certificate and Tariff Model could not be reconciled. DIAL submission regarding the same on 07.04.2014 is reproduced below:

> *"Auditors have validated the contract period, contracted sum, last month payment along with the contractual cost for next control period for all the existing contracts (Long term as well as others).*
>
> *From this Auditor certificate DIAL has considered only the long term contracts (i.e., Page 7 and 8 of Annexure K of the filing for 2nd control period which covers Contract having term of 2 years or more).). This is an extract derived by DIAL from the Auditor Certificate (hence not stamped by the Auditors).*
>
> *Please note, that monthly values are last month contracted values as per the contracted term. However, the value considered for FY2013-14 is a pro-rata*

(i.e., partial year charged at old rate, remaining at revised rate) as per the contracted annual renewal term. As such a multiplication by 12 will not reconcile with the numbers considered in the model."

17.47. The Authority has noted from the Tariff Model submitted by DIAL that value of repairs & maintenance costs under long term contracts is expected to increase due to inflation, increase in operations and maintenance cost under this category and that DIAL has considered an escalation of 20% on renewal of existing contracts, 5% per annum in recurring annual costs and 7.415% per annum in other costs without including the inflationary growth.

17.48. The Authority has noted DIAL submission regarding projections of maintenance expenses towards security related equipment. It has also noted that these expenses are being considered by DIAL as operating expense towards determination of aeronautical tariff rather than towards PSF (Security Charge) Accounts. The Authority has noted from the Tariff Model that these are included under the Repairs and Maintenance Additional expenses category. In line with the discussions presented in paras 3.18 to 3.31 above, the Authority proposes to accept these expenses towards determination of aeronautical tariff.

Security Related Expenses

17.49. The Authority has noted from the Tariff Model submitted by DIAL that security related expenses have been considered at Rs. 11.43 crore and Rs. 12.09 crore in FY2012-13 and FY2013-14 respectively. The Authority has sought Auditor's Certificate for the same and is now in receipt of this certificate. The Authority has noted from the Tariff Model that these expenses are expected by DIAL to increase at 7.415% per year in the second Control Period.

17.50. The Authority has noted that DIAL's submission regarding security related maintenance expenditure is based on the assumption that these will not be allowed as part of PSF (Security Charge). Based on the discussions presented in paras 3.18 to 3.31 above, the Authority proposes to consider these expenses towards determination of aeronautical tariff.

17.51. *Manpower Outsourcing:* The Authority has noted from the Tariff Model that Manpower Outsourcing expenses were to the tune of Rs. 41.41 crore and Rs. 41.31

crore in FY2012-13 and FY2013-14 respectively. The Authority has sought Auditor's Certificate for these numbers and is in receipt of the same. The Authority has noted from the Tariff Model that the projections for these expenses during the second Control Period are based on a 7.415% increase per annum. However, as discussed in para 17.85 below, the Authority has considered this component to increase at 8% per annum in the second Control Period.

IT JV Expense

17.52. The Authority has noted that DIAL has incorporated a JV with Wipro to provide IT services at IGI Airport, Delhi. The Authority understands from DIAL submissions that the net of (a) revenue from IT JV (sum of CUTE and Non-CUTE revenue) and (b) expenses towards the IT JV is the amount considered by DIAL as net expense (called as subsistence cost) on account of IT JV. The Authority is in receipt of the Contract Agreement between DIAL and Wipro providing monthly service charges for July 2010 – March 2020 period. It has also noted the details on proposed capital expenditure to be incurred by IT JV and the consequent amount payable towards repayment of loan and interest costs.

17.53. The Authority noted from the IT JV contract that, the subsistence cost to be paid by DIAL to the JV includes the repayment liability of JV towards the capital cost and interest cost of the Capex incurred by the JV as well as other expenditures of the JV. The Authority is in receipt of the Auditor's Certificate certifying the net IT JV expense in FY2012-13 and FY2013-14.

17.54. The Authority has noted from the Tariff Model that the Non CUTE revenues were Rs. 16.63 crore in FY2012-13 and then increased to Rs. 26.46 crore. These are expected to remain unchanged at Rs. 26.46 crore in the second Control Period and CUTE revenues are expected to increase at 4.6% per year in the second Control Period.

Insurance Costs

17.55. The Authority has noted DIAL's submission regarding its insurance costs related to its insurances policies for - Property Damage, Business Interruption, AOL/3rd Party Liability Policy and Terrorism Policy. The Authority had sought the Auditor Certificate for these numbers for FY2013-14. The Authority is in receipt of the Auditor's Certificate for total insurance expenses incurred in FY2013-14. The Authority has noted from the Tariff Model that insurance cost for AOL/3rd party liability is given as the actual expense on this account in FY2012-13 and for the other 3 categories, namely Property Damage, Business Interruption and Terrorism Policy has been calculated as a % of gross block, gross revenue and % of sum of gross revenue and gross block respectively.

17.56. The Authority has also noted from the Tariff Model that the respective rates are increasing by 10% every year during the second Control Period. The Authority has sought clarification on the future assumption of insurance and 10% increase in the rates in the second Control Period. The Authority is in receipt of clarification by DIAL submitted on 07.04.2014 that mentions that the future forecast of Insurance is calculated based on the asset base and the likely rates of insurance. Additional clarification made by DIAL are as follows,

"Further, we would like to clarify that the insurance costs have been estimated with the best of understanding and bearing in mind the past increase in insurance rate. The insurance costs have been projected to increase by 10% annually. We have assumed the rise in the costs considering the past experience and future insurance rates anticipated.

Policy Period	*2011-12*			*2012-13*		
Value in Rs. Crores	*Cover*	*Premium Paid*	*%*	*Cover*	*Premium Paid*	*%*
Terrorism - Loss limit with sum insured as per IAR	*3,000*	*2.75*	*0.09%*	*3,000*	*2.78*	*0.09%*
Airport Operator Liability	*3,375*	*1.97*	*0.06%*	*4,162*	*2.21*	*0.05%*
(in USD million)	*750*			*750*		
IAR (A+B+C)	*12,632*	*3*	*0.02%*	*14,132*	*4.7*	*0.03%*
Property (A)	*10,632*			*10,632*		
Loss of Profit (FLOP) (B)	*2,000*			*3,500*		
Total		*7.72*			*9.69*	
Percentage of Insurance Cost		*0.0406 %*			*0.0455%*	
Year on Year Growth in cost					*12%*	

"

17.57. The Authority has also noted from the Tariff Model that there is a Miscellaneous Insurance cost expense included under the total Insurance cost expense. This is projected by DIAL to increase at 7.415%.

Water Charges

17.58. The Authority has noted DIAL submission that FY2012-13 numbers for water charges are not representative of the true cost of water due to shortage of supply as well as the internal maintenance expenditure related to water and recoveries. The Authority has noted from the Tariff Model that there are water charges associated with DJB and additional supply and recoveries, provided for FY2012-13 and FY2013-14. The Authority has sought Auditor's Certificate for these numbers. The Authority is in receipt of the Auditor's Certificate certifying the total charges for water from DJB and additional supply and the recoveries. Regarding future projections of water charges, DIAL has provided the following clarification in its submission dated 07.04.2014,

"However, we would like to clarify that the future forecast of Water charges is not based on the actual expense for FY2013-14. The water charges are calculated based on likely usage and the applicable rates as prescribed by DJB."

17.59. The Authority also sought further information regarding water charges in the second Control Period as the information provided by DIAL could not be reconciled with the charges under this head in the Tariff Model. The Authority received following clarification from DIAL on 15.04.2014,

"DIAL is procuring Water from DJB at the prevailing rates and it is supplied to various concessionaires, airline operators and other services providers at the airport. The cost of the water supply to these entities is recovered from them; hence the net expense is booked in the DIAL financials.

The water charges with effect from 1st January, 2012 were INR 121 per kilo liter (as per annexure M of our previous submission). Water charges will increase 10% annually from INR121 in FY12 to INR 214 in FY19. The rates have been multiplied with the daily requirement of 3 million liters of water every day to arrive at the final water charges for the respective years.

2012-13	*Water Rate @ Rs. 121 /KL*

2013-14	*Water Rate @ Rs. 133 /KL*
2014-15	*Water Rate @ Rs. 146.5 /KL*
2015-16	*Water Rate @ Rs. 161 /KL*
2016-17	*Water Rate @ Rs. 177 /KL*
2017-19	*Water Rate @ Rs. 195 /KL*
2018-19	*Water Rate @ Rs. 214 /KL*

The water supply at airport is provided by Delhi Jal board (DJB). DJB is committed to give us a water supply of 3 MLD per day. The current supply is very low and efforts are on to augment the supply and as such 2012-13 numbers are not representative of the true cost of water. Based on the above following are the amounts forecasted towards water charges.

FY	*Water demand/per day*	*Yearly Water Volume MLD*	*Rate*	*Water Charges IN INR*
2014-15	*3MLD*	*1095*	*146.41*	*160,318,950*
2015-16	*3MLD*	*1095*	*161.05*	*176,350,845*
2016-17	*3MLD*	*1095*	*177.16*	*193,985,930*
2017-18	*3MLD*	*1095*	*194.87*	*213,384,522*
2018-19	*3MLD*	*1095*	*214.36*	*234,722,975*

Mistakenly, in our previous submission we missed out on the additional sewerage charge in the model, i.e., 60% of water volumetric charges. So, we propose that correct rates should be incorporated in the model while projecting for water charges. Corrected water charges are as below:

2014-15	*Water Rate @ Rs. 234.25 /KL*
2015-16	*Water Rate @ Rs. 257.68 /KL*
2016-17	*Water Rate @ Rs. 283.45 /KL*
2017-19	*Water Rate @ Rs. 311.79 /KL*
2018-19	*Water Rate @ Rs. 342.97 /KL*

The 'Water charges – DJB' need to rectify as under:

Values in Rs. Crores	*FY2012-13*	*FY2013-14*	*FY2014-15*	*FY2015-16*	*FY2016-17*	*FY2017-18*	*FY2018-19*
Water charges – DJB were calculated as (Row 441)	*1.95*	*14.56*	*16.04*	*17.63*	*19.38*	*21.32*	*23.45*
Water charges – DJB need to considered as (Row 441)	*1.95*	*23.30*	*25.67*	*28.21*	*31.01*	*34.11*	*37.53*

"

17.60. The Authority notes from DIAL submissions that DIAL has a demand of 3 MLD of water on daily basis, however the amount being currently supplied to DIAL is much less. The Authority further notes that DIAL has been efficiently managing its operations with the existing level of water supply. The Authority has considered the submission from DIAL that DIAL is in discussions with DJB for ensuring a supply of 3 MLD per day. In absence of any confirmation from DJB as on date and considering the requirements of DIAL, the Authority proposes to consider the growth in volume of water consumption at IGI Airport, Delhi at the same rate as that of growth in passenger traffic. Additionally the Authority has noted from DIAL submission that the tariff for water supply is proposed to be increased at 10% per annum and the Authority proposes to consider the same in its projection of water expenses along with the increase on account of volume growth for IGI Airport, Delhi.

Administrative Expenses

17.61. The Authority has noted DIAL's submission dated 11.11.2013 on administration expenses. The Authority had sought Auditor's Certificate for each of the sub-heads under Administration costs for FY2012-2013 and FY2013-14. The Authority is in receipt of the same. The Authority has noted from the Tariff Model and DIAL submission in Para 17.9 that for categories other than "Other Administrative Expenses", Property Tax and Other Finance Charges, the projections for the second Control Period are based on the assumption that these costs will increase at a real rate of 5% per annum through the period.

Property Tax

17.62. The Authority has noted from DIAL's submission that it is required to pay property tax to Municipal Corporation of Delhi (MCD) and Delhi Cantonment Board (DCB). The Authority has also noted from the Auditor's Certificate that the property tax paid in FY2013-14 was Rs. 6.94 crore and DIAL made provision for Rs. 53.65 crore as cumulative provision towards property tax. Further, the Authority has noted that DIAL has considered Rs. 33.61 crore towards property tax in each year of the second Control Period. In response to a clarification from the Authority, DIAL responded as under,

"DIAL has to pay property tax to:

1. Municipal Corporation of Delhi (MCD); and

2. Delhi Cantonment Board (DCB).

The amount of property tax as per Demand Notices raised by MCD is Rs. 22.18 Crore per annum (For F.Y 2012-13), and same were submitted to Authority along with the Tariff proposal submitted on 10th November 2013 (as Annexure N). The future projections are based on same amount only.

A notice has been received from the DCB for payment of property tax. The methodology and valuation for property tax is not firmed up but based on the principles applied in case of MCD, the amount payable has been calculated on a proportion basis. It is assumed that same principles, rates and classifications as adopted by MCD will be used by DCB.

Therefore at this stage we have considered approx. Rs. 33.61 Crores annually based on the demand of MCD. This forecast of property tax is subject to true up."

17.63. The Authority finds the property tax of Rs. 33.61 crore projected by DIAL in each year of the second Control Period to be considerably higher than the property tax actually paid by DIAL in the last two years of the first Control Period. Further, as property tax to be paid by DIAL is a mandatory expense governed by regulatory determination by MCD and DCB, the Authority proposes to consider the property tax actually paid by DIAL in a recent year as property tax liability for each year of the second Control Period for the purpose of determination of aeronautical tariffs. Accordingly, the Authority proposes to consider the property tax paid by DIAL in FY2013-14 of Rs. 6.94 crore to be considered in each year of the second Control Period.

17.64. Further the Authority has sought Auditor's Certificate certifying the split between property tax paid on airport infrastructure assets and non-transfer assets of DIAL. The Authority proposes to consider property tax paid by DIAL on airport infrastructure assets only towards computation of ARR. In response to a clarification, the Authority is in receipt of a confirmation from DIAL that *"the actual payment in FY2013-14 and projections does not include tax levied on Non Transfer land and assets"*.

17.65. Furthermore, the Authority proposes to true-up these values as per actual property tax paid by DIAL in each year of the second Control Period at the time of determination of aeronautical tariff for the third Control Period. The Authority will also appropriately consider any property tax, which DIAL would have recovered from or which was borne by third party on behalf of AAI / DIAL as per respective contractual arrangements.

Electricity & Fuel Costs

Power

17.66. The Authority has noted that in DIAL's submission dated 11.11.2013, DIAL has calculated utility costs as a sum of power charges at net of recovery from the airlines and concessionaires and fuel charges. The Authority has sought Auditor's Certificate for Utility costs for FY2013-14. The Authority is in receipt of the Auditor's Certificate certifying the respective values for power expenses (net of recovery) and fuel charges.

17.67. The Authority has also noted DIAL's submission regarding increase in electricity rates at 7.51% CAGR from April 2010 to March 2013. The Authority has also noted DIAL's assumption that these rates will continue to increase at 7.51% per annum over the second Control Period in addition to an increase at 5% per annum in the consumption on account of higher activity at the airport resulting in projected increase of 12.89% per annum in electricity expense.

17.68. The Authority has noted from DIAL submissions (refer para 10.16 above) that it has operationalized a solar plant of 2 MW capacity at IGI Airport and proposes to expand this solar plant during the second Control Period. The Authority has also noted that while DIAL will need to incur additional operating expense for operation of solar plant, DIAL expects to benefit from the electricity generated from the solar plant resulting in savings in electricity expense for DIAL.

17.69. DIAL has provided further clarification on the existing solar plant vide its submission dated 01.06.2014 as below,

> *"Further, We would like to clarify that cost of solar power plant capitalized during Q4 of FY2013-14 is Rs. 14.8 Crores. However, the contract is not yet closed. And the Units generated from the said solar power plant are as follows:*

Period	*Actual Units Generated*
15 Jan 14 to 31st March 14	*6,61,000*
1 April 14 to 20 May 14	*4,93,000*

"

17.70. The Authority has sought details regarding the solar plant Capex, utilization and savings resultant from the project, to ascertain its cost benefits are properly accounted for. The response from DIAL is presented in 10.16 above. Accordingly, the Authority proposes to consider DIAL submissions towards the expected operating expense for operation of solar plant and projected savings in electricity expense due to electricity generated from the plant.

17.71. As regards the electricity expense, the Authority proposes to account for the actual cost of electricity billed by the concerned regulatory authority. The Authority also proposes to adjust any electricity cost recovered from or to be borne by third party for consideration towards determination of ARR.

Fuel Costs

17.72. The Authority has also noted DIAL's submission regarding the increase in fuel rates at a CAGR of 25.28% between April 2010 and March 2013. The Authority has also noted DIAL's submission that fuel rates are projected to increase at this rate over each year in the second Control Period in addition to the projected increase in the consumption of fuel at 5% per year resulting in 31.54% increase in expense on account of fuel.

17.73. The Authority has noted DIAL's submission of request for a 100% true up of fuel charges. However, in its clarification dated 01.06.2014, DIAL has withdrawn this request for true-up of fuel costs.

17.74. The Authority notes the submissions from DIAL on requirement of fuel for running DG sets and motor transport. The Authority finds the increase considered by DIAL at 31.54% in projection of fuel expense on a higher side.

VRS Payment

17.75. The Authority has noted that DIAL, in its submissions, has considered VRS payment to AAI as an operating expense with 91.6% allocation towards aeronautical activities. The Authority is in receipt of a letter forwarded by DIAL from AAI dated 19.07.2011, providing the monthly VRS payments or Retirement Compensation Claim for the period May 2009 to April 2019. The Authority is also in receipt of computation of annualized VRS payment schedule from the above monthly schedule which is given below,

Table 49: Schedule for VRS payments from DIAL to AAI

Annualised Figures	1-Apr-10	1-Apr-11	1-Apr-12	1-Apr-13	1-Apr-14	1-Apr-15	1-Apr-16	1-Apr-17	1-Apr-18	1-Apr-19	1-Apr-20	1-Apr-21
	31-Mar-11	31-Mar-12	31-Mar-13	31-Mar-14	31-Mar-15	31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19	31-Mar-20	31-Mar-21	31-Mar-22
VRS Payments (in Crores)	20.10	19.68	19.38	19.07	18.72	18.26	17.61	17.07	16.48	1.36	0.00	0.00

"

17.76. The Authority notes that VRS has been capitalized in the books of DIAL as an intangible asset. The Authority, vide Decision no 7.a. of its Delhi Tariff Order 03 / 2012-13, decided to expense out VRS based on the actual payments made by DIAL instead of the proposed schedule. However, for projections during the second Control Period, the Authority proposes to consider the schedule of VRS payments as submitted by DIAL which itself is based on the VRS schedule presented above. The Authority also proposes to true it up based on the actual payments made by DIAL during the second Control Period and not merely as per the scheduled originally decided.

Study on Efficient Operation and Maintenance Cost

17.77. In order to determine the efficient operating and maintenance costs of IGI Airport, Delhi, the Authority had commissioned an independent study by ICWAI. The Authority is in receipt of a letter from ICWAI that states that *"the Authority may take the operating and maintenance expenses incurred for the FY 2012-13 as the costs for efficient operation in the formulating the consultation paper for the next control period."* This is discussed in detail in Para 6.22 above.

17.78. The Authority also notes that the terminal was commissioned by DIAL in FY 2010-11 and operations at the terminal have stabilized by now and accordingly actual operating expense for DIAL for FY 2012-13 reflects the operating requirements of the airport. IGI Airport has witnessed moderate increase in the passenger growth and there has not been any considerable expansion of its terminal or other facilities. Based on the ICWAI study and the above, the Authority is of the view that operating costs for FY 2012-13 are the efficient operation and maintenance cost.

17.79. The Authority has noted from DIAL submissions that the actual values for operating expenses for the first Control Period materialized as follows,

Table 50: Actual Aeronautical Operating Expenses for DIAL for first Control Period as per Auditor's Certificate

INR crore	2009-10	2010-11	2011-12	2012-13	2013-14
Staff Cost	91.28	125.11	128.05	111.08	110.12
Administrative & General Expenses	60.04	86.24	106.19	95.88	108.13
Electricity & Water Charges	31.21	61.29	86.89	98.17	106.54
Operating Expenses	113.12	178.06	193.06	227.06	260.01
Sub-total	**283.20**	**450.61**	**514.19**	**532.20**	**584.80**
Growth , y-o-y%		**59.12%**	**14.11%**	**3.50%**	**9.88%**
Average growth p. a, %	**21.65%**				
Payment to AAI for VRS	71.83	29.38	43.26	17.40	17.12
Interest on DF expensed	0	0	162.12	0	0
Airport Operator Fee	13.01	15.38	17.61	18.91	68.00
Property Tax	0.00	0.00	13.13	1.21	6.07
Total Operating Expenses	**368.03**	**495.37**	**750.31**	**569.72**	**676.00**
Note: The numbers in this Table are derived after allocation of respective expenses into aeronautical component.					

17.80. The Authority notes that the operation and maintenance cost for FY 2013-14 comes to Rs. 584.80 crore, which is an increase of 9.88% over FY 2012-13. Considering that the inflation in FY 2013-14 was 9.50%[2], the real increase in operating expenses from FY 2012-13 to FY 2013-14 works out to less than 1%. Thus the Authority considers the actual operating costs for FY 2013-14 as reasonable and appropriate as the base for projection of operating costs for the second Control Period.

17.81. As regards the growth rate to be considered for projection of this efficient operation and maintenance cost for the second Control Period, the Authority has had reference to the growth rates considered by it during the first Control Period and the actual growth rates witnessed by DIAL during the first Control Period. The Authority has noted that the actual growth rates have turned out to be significantly different from what was projected.

17.82. Further, the Authority has noted DIAL's revised submission for operating expenses in the second Control Period to be as follows,

Table 51: Projected Aeronautical Operating Expenses as per DIAL for the second Control Period

INR crore	2014-15	2015-16	2016-17	2017-18	2018-19

[2] CSO Release 30th May 2014

INR crore	2014-15	2015-16	2016-17	2017-18	2018-19
Aeronautical Operating Expenses	913.10	961.69	1,103.73	1,151.19	1,164.42
Growth , y-o-y%	17.00%	5.32%	14.77%	4.30%	1.15%
Average growth p.a, %	8.51%				

17.83. The Authority notes from DIAL submission that the average growth for the operating expenses (aeronautical) projected by DIAL for the second Control Period is 8.51% which does not include inflation. DIAL has projected year to year increase in expenses as well as has asked for increase in CPI inflation on yearly basis. This growth rate (8.51%), including inflation as per RBI projections of 6.6%, would work out to 15.67%. On account of fluctuations in growth rates as well as need for maintaining efficiency in operations, the Authority is not persuaded to accept DIAL's projections.

17.84. On balance, the Authority proposes to consider annual growth rate of 8% for each sub-head of the operating costs including projected inflation at 6.6% (Average CPI-IW forecast for FY 2014-15 to FY 2018-19 as per RBI Survey of Professional Forecasters on Macroeconomic Indicators 30th round of) with a headroom (real increase) of 1.4%. As stated earlier, this real increase is more in line with the past trends at DIAL. The overall growth of 8% proposed to be considered for projection of operating expenses is expected to take into account the requirements of operational and maintenance needs. This growth rate will be applied on the efficient operation and maintenance cost for IGI Airport. As presented in para 17.80 above, the Authority proposes to consider the actual costs for FY 2013-14 as the base for projection of operating expenses for second Control Period.

17.85. However, the Authority, proposes to consider a 10% increase in manpower costs as discussed in para 17.37 above instead of 8% as considered for the remaining heads as given above.

17.86. The above approach is proposed to be followed for all sub-heads of operating expenses except for VRS expense, Property tax and Airport Operator Fee. For VRS expense, the Authority proposes to consider the values as per payment schedule agreed upon by AAI and DIAL, as presented in Table 49.

17.87. Similarly, the Authority proposes to consider Property tax at Rs. 6.94 crore as per DIAL submission of actual property tax paid in FY2013-14, in each year during the second Control Period, as this is of statutory nature and is not driven by inflation. Considering the disagreement between DIAL and MCD ("DIAL has paid the property tax under protest") and in absence of settlement of any statutory dues for property tax owed by DIAL to MCD, the Authority proposes to provide a true-up as per actual property tax paid by DIAL in the second Control Period at the time of tariff determination for the next Control Period.

17.88. Based on the adopted allocation of costs, the Authority proposes to consider the operating expenses of DIAL for the second Control Period to be as below,

Table 52: Aeronautical Operating Expenses considered by the Authority for the 2nd Control Period (2014-15 to 2018-19)

INR crore	2014-15	2015-16	2016-17	2017-18	2018-19
Airport operator fees (Only Aero)	84.87	76.73	31.68	35.09	38.88
Manpower cost	125.09	137.60	151.36	166.49	183.14
Operating expenses	286.50	309.40	334.13	360.84	389.67
Administration expenses	120.05	129.41	139.49	150.38	162.15
Property tax	6.08	6.08	6.08	6.08	6.08
Utilities cost	113.28	122.50	126.98	132.92	144.65
Payment to AAI for VRS	16.81	16.39	15.81	15.32	14.79
Total	**752.68**	**798.10**	**805.52**	**867.13**	**939.36**

17.89. The Authority is of the view that the operating expense for DIAL would evolve over the second Control Period in wake of increasing / varying traffic levels. The second control period being the first complete control period of stabilised operations can have a significant impact on how the operating costs evolve. DIAL has also submitted that it has postponed certain expenses to the second Control Period on account of paucity of funds and accordingly the Authority infers that the efficiency levels for DIAL may have to be relooked at the end of second Control Period. Schedule 1 of SSA requires the Authority to consider efficient operation and maintenance costs towards determination of aeronautical tariff.

17.90. Accordingly the Authority proposes to commission an independent study to assess the efficient operating costs of IGI Airport, Delhi for the second Control Period and to true-up the operating costs, based on the findings of the study, at the time of determination of tariff for the third Control Period.

Proposal No. 15. Regarding Operating Expenses to be considered for determination of ARR for second Control Period

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

i. **To consider the cost allocation for the second Control Period as in Table 48 which is as per its Delhi Tariff Order No. 03/2012-13 for all sub-heads except VRS payment to AAI and Airport Operator Fee.**

ii. **To consider the allocation of VRS payment to AAI at the rate of manpower allocation while projecting aeronautical expenses for the second Control Period.**

iii. **To seek comments from stakeholders regarding methodology to estimate aeronautical component of the Airport Operator Fee out of the two approaches mentioned in para 17.29 above. For the time being, consider Airport Operate Fee as 3% of the Aeronautical Revenue as mentioned in para 17.30 above for the second Control Period.**

iv. **To consider actual costs incurred by DIAL for FY 2012-13 as the efficient operation and maintenance costs for IGI Airport, Delhi based on ICWAI study on efficient Operation and Maintenance cost.**

v. **To consider actual costs for FY 2013-14 as the base for projection of operation and maintenance costs for the second Control Period**

vi. **To adopt an average growth rate of 8.0% (based on inflation of 6.6% per annum and headroom in real growth of 1.4%) for projection of the operation and maintenance costs for the second Control Period except for manpower costs for which the Authority proposes to consider a growth rate of 10%**

vii. **To consider the inline baggage screening expenses incurred by DIAL towards security related requirements for determination of aeronautical tariff. Further, to bring to the attention and information of MoCA the inclusion of these elements of expenses of security, as the same is presently determined and monitored by MoCA.**

viii. **To commission an independent study to assess the efficient operating costs of IGI Airport, Delhi for the second Control Period and to true-up**

the operating costs, based on the findings of the study, at the time of determination of tariff for the third Control Period.

ix. **To true-up at the time of determination of tariff for the third Control Period (a) mandated costs incurred due to directions issued by regulatory agencies like DGCA; (b) All statutory levies in the nature of fees, levies, taxes and other such charges by Central or State Government or local bodies, local taxes/levies, directly imposed on and paid for by DIAL on final product/ service provided by DIAL. Furthermore, any additional payment by way of interest payments, penalty, fines and other such penal levies associated with such statutory levies, which DIAL has to pay for either any delay or non-compliance, the same would not be trued up.**

18. Taxation

a DIAL Submission on Taxation

18.1. DIAL's submission dated 11.11.2013 on Taxation is given as below:

"In this section, we describe the key considerations in relation to determination of corporate tax on the aeronautical services. SSA require that corporate, tax pertaining to aeronautical services shall be separately calculated and added as a building block to compute the final target revenue.

The computation of income tax, on aeronautical income, has been made on the prevailing Income Tax laws and rules. Further, the assumptions are as below:

- *The Aeronautical Segment has been treated as a standalone entity with its own tax computations. This may not necessarily reflect the overall tax computation of DIAL as a whole;*
- *In line with this, all items excluded from the calculations of the regulatory building blocks have been excluded from the regulatory tax computation. The items not taken into account include:*
    - *Non-aeronautical operating costs or depreciation;*
    - *Revenue share costs as they are mandated, to be excluded as per concession documents.*
    - *Tax Computation has also considered MAT provisions.*
- *In our current calculation we have not assumed any tax on true up revenue. This is based on the assumption that this tax was allowed by authority in earlier control period and there is no true up of taxation for first control period.*

  However at any stage if this stand is changed then we need to incorporate tax on true up revenues as well."

18.2. DIAL submission dated 11.11.2013 on forecast for corporate tax for the second Control Period as under:

"

INR Crore	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*
Corporate Tax	*410*	*604*	*769*	*981*	*1237*

"

18.3. DIAL's revised submission dated 23.07.2014 on forecast for corporate tax for the second Control Period as below:

"

INR Crores	*FY 2015*	*FY 2016*	*FY 2017*	*FY 2018*	*FY 2019*
Aero Corporate Tax	*250*	*711*	*891*	*1129*	*1413*

"

b Authority's Examination of DIAL Submissions on Taxation

18.4. The Authority has carefully examined DIAL submissions with regard to taxes to be considered towards determination of aeronautical tariff.

18.5. In its Delhi Tariff Order 03/2012-13, the Authority had decided to take into account the actual corporate tax paid by DIAL (apportioned on operations from aeronautical services) for the years FY2009-10, FY2010-11 and FY2011-12. For the balance period i.e., FY2012-13 and FY2013-14, the forecast of corporate tax payable on aeronautical earnings has been used for tariff determination. The Authority had also decided to review the actual corporate taxes on aeronautical earnings paid by DIAL, based on the audited figures as may be available and true up the difference between the actual corporate tax paid and that used by the Authority in the forecast.

18.6. However, the Authority has noted DIAL's submission on exclusion of following items for the purpose of regulatory tax computation:

"Non-aeronautical operating costs or depreciation, Revenue share costs and MAT provisions"

18.7. The Authority notes that if the above elements of costs are excluded from the composition of tax, the notional tax burden would be substantially higher than the actual burden on account of tax that is paid out by DIAL.

18.8. The Authority has noted that wordings of State Support Agreement (SSA) – "corporate taxes on earnings pertaining to aeronautical services". The Authority also notes that tax is a statutory payment due to the Government. Further, the tax is being expensed out as a building block in the target revenue computations. 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 DIAL would benefit unjustly. The Authority is of the view, that calculation of tax on theoretical basis without linkage to actual tax paid, being a statutory payment, is not appropriate.

18.9. The Authority proposes to determine such corporate tax pertaining to aeronautical earnings based on the consideration of actual / projected aeronautical revenue, operating expenses pertaining to aeronautical services, depreciation pertaining to aeronautical assets and interest expense and had considered the applicable tax rate. As the actual tax liability for DIAL would include the adjustment of its gross revenue by the amount of revenue share paid by it to AAI, the Authority proposes to consider revenue share as an expense purely for the purpose of calculation of corporate tax on earnings pertaining to aeronautical services. The Authority further clarifies that the depreciation, to be considered for such tax calculation, should be the depreciation on account of aeronautical assets only. The Authority is of the view that as Hypothetical Regulatory Base, to be determined in line with SSA, is of hypothetical nature and does not correspond to physical assets in the books of accounts of MIAL, depreciation on such assets should not be considered towards calculation of tax pertaining to aeronautical services.

18.10. The Authority estimates and proposes to consider the values for taxation in the second Control Period as below,

Table 53: Summary of Tax forecast for the second control period by DIAL

Component	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Corporate Tax (Rs. crore)	-	-	-	-	-

18.11. The Authority is not persuaded to reconsider its earlier decision. The Authority proposes that only the actual corporate tax paid that can be ascribed to aeronautical earnings will be reckoned for the purpose of determining the target revenue.

18.12. Since the actual corporate tax paid that can be ascribed to aeronautical earnings will be known at the end of the 2nd control period, the Authority also proposed to true up the same at the time of determination of the tariff for the third control period.

Proposal No. 16. Regarding taxation on aeronautical earnings

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

i. **To forecast the corporate tax payable on aeronautical earnings as indicated in the Table 53 and consider the same for ARR building block**

ii. **To true up the forecast figures of tax on aeronautical earnings of the 2nd Control Period as per the actuals at the time of determination of aeronautical tariff for the 3rd control period.**

19. Non-aeronautical revenue

a DIAL Submission on Non-aeronautical revenue

19.1. DIAL's submission on forecast methodology and classifications for Non-aeronautical revenue dated 11.11.2013 is as given below,

"In this section of the regulatory filing, we present forecasts of non-aeronautical revenues, together with explanations to support these.

Forecast methodology:

We have forecasted the Non-Aeronautical revenue based on the nature of revenue. There are services that generally grow in line with growth in:

1 ATM

2 International Passengers

3 Total Passengers

4 Cargo growth

5 Others: There are revenue streams which are not linked to any of the above drivers or are based on contracted amounts

We have taken the Numbers of the half Year ended 30th September 2013 and extrapolated the same for the full year assuming that the same growth trend will prevail in the II half of the year. These are the latest numbers available for the filing.

We have applied the traffic growth as per Mott McDonald report (MOTT) of traffic projection. MOTT did a detailed Traffic Forecast Exercise as a part of the original Master Plan in the year 2006.

This Traffic Forecast Report is an exhaustive analysis of the air-transport services in India based on:

- *The state of the airlines,*
- *The economic growth scenario in India and the entire globe,*
- *Historical past trends of traffic (passenger numbers, Cargo and ATMs-scheduled / non-scheduled , charters , general aviation , Defence and others),*

- *Regression analysis,*
- *Interaction with IATA and other major Airlines,*
- *Compilation of future economic growth figures,*
- *Tourism and trade figures from various national and international organizations and*
- *Judgment of various air transportation experts.*

Based on this, this Report has projections till 2036. The above forecast of non-aero is based on this traffic forecast of Mott McDonald.

Classification on Non Aeronautical Revenue Streams:

For the purpose of forecast, Non-aeronautical revenues streams are classified as below:

a) Air Traffic Movement (ATM) Linked revenues

- *Into-Plane (ITP) Concession;*
- *Ground handling (Bridge-mounted equipment (BME) ;*
- *Ground handling (GH);*
- *CUTE Counter Rental*

b) Overall Passenger Traffic Linked revenues

- *In-flight kitchen (IFK) ;*
- *Car parking and Public admission fee revenues;*
- *Retail revenues;*
- *Food & beverage revenues;*
- *Lounge revenues;*
- *Radio taxi revenues;*
- *Other Travel Services;*

c) International Passenger Traffic Linked revenues

- *Retail -Duty Free revenues;*
- *d) Other revenues*
- *Advertisement;*

- *Foreign exchange revenues;*
- *Rentals from land, space and hangars;*
- *Common Area Maintenance*
- *Transit Hotel;*
- *Airport Service Charges;*
- *ATM revenues;*
- *Telecom;*
- *Miscellaneous Income;"*

19.2. DIAL's submission on "Air Traffic Movement Linked Revenue" is given as below,

"A. Into Plane (ITP) Concession revenues

This section is concerned with the forecast of the into plane revenues.

We have two ITP concessionaires namely

1. M/s Indian Oil Skytanking Ltd. (IOSL); and

2. Bharat Star Services P. Ltd. (BSSPL)

These concessionaires are responsible for Procurement, Installation, and Maintenance & Operation of ITP Assets at IGI Airport. ITP concessionaires pay us 5% as concession fee.

Historical trend of fuel throughput & into plane farm is as below:

INR Crores	*2012-13*	*September 2013 (half year)*
Into Plane Service	*1.25*	*0.68*

ITP Assumptions:

- *These services are availed by flights using Terminal 3.*
- *Growth rate assumed here for revenue projections is of air traffic movements (ATMs) of 5.37% (CAGR) as per the Mott Forecast.*
- *Additional increase assumed over and above traffic growth is 5%.*
- *We also foresee a trend among airlines to opt for better fuel-efficient aircrafts such as 787, A320, Q400 etc. to reduce their operational cost.*

This will have negative impact of 3% on ITP throughput at IGIA. This is in line with the historical trend where the revenue has declined.

- *Apart from above there will not be any growth in this revenue stream from any other factor. There will not be any inflation-linked growth of Non Aeronautical revenues.*

Conclusion

Based on the aforesaid assumptions the forecast for the period starting from 2014-15 to 2018-19 is as below:

INR Crores	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Into Plane Concession Fee	1.36	1.46	1.57	1.68	1.80	1.94

B. Ground handling (Bridge-mounted equipment- BME)

Providers of bridge-mounted equipment pay a fixed percentage of revenue as concession fee. The total concession fee payable is calculated by multiplying total revenue by the revenue share percentage. Total revenue consists of following ground handling services:

- *Ground power unit revenue;*
- *Pre air-conditioning unit revenue; and*
- *Potable water revenue.*

forecasts for each revenue stream are based on MOTT forecast of air traffic movements as well as assumptions in aircraft types and use of remote stands. Rates are assumed to remain unchanged in real terms.

Historical trend of BME revenues is as below: INR Crores 2011-12

INR Crores	2011-12	2012-13	September 2013 (half year)
Bridge-mounted equipment revenues	4.43	5.96	3.18

BME Assumptions:

- *Growth of BME business is linked with ATM growth.*

- *We have applied ATM growth rate of 5.37% (CAGR) as forecasted by MOTT.*
- *Apart from above there will not be any growth in this revenue stream from any other factor. There will not be any inflation-linked growth of Non Aeronautical revenues.*

Conclusion

Based on the aforesaid assumptions the forecast for the period starting from 2014-15 to 2018-19 is as below:

INR Crores	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Ground handling Bridge-mounted equipment	6.36	6.70	7.06	7.44	7.84	8.26

C. Ground handling revenues

This section is concerned with the forecast of the ground handling concession fees payable. These are based on concession contracts with ground handling providers, and are fixed until the end of concession term. There are currently four authorised Ground Handling service providers at the airport:

1. *Cambata,*
2. *BWFS,*
3. *Air India-SATS and*
4. *Celebi.*

These providers make two types of payments:

a. Rental or annual licence fees, which has been covered below land rental below; and

b. A concession fee expressed as a percentage of revenue.

Historical Revenue of ground handling has been as below:

INR Crores	***2012-13***	***September 2013 (half year)***
Revenue from Registered Handlers	*40.66*	*21.82*
3rd Party Ground Handlers	*16.22*	*7.97*
Total Ground handling revenues	*56.88*	*29.79*

The Ground handling revenue of 2013-14 (half year) includes revenue from third party ground handlers of Rs. 7.97 Crores. In future we expect that due to changes in ground handling policy this revenue will not accrue to us. As such the revenue is forecasted based on only registered ground handlers.

Ground Handling Forecast Assumptions. This forecast is based on:

- *The ATM forecast, sourced from MOTT.*
- *ATM Growth is assumed to be 5.37% (CAGR) as forecasted by MOTT*
- *We have assumed a decline in rates of 2% due to increased competition.*
- *As per the terms of contract the GH price increase is based on WPI. As per contractual term with GH we are eligible for an increase equivalent to WPI every 3 years.*

The current RBI forecast of WPI for next 5 years is 6.1%.

Accordingly we have considered an increase of 18.3% (6.1% X 3) for the year FY2016 and FY2019. This is based on forecast report of professional forecasters released by RBI.

RBI Forecast of WPI:

- *Extract from RBI Forecast (Results of the Survey of Professional Forecasters on Macroeconomic Indicators – 24th Round (Q1:2013-14).*

Source: rbidocs.rbi.org.in/rdocs/Publications/PDFs/01MSPF270713.pdf

Split between different aircraft types, based on the current split and it is assumed to remain unchanged;

- *No revenues have been considered for NACIL "Air India" Flights (Both International and Domestic) as they are being self-handled by Air India SATS Ground handling company. There is no revenue accruing to DIAL from above.*
- *Apart from above there will not be any growth in this revenue stream from any other factor. There will not be any inflation-linked growth of Non Aeronautical revenues.*

The current ground handling forecast has been based on historic ground handling revenues.

- *The forecasted revenues have been increased at the ATM growth rate of each year.*
- *We have taken the revenue of registered ground handlers for 6 months ending September 2013 and extrapolated the same to arrive at 2013-14 numbers.*
- *These are the base numbers on which we have forecasted future revenues.*

Conclusion:

Based on the aforesaid assumptions the forecast for the period starting from 2014-15 to 2018-19 is as below:

INR Crores	*2013-14*	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*
Ground handling revenues	*43.64*	*45.98*	*57.32*	*60.39*	*63.63*	*79.32*

D. Cute Counter Rental (Charges)

Cute counter charges revenue for 2012-13 was as below:

INR Crores	*2012-13*	*2013-14 Half year*
Cute Counter Charges		
Domestic	*4.70*	*1.96*
International	*5.67*	*3.45*
Total	*10.37*	*5.41*

Assumptions:

- *Growth of cute counter charges is linked with ATM growth rate of 5.72% (CAGR) for domestic and 4.27% for international as per the Mott Forecast.*
- *Six months revenue of FY 2013-14 is extrapolated to arrive at complete year revenue and is used as base for future forecast.*

- *Apart from above there will not be any growth in this revenue stream from any other factor. There will not be any inflation-linked growth of Non Aeronautical revenues.*

Conclusion:

Based on the aforesaid assumptions the forecast for the period starting from 2014-15 to 2018-19 is as below:

INR Crores	*2013-14*	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*
Cute Counter Charges	*10.82*	*11.34*	*11.88*	*12.45*	*13.05*	*13.68*

"

19.3. DIAL's submission on "Total Passenger Traffic Linked Revenue" is given as below,

"A. In-flight kitchen (IFK) revenues

This section is concerned with the forecast of the in-flight kitchen concession fees. These are based on concession contracts with in-flight kitchen providers. The rates have been assumed to remain same due to competitive scenario. There are currently four providers of (IFK's) services at the airport:

1 Ambassador,

2 Oberoi,

3 Sky Gourmet and

4 Taj Sats.

All providers make two payments to DIAL:

- *Rental or an annual licence fee, which has been covered below land rental; and*
- *A concession fee expressed as a percentage of their total revenue (revenue earned from inflight and outside catering).*

The following are the historical revenues from In Flight Kitchen:

INR Crores	*2011-12*	*2012-13*	*September 2013 (half year)*
In-flight kitchen revenues	*36.62*	*33.20*	*17.15*

IFK Assumptions:

Inflight catering business usually grows at the rate of passenger growth rate; however we assume that there will be pressure in this stream due to followings:

o The airline business will be negatively impacted due to cessation of operations of full service airlines like Kingfisher and American Airlines

o Shift of PAX Traffic from Full service airlines to LCC.

o Most of the domestic airlines are changing their meal concept from Full Meal to Buy on Board (BOB). BOB are much lower priced than the Full Meal that is resulting in lesser revenue per meal to the caterer. We also foresee, increase in future demand of ready to cook meals (packaged meals) in flights.

o Competitive environment in IFK business has resulted in reduction in per meal prices.

o In view of the sluggish business environment we have not considered any growth for first two years.

o Thereafter we have only assumed a Y-o-Y increase of 4.60% (pax growth - CAGR) as forecasted by Mott.

o There is no other growth including inflation expected in this revenue source.

- *We have taken the revenue of 6 months ending September 2013 and extrapolated the same to arrive at 2013-14 numbers.*
- *These are the base numbers on which we have forecasted future revenues.*

B. Car parking, Entry Ticket and Left Luggage Facility revenues

DIAL has concessioned out car park to Delhi Airport Parking Services Private Limited ("DAPS"). DAPS provides car parking management, entry ticket and left luggage services at the Delhi Airport. The parking facilities at Terminal 1 and are also handle by DAPS. DAPS manages services at the airport and collect charges/fees as revenue from the users. The Delhi Airport has a five-storied car park.

An overview of the car parking, entry ticket and left luggage facility audited revenue for financial year 2011-12, 2012-13 and half year of 2013-14 is depicted in the following table.

INR Crores	*2011-12*	*2012-13*	*September 2013 (half year)*
Car park	*5.47*	*5.76*	*4.40*

The Car Park business is below tremendous pressure because of following:

o There has been a shift in passenger traffic to T1 from T3 due to shift of traffic towards LCC and the collapse of Kingfisher.

o The terminal T1 has limited parking space. This is resulting in a decline in the revenue from car park.

o Metro impact wherein we expect stiff competition in terms of pricing and passengers migrating towards the same over a period of time as it is convenient and fast mode to connect city has resulted in less usage of cars

o Impact of DTC buses both in T3 and T1 has resulted in less usage of cars

We have taken revenue of the half year ended 30th September 2013 as base for extrapolation to arrive at forecast of revenue for the control period. Forecasted revenue is escalated on following accounts:

o In year 2013-14 the revenue share has increased from 10% to 15% as per terms of contract.

o In 2015-16 Revenue share is scheduled to increase to 20% as per terms of contract.

o In 2016-17 one time Parking tariff increase by 15%. This is based on our assumption.

o Apart from above there is no growth expected due to any other factor including inflation

INR Crores	*2013-14*	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*
Car park (Incl. Entry ticket and Left	*8.80*	*8.80*	*11.73*	*13.49*	*13.49*	*13.49*

Luggage Fee)						

C. Retail

There are a number of concessionaires in Retail category at Delhi Airport. The revenue shares payable to DIAL are a percentage of total retail revenue. The percentage is provided in concession agreements with the concessionaires. The contracts also specify a minimum amount of guaranteed revenue (MMG). If the revenue multiplied by the revenue share percentage falls below this minimum guaranteed amount, the revenue share payment is replaced by the minimum guarantee.

An overview of the historical revenue is as below:

INR Crores	*2011-12*	*2012-13*	*September 2013(half year)*
Retail-Duty Paid	*42.35*	*54.45*	*31.10*

Increase of 28.6% in FY2013 vis-à-vis FY2012 was achieved as many large vacant retail spaces were let out to new concessionaires.

We have taken revenue of the half year ended 30th September 2013 as base for extrapolation to arrive at forecast of revenue for the control period. Forecasted revenue is escalated on following accounts.

Total passenger traffic growth of 4.60% (CAGR) as per Mott Study

1. Additional growth of 2% pa

2. Apart from above there is no growth expected due to any other factor including inflation.

INR Crores	*2013-14*	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*
Retail-Duty Paid	*62.20*	*66.36*	*70.80*	*75.54*	*80.60*	*85.99*

D. Food & Beverage and Lounges

DIAL has following major food and beverage concessionaires:

1. Travel Food Services (Delhi Terminal 3) Private Limited,

2. Devyani Food Street Private Limited and

3. Delhi Select Service Hospitality Private Limited,

4. Lite Bite foods Private Limited

5. Devyani International

These concessions have been entered into with the aim of undertaking the design, establishment, setting up, development, operation, maintenance and managements of food and beverage outlets at the Delhi Airport. The Delhi Airport has food and beverage outlets, falling within the categories of cafes and bars; fine dining; quick service restaurants and sweets and ice creams.

E. Lounge revenues

In case of lounges we get revenue share. The revenue shares payable to DIAL are a percentage of total lounge revenue. An overview of the audited revenue of financial year 2011-12, 2012-13 and half year of 2013-14 is as following:

INR Crores	*2011-12*	*2012-13*	*September 2013 Half year*
Food & beverage	*41.39*	*42.24*	*24.18*
Lounges	*20.10*	*18.82*	*10.39*

- *There is a shift of traffic from T3 to T1 due to collapse of Kingfisher and emergence of low cost carriers.*
- *The food and beverage option at T1 are limited and there is going to be pressure to be able to get the same level of revenue as 2012-13*
- *In T1 since the space is limited, the shift in passengers are not effectively being converted into revenue. Also due to limitation of space for large format concepts, there is growth limitation.*

We have taken audited revenue of the half year ended September 2013 as base for extrapolation to arrive at forecast of revenue for the control period.

Forecasted revenue is escalated on following accounts.

1. Total passenger traffic growth of 4.60 (CAGR) as per Mott Study

2. Apart from above there is no growth expected due to any other factor including inflation.

For Lounges the following is the list of concessionaires and the expected revenue:

Contract Name	Current Monthly Avg. Billing (in Rs. Crs)
Premium Lounge T1D SHA	0.05
Premium Port Lounge	0.31
ITC Lounge at T3, Int'l Wing	0.17
Premium Port Lounge, INL 04 T-3	0.16
Emirates Lounge, IL-8 T-3	0.27
Buddy Retail Amex Lounge Domestic Departure T-3	0.11
Singapore Airlines Lounge IL 09 (B)	0.09
Lufthansa Lounge IL 09 (A)	0.10
Nap & Massage T1D PPML	0.03
Air India Lounge	0.29
Grand Total	1.56
Annual Projected	18.75

For Lounges there is only overall pax growth used for escalation assumption because of the following reasons:

a. Impact of business in lounges due to shift in passengers to T1. The T1 is a small terminal with less option and as such revenue generation also is low.

b. Closure of Kingfisher has impacted business.

c. Impact on CIP Lounge operators due to direct lounge operations by airline

d. Consolidation of business and competition in terms of pricing

Following is forecast of Food & Beverage and Lounges

INR Crores	2014-15	2015-16	2016-17	2017-18	2018-19
Food & beverage	50.58	52.91	55.35	57.89	60.55
Lounges	19.61	20.51	21.46	22.45	23.48

Radio taxi

Radio taxi service providers pay fees to DIAL for the use of the facilities.

An overview of the audited revenue for financial year 2011-12, 2012-13 and half year of 2013-14 is depicted in the following table:

INR Crores	2011-12	2012-13	September 2013 - Half year
Radio Taxi	15.96	15.01	8.03

T

here is drop of about 6% in revenue from radio taxi in 2012-13 as shown above. The reasons of decline are

1 Availability of alternate means of transport like metro.

2 Shift to Black and yellow taxis due do tightening budgets both of the families and corporates.

3 Better connectivity by bus

We have taken revenue of the half year ended 30th September 2013 as base for extrapolation to arrive at forecast of revenue for the control period.

Forecasted revenue is escalated on following accounts.

1. An overall growth of 2% p.a.

2. Apart from above there is no growth expected due to any other factor including inflation.

INR Crores	*2013-14*	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*
Radio Taxi	*16.06*	*16.38*	*16.71*	*17.04*	*17.38*	*17.73*

F. Other Travel Services

There are other travel service portals/providers which occupy space at terminal and pay fees to DIAL for use of facilities. An overview of the audited revenues for financial year 2012-13 and half year of 2013-14 is depicted in the following table

INR Crores	*2012-13*	*September 2013 (Half year)*
Other Travel Services	*10.31*	*6.19*

We have taken revenue of the half year ended 30th September 2013 as base for extrapolation to arrive at forecast of revenue for the control period.

Forecasted revenue is escalated on following accounts.

1. An overall passenger growth of 4.6% p.a.

2. Apart from above there is no growth expected due to any other factor including inflation.

INR Crores	*2013-14*	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*
Other travel services	*12.38*	*12.95*	*13.55*	*14.17*	*14.82*	*15.50*

"

19.4. DIAL's submission on "Total Passenger Traffic Linked Revenue" is given as below,

"A. Retail-Duty-Free revenues

Duty free was concessioned out on a competitive bidding where the highest bidder was selected to manage the duty free operations at airport. The duty free is concessioned out to Delhi Duty Free Services Pvt. Ltd. (DDFS). DDFS was incorporated for the purpose of setting up, developing, operating, maintaining and managing the duty free outlets at the Delhi Airport.

DDFS is the largest duty free retail operator in India operating out of Terminal-3. The duty free shops at the Delhi Airport are spread across international departure and arrivals. DDFS provides a wide range of products for passengers such as perfumes, cosmetics, confectionery, liquor, tobacco, souvenirs and fashion. DDFS also has a specialty fashion area at the international departures area where travellers can purchase fashion products and accessories from luxury brands.

Contract with duty free provider also specifies a minimum amount of guaranteed revenue to DIAL (MMG). If the provider's revenue is multiplied by the revenue share percentage falls below this minimum guaranteed amount, the revenue share payment is replaced by the minimum guarantee. This is the case in every year of the forecast. The minimum guarantee for the concessionaire DDFS is expressed as a constant amount per passenger in US dollars.

An overview of audited revenue for financial year 2011-12, 2012-13 and half year of 2013-14 is as following:

INR Crore	*2011-12*	*2012-13*	*September 2013 Half year*
Retail-Duty Free – DIAL revenue share	*157.99*	*194.94*	*111.85*

However if we see the turnover of concessionaire in USD terms it is severly below pressure as shown below:

USD - million	*2011-12*	*2012-13*	*September 2013 Half year*
Retail-Duty Free turnover of concessionaire without promotional income	*97*	*109*	*57*
Growth %		*12%*	*5%*

The increase 2013-14 is mainly because of depreciation of Indian currency.

- *IN USD terms the growth is not high.*

- *The growth has severely declined in 2013-14 as shown above.*

We have taken revenue of the half year ended 30th September 2013 as base for extrapolation to arrive at forecast of revenue for the control period.

Going forward with the economy in a very bad shape the discretionary spend by passenger is going to be hit the most. The Duty Free mainly deals in luxury goods. This is the item that is impacted the most in an economic downturn. As such we expect that the performance of the Duty Free is going to be impacted in this control period.

Forecasted revenue is escalated on following accounts:

1. International passenger traffic growth of 4.60 (Intl Pax CAGR- as per Mott Study).

2. Additional growth of 2% pa

3. Apart from above there is no growth expected due to any other factor including inflation.

INR Crores	*2013-14*	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*
Retail-Duty Free	*223.70*	*238.67*	*254.64*	*271.68*	*289.86*	*309.26*

"

19.5. DIAL's submission of summary of the "Other Revenues" for the 2nd control period is given as below,

"A. Advertisement revenues

DIAL has concessioned out the advertisement below a competitive bidding to TIM Delhi Airport Advertising Private Limited ("TIMDAA"). DIAL gets a revenue share of 55% (up to 15 years) and 61% (from the 16th to the 20th year).

TIMDAA provides advertising opportunities within and outside the Delhi Airport. The sites awarded are classified below following major locations (i) locations at Terminal 3 - indoor and outdoor sites at Terminal 3; (ii) locations at other terminals – indoor and outdoor sites at Terminal 1; and (iii) metro stations.

Advertising opportunities within the airport is in the form of ambient lit banners; front lit static sites, backlit totems, digital media, wall wraps and pillars, promotional stalls, strollers, giant banners and light boxes. Advertising *opportunities outside the Delhi Airport are in the form of banners along the road to and from the Delhi Airport. Historical revenues till 2012-13 have been as below:*

INR Crores	*2011-12*	*2012-13*	*September 2013 Half year*
Advertisement	*65.85*	*70.43*	*40.54*

Advertisement is a discretionary spends of the corporates. Advertisement revenues are curtailed the most in an economic down turn. As such we expect pressure on the revenues in the future years.

2. Advertising business's growth depend on factors like macro-economic scenario and industry growth driven by corporate spends Due to slowdown and reduced spends by corporates on large OOH format, the growth is expected to be challenged.

We have taken revenue of the half year ended 30th September 2013 as base for extrapolation to arrive at forecast of revenue for the control period.

Forecasted revenue is escalated on following accounts

1. We have considered traffic growth of 4.6% YOY for the future during the control period

2. Apart from above there is no growth expected due to any other factor including inflation.

INR Crores	*2013-14*	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*
Advertisement	*81.08*	*84.81*	*88.71*	*92.79*	*97.06*	*101.52*

B. Foreign exchange

In case of foreign exchange, there is a cap on the commission chargeable by the concessionaires. The concessionaire share part of their commission with DIAL that is expressed as a percentage of their total turnover. The contracts with concessionaries also specify a minimum amount of guaranteed revenue (minimum monthly guarantee of MMG).

An overview of the audited revenue for financial year 2011-12, 2012-13 and half year of 2013-14 is depicted in the following table:

INR Crores	2012-13	September 2013 Half year
Forex	42.09	23.00

We have taken revenue of the half year ended 30th September 2013 as base for extrapolation to arrive at forecast of revenue for the control period.

Forecasted revenue for the period is escalated on following basis:

1. Growth assumed of 4.6% p.a. (international passenger growth) from 13-14 due to lower conversion on account of change in profile (higher NRI and tour groups whose spending is lower in Forex at airport)

2. Perceived higher value of USD and hence lesser spends

3. There is no other increase expected from inflation or any other factor

INR Crores	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Forex	46.00	48.12	50.33	52.64	55.07	57.60

C. Land License Revenue

In case of Land revenues, the same is based on various leases with Airlines, Government Agencies, Oil Companies and Private Agencies the lease revenue is derived. The rates have been escalated by average 7.5 % p.a. based on contracts.

INR Crores	2012-13	September 2013 Half year
Land License Fee	110.46	55.69
Prior period revenues booked in 2012-13		4.61
Net Revenue		105.85
Revenue from area likely to be surrendered during Control period II – being forecasted separately		19.09
Net		86.76

The above income is extrapolated below two heads:

1. Contracts which will continue without any interruptions

2. Contracts which are likely to be surrendered based on information available about their alternate arrangement.

INR Crores	2012-13
Total Revenue	105.85

Revenue from area which will progress normal increase	*86.76*
Revenue from area likely to be surrendered during Control period II – being forecasted separately	*19.09*

We have forecasted the revenue in following manner:

- *Revenue from areas that is not likely to be surrendered in current control period is escalated @ average 7.5% P. A.*
- *Revenues from areas that is likely to be surrendered in current control period. This amount is projected based on the likely date of surrender based on contracted rate of those areas.*
- *There is no traffic linked or any other growth expected due to inflation.*

e) It is envisaged that the following Land area will be surrendered. The area details and reason and year of surrender is as given hereunder:

Tenant	Area (Sq. mts.)	Reason	Surrender during Year
Celebi	5,563	Temporary allocation to be surrender	FY2012-13
Kingfisher Airlines	2,254	Operations closed	FY2012-13
Blue Dart	5,200	Excess area surrender	FY2013-14
DCSC	6,296	Excess area surrender	FY2013-14
ACAI	8,235	Relocating to Cargo Terminal	FY2014-15
CISF	2,907	Area surrender	FY2014-15
CISF	44,310	Relocating to area allotted by DDA	FY2016-17

Contacted lease rental from these parties is as below:

Tenant	Area (Sq. mts.)	2012-13	2013-14	2014-15	2015-16	2016-17
Celebi	5,563	1.61	-	-	-	-
Kingfisher Airlines	2,254	0.15	-	-	-	-
Blue Dart	5,200	1.80	1.93	-	-	-
DCSC	6,296	1.47	1.58	-	-	-
ACAI	8,235	1.42	1.53	1.64	-	-
CISF	47,217	12.64	13.59	14.61	12.49	13.42
Total	74,765	19.09	18.63	16.25	12.49	13.42

Conclusion:

Based on the aforesaid assumptions the forecast for the period starting from 2014-15 to 2018-19 is as below:

INR Crores	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Land License other than areas being surrendered	92.75	99.71	107.18	115.22	123.86	133.15
Revenue from surrendered areas	18.63	16.25	12.49	13.42	0	0
Total	111.38	115.96	119.67	128.64	123.86	133.15

D. Space rentals revenues

Space rental comes from lease of space within the terminals. The revenue for rentals is based on the contracts and the existing arrangements. The rates have been escalated by 7.5 % p.a. based on relevant contracts. Historical trend of revenues is as below:

INR Crores	2012-13	September 2013 Half year
Space Rental	55.33	20.58
Prior period revenues	10.05	
Net Revenue	45.28	
Revenue from area surrendered	2.20	
Net revenue	43.08	

The above income is extrapolated below two heads:

1. Contracts which will continue without any interruptions

2. Contracts which are likely to be surrendered based on information available about their alternate arrangement.

INR Crores	2012-13
Total Revenue	45.28
Revenue from area surrendered	2.20
Net revenue extrapolated	43.08

It is envisaged that the following Space areas will be surrendered during FY2013-14 period.

Tenant	Area (Sq. mts.)	Rental (Rs. Crs)	Reason
Paramount Airways	28.56	0.03	
Kingfisher Airlines	1,675.61	1.83	Operations closed at Delhi Airport
Nepal Airlines	25.33	0.03	Operations closed at Delhi Airport
Air Asia	47.00	0.04	Operations closed at Delhi Airport

MDLR Airlines	*69.60*	*0.06*	*Operations closed at Delhi Airport*
Aerosvit Airlines	*21.67*	*0.03*	*Operations closed at Delhi Airport*
Eat On Smart-Hotels	*115*	*0.02*	*Operations closed at Delhi Airport*
Travel Food Services	*16.45*	*0.04*	*Operations closed at Delhi Airport*
Nayak Aviation Services	*67.15*	*0.01*	*Operations closed at Delhi Airport*
Phillipines Air	*30.00*	*0.08*	*Operations closed at Delhi Airport*
Sahara Int'l Airport Pvt Ltd	*96.00*	*0.03*	*surrendered*
Total	*2,192.37*	*2.20*	

Considering the large surrender of spaces, the actual revenue of Rs. 20.58 Crs for the 6 months ending 30th Sep. 2013 is extrapolated and used as the base for forecasting of revenue in the next control period.

Conclusion:

Based on the aforesaid assumptions the forecast for the period starting from 2014-15 to 2018-19 is as below:

INR Crores	*2013-14*	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*
Space Rental	*41.18*	*44.27*	*47.59*	*51.16*	*54.99*	*59.12*

E. Common Area Maintenance Charge (CAM)

Maintenance cost of the Common Space is additionally recovered from lessee of space. The forecasting of such charge is based on the contracts and the existing arrangements. The rates have been escalated by 7.5 % p.a. based on normal increase in the contracts.

INR Crores	*2012-13*	*September 2013 Half year*
Common Area Maintenance	*2.96*	*3.75*
Prior period revenues	*1.29*	
Net Revenue	*1.67*	

We have extrapolated the half yearly numbers of September 2013 to arrive at 2013-14 numbers and used the same as base for forecasting the future revenues.

Conclusion:

Based on the aforesaid assumptions the forecast for the period starting from 2014-15 to 2018-19 is as below:

INR Crores	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
CAM	7.50	8.06	8.67	9.32	10.02	10.77

F. Hangar Rental

Hanger rental comes from lease of hangers to airlines. The revenue for rentals is based on the contracts and the existing arrangements. The rates have been escalated by 7.5 % p.a. based on relevant contracts.

INR Crores	2012-13	September 2013 Half year
Hangars	13.53	7.99

We have extrapolated the half yearly numbers of September 2013 to arrive at 2013-14 numbers and used the same as base for forecasting the future revenues.

Conclusion:

Based on the aforesaid assumptions the forecast for the period starting from 2014-15 to 2018-19 is as below:

INR Crores	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Hangars	15.98	17.18	18.47	19.85	21.34	22.94

G. Transit Hotel

Transit Hotel facility has been provided to the passengers at Terminal 3. The hotel business has been concessioned out to a third party for consideration in form of revenue share that is a fixed percentage of gross revenue. The revenue shares payable to DIAL is as a percentage of total turnovers of concessionaire. Contract with provider also specify a minimum amount of guaranteed revenue (MMG).

An overview of the audited revenue of financial year 2011-12, 2012-13 and half year of 2013-14 is as following:

INR Crores	2011-12	2012-13	September 2013 Half year
Transit Hotel	1.57	2.17	1.23

There is going to be a huge supply of hotels in CPD in the current control period and we do not expect revenue more than MMG from this concessionaire.

INR Crores	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Transit Hotel (MMG)	2.10	2.23	2.87	2.96	3.06	3.15

H. Airport Service Charges

All the concessionaires pay fixed monthly service charges for common services. Annually, the airport service charges are escalated by CPI on the first day of January every year.

The following are the Airport Service charge collected during 2012-13 and 2013-14 (Half Year ending September 2013):

INR Crores	2012-13	September 2013 Half year
Airport Service Charges	18.15	9.43

A CPI based growth of 7.7% (as per the forecast of Professional Forecasters Published by RBI for next 5 years) has been assumed as per the terms of contracts.

An overview of the forecasts is provided below:

INR Crores	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Airport Service Charges	18.86	20.31	21.88	23.56	25.37	27.33

I. Bank ATM revenue

On Bank and ATMs, there is a monthly rental per location per month. This is a fixed monthly amount payable to DIAL. The contracts with concessionaries also specify a minimum amount of guaranteed revenue (minimum monthly guarantee of MMG).

An overview of the audited revenue for financial year 2011-12, 2012-13 and half year of 2013-14 is depicted in the following table:

INR Crores	2011-12	2012-13	September 2013 Half year
ATM	11.36	11.37	7.09

We presume that going forward there will be no fresh leasing of ATM and Bank space and lease rental would remain constant during the forecasted period. There will be no increase in the revenue from Banks and ATM because the rates and area lease out is not increasing.

Following is the list of Concessionaires in Bank/ATM section:

Contract Name	Current Monthly Avg. Billing (in Rs. Crs)

Kotak ATM @T1D check-in	*0.02*
Indusind bank ATM @ T1D check-in	*0.02*
PNB ATM @ T1C canopy area	*0.01*
Kotak ATM T3	*0.15*
INDUSIND BANK LIMITED T3	*0.18*
EURONET SER. INDIA PVT LTD T3	*0.24*
SBI for operating Banking facility at T-3	*0.05*
Kotak ATM @ T1C canopy area	*0.02*
Standard Chartered Bank	*0.04*
Central bank of India ATM @ ACB	*0.05*
Standard chartered ATM @ACB	*0.04*
PUNJAB NATIONAL BANK T3	*0.02*
Yes Bank Ltd.	*0.13*
Allahabad Bank ATM T3	*0.10*
Grand Total	*1.07*
Annual Projected	*12.79*

An overview of forecast is provided below:

INR Crores	*2013-14*	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*
Bank ATM	*12.79*	*12.79*	*12.79*	*12.79*	*12.79*	*12.79*

J. Telecom/Branding

Revenue of telecom/ Branding for the year 2013-14 is forecasted based on 2011-12 revenue and it is escalated by passenger growth and further increased by 5% pa.

An overview of the audited revenue for financial year 2011-12, 2012-13 and half year of 2013-14 is depicted in the following table:

INR Crores	*2011-12*	*2012-13*	*2013-14 Half Year*
Telecom	*6.45*	*5.84*	*4.52*

Since the telecom is below tremendous pressure due to heavy losses and reduced margins there is expected to be a decline in the revenues and the pressure is likely to be huge going forward. We also expect some key telecom branding contracts which expire in near future to get renewed at a further lower value due to poor market sentiments. However we have not assumed any decline in current revenue.

Following is the list of Concessionaires in Telecom segment:

Contract Name	*Current Monthly Avg. Billing (in Rs. Crs)*
Contract to Vodafone for booster at IGI Airport	*0.05*

Contract to Idea Cellular for Booster at IGI	*0.05*
Airtel Ltd.	*0.01*
Reliance Communication @ T1D	*0.04*
Matrix Cellular (Int'l) Services Pvt Ltd. - Telecom	*0.09*
Aircel Facilitation Counter at T-3	*0.02*
Airtel Facilitation Counter & World Sim Card Count	*0.11*
Airtel BTS and MPAS	*0.05*
Airtel Laptop Charging Stations & Payphone - T-3	*0.05*
Aircel Ltd.	*0.05*
Grand Total	*0.51*
Annual Projected	*6.15*

INR Crores	*2013-14*	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*
Telecom	*6.15*	*6.15*	*6.15*	*6.15*	*6.15*	*6.15*

K. Other Miscellaneous

DIAL is likely to receive some other miscellaneous income, such as Passes issuance charges, Penalties and others. An overview of the audited revenue for financial year 2011-12, 2012-13 and half year of 2013-14 is depicted in the following table:

INR Crores	*2012-13*	*September 2013 Half year*
Passes/Penalties/Other Misc.	*4.86*	*0.87*

We presume that going forward these revenues would remain constant during the forecasted period.

INR Crores	*2013-14*	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*
Miscellaneous income	*1.74*	*1.74*	*1.74*	*1.74*	*1.74*	*1.74*

"

19.6. DIAL's submission of Cargo revenues for the 2nd control period is given as below,

"DIAL has given concession for Cargo Terminals to the following concessionaires as per the Operations, Management and Development Agreement (OMDA) signed between Airports Authority of India and Delhi International Airport Private Limited:

1. Celebi Delhi Cargo terminal Management India Pvt. Ltd. (CDCTMIPL)

2. Delhi Cargo Service Centre (DCSC)

These concessionaires provide cargo-handling service at Cargo Terminals at IGIA and give to DIAL

1. Revenue share from Cargo Handling and

2. Space rental

The revenue share % from both concessionaires is as below:

1. Celebi Delhi Cargo terminal Management India Pvt. Ltd. (CDCTMIPL): 36%

2. Delhi Cargo Service Centre (DCSC): 24%

Historical Cargo revenues of DIAL are as below:

INR Crores	*2011-12*	*2012-13*
Cargo Revenues from Concession (INR Crores)	*128.46*	*129.36*

A. Assumptions for forecast:

The Cargo forecast has been done below following assumptions:

1 Tonnage:

a. First year of the next control period, i.e., FY 2014-15 3.94% growth (half of the forecast of Mott) has been considered.

b. There has been a slowdown in growth of Cargo Volumes in last 2 years (negative by 5.56% and 1.52% respectively) and the same trend is seen in Q1 and Q2 of FY 2013-14. As such it is assumed that Cargo growth will remain in pressure. A similar trend has been noted in Domestic volume, hence in first year 2.75% growth (Half of Mott Forecast) is assumed.

c. Thereafter from 2015-16 onwards it is assumed that the Cargo Growth will be as per the growth forecasted by Mott McDonald

Traffic Forecast -Cargo	*2014-15 (% Growth)*	*2015-16 to 2018-19 (% Growth)*
International	*3.94%*	*7.88%*
Domestic	*2.75%*	*5.50%*

2 Market Share:

a. On International side, it is assumed that the market share of DCSC will gradually increase and market share of CDCTMIPL will decline in the next control period. It is to be noted that DCSC has a significantly lower revenue share of 24% than that of CDCTMIPL which is 36%.

b. On domestic side, market share of DCSC may remain constant at 75% during the next control period.

Market share	*2013-14*	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*
Celebi Market share						
International	*80%*	*70%*	*60%*	*60%*	*55%*	*55%*
Domestic	*25%*	*25%*	*25%*	*25%*	*25%*	*25%*
DCSC Market share						
International	*20%*	*30%*	*40%*	*40%*	*45%*	*45%*
Domestic	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*

4. Demurrage:

Demurrage is expected to continue to fall as is seen in historic trend. Last two years have shown a negative trend in Import and Export both. It is expected to fall further by 10% year on year.

5. X-Ray Screening:

X-Ray screening income will increase at the growth rate of Export and Outbound Volumes. Hence the average tonnage growth is assumed during the next control period.

B. Forecast methodology:

1. We have extrapolated the total revenue of DIAL based on revenue share of respective service providers to arrive at the total cargo market.

2. This we have bifurcated amongst Handling and Demurrage revenues.

3. We have considered growth on various revenue items as Handling and Demurrage as per the assumptions mentioned above.

4. Thereafter we have divided the total market amongst two concessionaires as given above.

5. Based on revenue share percentage of the concessionaire, the total revenue of DIAL has been arrived.

C. Revenue Forecast:

An overview of the forecast for 1st April 2014 to 31st March 2019 is provided below.

INR Crores	*2013-14*	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*

Cargo Revenues	*123.92*	*122.68*	*124.52*	*130.23*	*134.98*	*142.21*

D. Rationale for Drop in Revenues:

Revenue to DIAL is expected to drop Y-o-Y from FY 12-13 till 2015-16 due to the following reasons:

a. Shift in market share from CDCTMIPL to DCSC with revenue share declining from 36% to 24%.

b. Demurrage is expected to continue to fall as seen in historic trend. This will be enabled by improved facilities of cargo handling.

c. Marginal growth in Tonnage due to global slowdown. In the last 2 years there has been negative growth in International and Domestic."

19.7. DIAL's submission of summary of the projected Non-Aeronautical revenues for the 2nd control period, based on their submission dated 11.11.2013, is given as below,

"

In INR Crores	*FY 15*	*FY 16*	*FY 17*	*FY 18*	*FY 19*
Air traffic related revenues					
Into plane concession fee	*1*	*2*	*2*	*2*	*2*
Bridge-mounted equipment revenues	*7*	*7*	*7*	*8*	*8*
Ground handling revenues	*46*	*57*	*60*	*64*	*79*
Cute counter charges - Domestic	*4*	*4*	*5*	*5*	*5*
Cute counter charges - International	*7*	*8*	*8*	*8*	*9*
Subtotal Air traffic related revenues	*65*	*78*	*82*	*86*	*103*
Passenger traffic related revenues					
In-flight kitchen revenues	*34*	*34*	*36*	*38*	*39*
Car Parking	*9*	*12*	*13*	*13*	*13*
Retail-Duty paid	*66*	*71*	*76*	*81*	*86*
Food & beverage	*51*	*53*	*55*	*58*	*61*
Lounges	*20*	*21*	*21*	*22*	*23*
Radio taxi	*16*	*17*	*17*	*17*	*18*
Other travel services	*13*	*14*	*14*	*15*	*16*
Subtotal Pax traffic related revenues	*209*	*221*	*233*	*244*	*256*
Int'l passenger traffic related revenues					
Retail-Duty free	*239*	*255*	*272*	*290*	*309*
Subtotal Int'l pax traffic related revenues	*239*	*255*	*272*	*290*	*309*
Other revenues					

Advertisement	*85*	*89*	*93*	*97*	*102*
Forex	*48*	*50*	*53*	*55*	*58*
Land license fee	*116*	*120*	*129*	*124*	*133*
Space rental	*44*	*48*	*51*	*55*	*59*
Hangar	*17*	*18*	*20*	*21*	*23*
Common area management	*8*	*9*	*9*	*10*	*11*
Transit hotel	*2*	*3*	*3*	*3*	*3*
Airport service charges	*20*	*22*	*24*	*25*	*27*
Bank ATM	*13*	*13*	*13*	*13*	*13*
Telecom	*6*	*6*	*6*	*6*	*6*
Misc. others	*2*	*2*	*2*	*2*	*2*
Cargo	*123*	*125*	*130*	*135*	*142*
Subtotal Contract linked revenues	*484*	*503*	*532*	*546*	*578*
Total Non-Aero revenues	*997*	*1056*	*1118*	*1167*	*1247*

"

19.8. DIAL's revised submission dated 23.07.2014 on summary of non-aeronautical revenues is as below,

"We have revised the forecast for the next control period based on the audited numbers of 2013-14. Following is a summary of the revised forecast:

In INR Crores	*FY14*	*FY14*	*FY 15*	*FY 16*	*FY 17*	*FY 18*	*FY 19*
Air traffic related revenues	*Earlier Submitted*	*Actual*	*Revised Projection*				
Into plane concession fee	*1*	*1*	*1*	*2*	*2*	*2*	*2*
Bridge-mounted equipment revenues	*6*	*5*	*5*	*5*	*6*	*6*	*6*
Ground handling revenues	*44*	*45*	*47*	*58*	*61*	*64*	*79*
Ground handling revenues – 3rd Party	*0*	*18*					
Cute counter charges - Dom.	*4*	*5*	*5*	*5*	*5*	*6*	*6*
Cute counter charges - Int'l	*7*	*6*	*7*	*7*	*7*	*8*	*8*
Subtotal Air traffic related revenues	*62*	*80*	*65*	*77*	*81*	*86*	*102*

Passenger traffic related revenues							
In-flight kitchen revenues	*34*	*35*	*35*	*35*	*37*	*39*	*41*
Car Parking	*9*	*10*	*10*	*13*	*15*	*15*	*15*
Retail-Duty paid	*62*	*73*	*78*	*83*	*89*	*95*	*101*
Food & beverage	*48*	*48*	*50*	*52*	*55*	*57*	*60*
Lounges	*19*	*21*	*22*	*23*	*24*	*25*	*26*
Radio taxi	*16*	*17*	*17*	*18*	*18*	*19*	*19*
Other travel services	*12*	*15*	*15*	*16*	*17*	*17*	*18*
Subtotal Pax traffic related revenues	*201*	*218*	*227*	*240*	*254*	*266*	*279*
Int'l passenger traffic related revenues							
Retail-Duty free	*224*	*247*	*264*	*281*	*300*	*320*	*342*
Subtotal Int'l Pax traffic related revenues	*224*	*247*	*264*	*281*	*300*	*320*	*342*
Other revenues							
Advertisement	*81*	*90*	*94*	*98*	*103*	*107*	*112*
Forex	*46*	*48*	*50*	*52*	*55*	*57*	*60*
Land license fee	*111*	*99*	*107*	*110*	*114*	*108*	*116*
Space rental	*41*	*43*	*47*	*50*	*54*	*58*	*62*
Hangar	*16*	*17*	*19*	*20*	*22*	*23*	*25*
Common area management	*8*	*5*	*6*	*6*	*6*	*7*	*8*
Transit hotel	*2*	*3*	*2*	*3*	*3*	*3*	*3*
Airport service charges	*19*	*19*	*21*	*22*	*24*	*26*	*28*
Bank ATM	*13*	*15*	*15*	*15*	*15*	*15*	*15*
Telecom	*6*	*8*	*8*	*8*	*8*	*8*	*8*
Misc. others	*2*	*2*	*2*	*2*	*2*	*2*	*2*
Subtotal Contract linked revenues	*345*	*349*	*369*	*387*	*405*	*414*	*438*
Cargo revenues							
Cargo Concession fee – Brownfield	*82*	*94*	*85*	*77*	*81*	*79*	*82*

Cargo Concession fee – Greenfield	*21*	*22*	*28*	*36*	*37*	*43*	*45*
Cargo screening – Domestic	*6*	*7*	*7*	*8*	*8*	*9*	*9*
Cargo screening – Exports	*14*	*15*	*16*	*17*	*19*	*20*	*22*
Cargo others	*0*	*3*	*0*	*0*	*0*	*0*	*0*
Subtotal Cargo revenues	*124*	*141*	*136*	*138*	*145*	*150*	*158*
Total Non-Aero revenues	*955*	*1,036*	*1,062*	*1,124*	*1,185*	*1,236*	*1,319*

"

19.9. DIAL's revised submission dated 23.07.2014 on various sub-heads under non-aeronautical revenues is as below,

"Into Plane Concession fee:

Revised forecasted figures for FY15-19 have been updated based on the actual numbers of FY14, is as follows:

In Crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*1.36*	*1.46*	*1.57*	*1.68*	*1.80*	*1.94*
New Submission	*1.36*	*1.46*	*1.56*	*1.68*	*1.80*	*1.93*

Bridge mount equipment fee:

Revised forecasted figures for FY15-19 have been updated based on the actual numbers of FY14, is as follows:

In Crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*6.36*	*6.70*	*7.06*	*7.44*	*7.84*	*8.26*
New Submission	*4.94*	*5.21*	*5.48*	*5.78*	*6.09*	*6.42*

Ground handling revenues

We are revising the forecast based on the revised WPI forecast of RBI. Extract from RBI Forecast (Results of the Survey of Professional Forecasters on Macroeconomic Indicators – 28th Round (Q4:2013-

14)Source:http://www.rbi.org.in/scripts/PublicationsView.aspx?id=15761) giving the latest forecast is as under:

Annual Average Percentage Change								
	Annual average percentage change over the next five years				*Annual average percentage change over the next ten years*			
	Mean	*Median*	*Max*	*Min*	*Mean*	*Median*	*Max*	*Min*
Real GDP	*6.50*	*6.50*	*7.5*	*5.9*	*7.2*	*7.2*	*8.0*	*6.0*
CPI- Inflation	*6.9*	*7.0*	*8.0*	*5.5*	*6.3*	*6.5*	*7.5*	*5.0*
WPI Inflation	*5.4*	*5.5*	*6.2*	*4.3*	*5.1*	*5.5*	*6.0*	*3.5*

Revised forecasted figures for FY15-19 have been updated based on the actual numbers of FY14, is as follows:

In Crores	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
Earlier Submission	43.64	45.98	57.32	60.39	63.63	79.32
New Submission	44.64	47.04	58.03	61.14	64.42	79.48

Cute Counter Charges:

Revised forecasted figures for FY15-19 have been updated based on the actual numbers of FY14, is as follows:

In Crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*10.82*	*11.34*	*11.88*	*12.45*	*13.05*	*13.68*
New Submission	*10.98*	*11.51*	*12.08*	*12.66*	*13.28*	*13.93*

Inflight Kitchen Revenues:

Revised forecasted figures for FY15-19 have been updated based on the actual numbers of FY14, is as follows:

In Crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*34.30*	*34.30*	*34.30*	*35.88*	*37.53*	*39.25*
New Submission	*35.46*	*35.46*	*35.46*	*37.09*	*38.80*	*40.58*

Car Parking Revenues:

Revised forecasted figures for FY15-19 have been updated based on the actual numbers of FY14, is as follows:

In Crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*8.80*	*8.80*	*11.73*	*13.49*	*13.49*	*13.49*
New Submission	*9.65*	*9.65*	*12.87*	*14.80*	*14.80*	*14.80*

Retail (Duty Paid) revenues:

Revised forecasted figures for FY15-19 have been updated based on the actual numbers of FY14, is as follows:

In Crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*62.20*	*66.36*	*70.80*	*75.54*	*80.60*	*85.99*
New Submission	*73.08*	*77.97*	*83.19*	*88.76*	*94.69*	*101.03*

Food and Beverage revenues:

Revised forecasted figures for FY15-19 have been updated based on the actual numbers of FY14, is as follows:

In Crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*48.36*	*50.58*	*52.91*	*55.35*	*57.89*	*60.55*
New Submission	*47.73*	*49.93*	*52.22*	*54.62*	*57.14*	*59.77*

Lounges revenues:

Revised forecasted figures for FY15-19 have been updated based on the actual numbers of FY14, is as follows:

In Crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*18.75*	*19.61*	*20.51*	*21.46*	*22.45*	*23.48*
New Submission	*20.58*	*21.53*	*22.52*	*23.55*	*24.64*	*25.77*

Radio taxi revenues:

Revised forecasted figures for FY15-19 have been updated based on the actual numbers of FY14, is as follows:

In Crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*16.06*	*16.38*	*16.71*	*17.04*	*17.38*	*17.73*
New Submission	*17.12*	*17.46*	*17.81*	*18.17*	*18.53*	*18.90*

Other travel services revenues:

Revised forecasted figures for FY15-19 have been updated based on the actual numbers of FY14, is as follows:

In Crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*12.38*	*12.95*	*13.55*	*14.17*	*14.82*	*15.50*
New Submission	*14.58*	*15.25*	*15.95*	*16.69*	*17.45*	*18.26*

Retail – Duty Free revenues:

Revised forecasted figures for FY15-19 have been updated based on the actual numbers of FY14, is as follows:

In Crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*223.70*	*238.67*	*254.64*	*271.68*	*289.86*	*309.26*
New Submission	*247.05*	*263.58*	*281.22*	*300.04*	*320.12*	*341.54*

Advertisement revenues:

Revised forecasted figures for FY15-19 have been updated based on the actual numbers of FY14, is as follows:

In Crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*81.08*	*84.81*	*88.71*	*92.79*	*97.06*	*101.52*
New Submission	*89.70*	*93.83*	*98.14*	*102.66*	*107.38*	*112.32*

Forex revenues:

Revised forecasted figures for FY15-19 have been updated based on the actual numbers of FY14, is as follows:

In Crores	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
Earlier Submission	46.00	48.12	50.33	52.64	55.07	57.60
New Submission	47.98	50.19	52.50	54.91	57.44	60.08

Land License Revenue

We have revised filing based on the revised schedule of area to be surrendered.

The area details and reason and year of surrender are as given hereunder:

Tenant	Area (Sq. mts.)	Reason	Surrender during Year
Blue Dart	5,200	Excess area surrender	FY2015-16
DCSC	3,296	Excess area surrender	FY2015-16
ACAI	8,235	Relocating to Cargo Terminal	FY2016-17
CISF	2,907	Area surrender	FY2015-16
CISF	44,310	Relocating to area allotted by DDA	FY2016-17

Contacted lease rental from these parties is as under:

Tenant (INR Crores)	Area (Sq. mts.)	2014-15	2015-16	2016-17	2017-18	2018-19
Blue Dart	5,200	2.12	2.34	-	-	-
DCSC	3,296	1.70	1.83	-	-	-
ACAAI	8,235	1.76	2.02	2.33	-	-
CISF	2,907	4.56			-	-
CISF	4,952	7.76	8.34	8.97	-	-
CISF	39,358	2.29	2.46	2.64	-	-
Total	63,948	20.19	16.99	13.94	-	-

Conclusion:

Based on the aforesaid assumptions the forecast for the period starting from 2014-15 to 2018-19 is as under:

INR Crores	2014-15	2015-16	2016-17	2017-18	2018-19
Land License (other than areas being surrendered)	86.84	93.35	100.35	107.88	115.97
Land License (areas being surrendered)	20.19	16.99	13.94	0.00	0.00
Total	107.03	110.34	114.29	107.88	115.97

Space rental:

Revised forecasted figures for FY15-19 have been updated based on the actual numbers of FY14, is as follows:

In Crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*41.18*	*44.27*	*47.59*	*51.16*	*54.99*	*59.12*
New Submission	*43.41*	*46.67*	*50.17*	*53.93*	*57.97*	*62.32*

Hangar revenues:

Revised forecasted figures for FY15-19 have been updated based on the actual numbers of FY14, is as follows:

In Crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*15.98*	*17.18*	*18.47*	*19.85*	*21.34*	*22.94*
New Submission	*17.40*	*18.71*	*20.11*	*21.62*	*23.24*	*24.98*

Common Area Management revenues:

Revised forecasted figures for FY15-19 have been updated based on the actual numbers of FY14, is as follows:

In Crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*7.50*	*8.06*	*8.67*	*9.32*	*10.02*	*10.77*
New Submission	*5.23*	*5.62*	*6.04*	*6.50*	*6.98*	*7.51*

Transit Hotel revenues:

Revised forecasted figures for FY15-19 have been updated based on the actual numbers of FY14, is as follows:

In Crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*2.10*	*2.23*	*2.87*	*2.96*	*3.06*	*3.15*
New Submission	*2.70*	*2.23*	*2.87*	*2.96*	*3.06*	*3.15*

Airport Service Charge revenues:

Revised forecasted figures for FY15-19 have been updated based on the actual numbers of FY14, is as follows:

In Crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*18.86*	*20.31*	*21.88*	*23.56*	*25.37*	*27.33*
New Submission	*19.23*	*20.71*	*22.31*	*24.02*	*25.87*	*27.86*

Bank ATM revenues:

Revised forecasted figures for FY15-19 have been updated based on the actual numbers of FY14, is as follows:

In Crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*12.79*	*12.79*	*12.79*	*12.79*	*12.79*	*12.79*
New Submission	*14.63*	*14.63*	*14.63*	*14.63*	*14.63*	*14.63*

Telecom revenues:

Revised forecasted figures for FY15-19 have been updated based on the actual numbers of FY14, is as follows:

In Crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*6.15*	*6.15*	*6.15*	*6.15*	*6.15*	*6.15*
New Submission	*7.54*	*7.54*	*7.54*	*7.54*	*7.54*	*7.54*

Miscellaneous revenues:

Revised forecasted figures for FY15-19 have been updated based on the actual numbers of FY14, is as follows:

In Crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*1.74*	*1.74*	*1.74*	*1.74*	*1.74*	*1.74*
New Submission	*2.10*	*2.10*	*2.10*	*2.10*	*2.10*	*2.10*

"

b Authority's Examination of DIAL Submissions on Non-aeronautical revenue

19.10. The Authority has carefully examined DIAL's submission regarding all components of the non-aeronautical revenue for the second Control Period. The Authority's examination with respect to non-aeronautical revenue is presented below.

19.11. The Authority has sought from DIAL the Auditor's Certificates providing detailed break-up of revenues from aeronautical and non-aeronautical sources, duly reconciled with the amounts shown in the DIAL's Balance Sheets relating to FY2011-12, FY2012-13 and FY2013-14. The Authority is in receipt of the same.

19.12. The Authority has noted that, DIAL has projected the streams of non-aeronautical revenue for the second Control Period under five groups namely, (i) Air-traffic related revenues, (ii) Passenger traffic related revenue, (iii) International passenger traffic related revenue, (iv) Contract-linked revenue and (v) Cargo revenue. These groups have been formed by DIAL as per the key factor, which drives the growth of these revenues. Based on the growth rate of the drivers such as passenger traffic, ATM traffic and cargo traffic, each sub-head of non-aeronautical revenues has been projected by DIAL at respective growth rates. Contract-linked revenue has been projected on the basis of contractual provisions for various concessionaires. The values of non-aeronautical revenues projected by DIAL for the second Control Period are presented in Paras 19.8 and 19.9 above.

19.13. The Authority has noted that the growth in actual non-aeronautical revenues of DIAL in the first Control Period exhibits a fluctuating trend, as presented in the table below. The average growth of actual non-aeronautical revenues for the first Control Period works out to be 15.52% (including other income), as shown in the table below**Error! Reference source not found.**:

Table 54: Actual Non Aeronautical Revenue as per DIAL's financial statements in the first Control Period

INR Crore	**2009-10**	**2010-11**	**2011-12**	**2012-13**	**2013-14**
Actual Non Aero Revenue	594.31	576.96	776.21	885.22	1001.40
Growth , y-o-y%		-2.92%	34.53%	14.04%	13.12%
Average growth p.a	14.70%				
Other Income (excl. dividends)	8.46	11.50	16.35	23.60	44.63
Non Aero Revenue including Other Income	602.77	588.46	792.56	908.82	1,046.03
Growth , y-o-y%		-2.37%	34.68%	14.67%	15.10%
Average growth p.a	15.52%				

19.14. The Authority has further noted the DIAL projections for the non-aeronautical revenue for the second Control Period. DIAL has assumed other income to be nil for the second Control Period. The Authority has also noted that the average growth in total non-aeronautical revenues for the second Control Period as per DIAL's Tariff Model turns out to be 5.53%, wherein the projections do not include CPI inflation.

Table 55: Non Aeronautical Revenues projected by DIAL for the second Control Period

INR Crore	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Projected Non-Aero Revenues (incl. other Income at nil)	1,061.65	1,123.11	1,184.41	1,235.37	1,317.67
Growth , y-o-y%	5.79%	5.46%	4.30%	6.66%	5.43%
Average growth p.a	5.53%				

19.15. The Authority has observed that actual non-aeronautical revenue varies significantly from the projections made by it for the first Control Period in its Delhi Tariff Order No. 03/2012-13. Further, the Authority notes that the average growth in actual non-aeronautical revenues for the first Control Period is 15.52% (refer para 19.13 above), whereas the average growth in the projections of the non-aeronautical revenues made by DIAL for the second Control Period is 5.53% (refer para 19.14 above) which works out to be 9.25% (refer para 19.16.2 below). Due to the fluctuating trend in growth, the past growth of non-aeronautical revenue may not serve either as a benchmark or guide in making the non-aeronautical revenue forecast in the future. Hence, it may not be appropriate to make accurate projections about the non-aeronautical revenues growth in the second Control Period.

19.16. Thus in view of above, the Authority proposes to consider DIAL projections for non-aeronautical revenues under each sub-head for the second Control Period with the following exceptions:

19.16.1. The Authority has applied CPI inflation rate of 6.6% (refer 22.8 below) for each year in the second Control Period on all non-aeronautical revenue sub-heads other than contract-linked revenues. For the latter, the Authority proposes to consider revenues as projected by DIAL as per the contract agreements.

19.16.2. The Authority proposes to consider the actual revenue realized by DIAL for FY 2013-14 as the base for projections for the second Control Period. Accordingly, the average growth rate for non-aeronautical revenue projections for the second Control Period works out to be 9.25% (refer Table 56).

19.17. The Authority also proposes to true-up the non-aeronautical revenue based on the actual non-aeronautical realized by DIAL during the second Control Period at the time of tariff determination for the third Control Period.

19.18. Further, while making the projection for non-aeronautical revenue, the Authority has noted a sub-head under the name of “Other Incomes”, which captures revenue from Interest received from deposits with banks and other entities, profit on sale of Investments, Interest received on account of delayed payments, sale of other materials / scrap, profit on sale of depreciable assets, dividends, management fees, realised foreign exchange gain/loss and miscellaneous income. The Authority is of the view that this sub-head is contingent upon the internal cash flow management of DIAL and uncertain sources like foreign exchange / delay in payments etc. The Authority, for the time being, has projected this sub-head at 'nil' value for the second Control Period. However the Authority proposes to true up the "Other incomes" based on the actual values realized by DIAL during the second Control Period at the time of tariff determination for the third Control Period.

Cargo Revenues

19.19. As per DIAL submission, cargo revenue for DIAL has been segregated in three heads; (i) Space rental revenue (ii) revenue from demurrage and (iii) revenue from handling of cargo. Space rental revenue in DIAL projections has been projected on the basis of a flat growth rate of 7.5% per annum. Revenue from demurrage is projected to decrease at flat 10% per annum. Revenue from handling of cargo is projected to increase at the rate of cargo traffic growth.

19.20. The Authority has noted the indicated share among its two cargo service providers does not match with that of the figures available with the Authority. The Authority has further asked DIAL for details regarding the same. On its receipt, it will be appropriately modified. For the time being the Authority has accepted the submission of DIAL for its workings. The Authority has considered an inflationary growth along with DIAL's growth drivers for projection of revenues from cargo space rental and handling of cargo. The Authority proposes to accept DIAL's submission of not applying the CPI-IW inflation on demurrage revenue and has accordingly calculated the projected cargo revenue for DIAL.

19.21. While revenue from Into Plane (ITP) Service revenue was considered as Non Aeronautical revenue during the first control period, the Authority is of the view that ITP is an integral part of the Fuel Farm revenue and is directly linked to the same (Refer paras 20.32 to 20.34 below). Hence the Authority proposes to consider revenue form ITP service as aeronautical revenue. The Authority also proposes to consider revenue from CUTE counter charges as aeronautical revenues (Refer Paras 20.25 to 20.29 below).

19.22. Thus, using the approach described in paras above, the Authority has calculated the non-aeronautical revenues as below,

Table 56: Non Aeronautical Revenues proposed to be considered by the Authority in the second Control Period

INR crore	2014-15	2015-16	2016-17	2017-18	2018-19
Air traffic related revenues					
Bridge-mounted equipment revenues	5.21	5.48	5.78	6.09	6.42
Ground handling revenues	66.44	80.93	85.27	89.85	109.44
Subtotal Air traffic related revenues	**71.65**	**86.41**	**91.05**	**95.94**	**115.85**
Passenger traffic related revenues					
In-flight kitchen revenues	35.46	35.46	39.54	44.09	49.16
Carpark (incl. entry ticket & left luggage fee)	10.29	10.97	11.69	12.46	13.28
Retail-Duty paid	83.12	94.53	107.51	122.28	139.07
Food & beverage	53.22	59.34	66.17	73.78	82.27
Lounges	22.95	25.59	28.53	31.81	35.47
Radio taxi	18.61	20.24	22.01	23.93	26.02
Other travel services	16.26	18.13	20.21	22.54	25.13
Subtotal Passenger traffic related revenues	**239.90**	**264.26**	**295.66**	**330.89**	**370.41**
International passenger traffic related revenues					
Retail-Duty free	280.98	319.57	363.46	413.37	470.14
Subtotal International passenger traffic related revenues	**280.98**	**319.57**	**363.46**	**413.37**	**470.14**
Contract linked revenues					
Advertisement	93.83	98.14	102.66	107.38	112.32
Forex	50.19	52.50	54.91	57.44	60.08
Land license fee	133.50	143.52	154.28	165.85	178.29
Land License Fee (Area surrendered)	20.19	16.99	13.94	0.00	0.00
Hangar	18.71	20.11	21.62	23.24	24.98
Common area management	5.62	6.04	6.50	6.98	7.51
Transit hotel	2.23	2.87	2.96	3.06	3.15
Airport service charges	20.50	21.85	23.29	24.83	26.47
Bank ATM	14.63	14.63	14.63	14.63	14.63
Telecom	7.54	7.54	7.54	7.54	7.54
Penalties	0.20	0.20	0.20	0.20	0.20
Misc. others	1.90	1.90	1.90	1.90	1.90
Subtotal Contract linked revenues	**369.03**	**386.29**	**404.43**	**413.05**	**437.07**
Cargo revenues					
Concession fee – Brownfield	88.83	84.54	92.49	94.80	105.15

INR crore	2014-15	2015-16	2016-17	2017-18	2018-19
Concession fee – Greenfield	29.24	39.87	43.85	53.34	59.43
Subtotal Cargo revenues	**118.07**	**124.40**	**136.34**	**148.14**	**164.59**
Total	**1,079.64**	**1,180.93**	**1,290.94**	**1,401.39**	**1,558.06**

19.23. As mentioned in para **Error! Reference source not found.** above, the past growth of non-aeronautical revenue may not serve either as a benchmark or guide in making the non-aeronautical revenue forecast in the future. Thus, the Authority proposes to provide a true-up of non-aeronautical revenues in the next Control Period based on the actuals for each sub-head during the second Control Period.

Proposal No. 17. Regarding Non-aeronautical revenue for the second Control Period

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

i. **To project "other income" as nil for the time being and to true it up based on actual "other income" realized by DIAL during the second Control Period at the time of tariff determination for the third Control Period**

ii. **To consider the non-aeronautical revenue for the second Control Period as projected and presented in Table 56.**Error! Reference source not found.

iii. **To true-up the non-aeronautical revenue based on the actual non-aeronautical realized by DIAL during the second Control Period at the time of tariff determination for the third Control Period**

20. Treatment of Cargo, Ground Handling & Fuel throughput Revenues

a DIAL Submission on Treatment of Cargo, Ground Handling & Fuel throughput Revenues

20.1. DIAL submission dated 11.11.2013 on the treatment of Cargo, Ground Handling & Fuel throughput Revenues is given as below,

> *"In accordance with the provisions of SSA and OMDA, Cargo and Ground Handling are explicitly stated as Non-Aeronautical services and therefore would entail contribution to the extent of 30% of their respective earnings while determining the Aeronautical Charges.*
>
> *While Schedule 5 of OMDA earmarks Fuel Farm Infrastructure as aeronautical services, treatment of fuel throughput charge has not been mentioned. Fuel Throughput charge is akin to royalty/profit share and thus should be treated as non-aeronautical. However the Authority has treated fuel throughput as aeronautical charge in the first control period. Without prejudice to our right to consider the fuel throughput as non-aeronautical, for the purpose of this filing, the fuel throughput charge has been considered as aeronautical charge."*

20.2. DIAL's submission of Cargo revenues for the second Control Period is given as below,

> *"DIAL has given concession for Cargo Terminals to the following concessionaires as per the Operations, Management and Development Agreement (OMDA) signed between Airports Authority of India and Delhi International Airport Private Limited:*
>
> *1. Celebi Delhi Cargo terminal Management India Pvt. Ltd. (CDCTMIPL)*
>
> *2. Delhi Cargo Service Centre (DCSC)*
>
> *These concessionaires provide cargo-handling service at Cargo Terminals at IGIA and give to DIAL*
>
> *1. Revenue share from Cargo Handling and*
>
> *2. Space rental*
>
> *The revenue share % from both concessionaires is as below:*
>
> *1. Celebi Delhi Cargo terminal Management India Pvt. Ltd. (CDCTMIPL): 36%*

2. Delhi Cargo Service Centre (DCSC): 24%

Historical Cargo revenues of DIAL are as below:

INR Crore	*2011-12*	*2012-13*
Cargo Revenues from Concession (INR Crores)	*128.46*	*129.36*

A. Assumptions for forecast:

The Cargo forecast has been done below following assumptions:

1 Tonnage:

a. First year of the next control period, i.e., FY 2014-15 3.94% growth (half of the forecast of Mott) has been considered.

b. There has been a slowdown in growth of Cargo Volumes in last 2 years (negative by 5.56% and 1.52% respectively) and the same trend is seen in Q1 and Q2 of FY 2013-14. As such it is assumed that Cargo growth will remain in pressure. A similar trend has been noted in Domestic volume, hence in first year 2.75% growth (Half of Mott Forecast) is assumed.

c. Thereafter from 2015-16 onwards it is assumed that the Cargo Growth will be as per the growth forecasted by Mott McDonald

Traffic Forecast -Cargo	*2014-15 (% Growth)*	*2015-16 to 2018-19 (% Growth)*
International	*3.94%*	*7.88%*
Domestic	*2.75%*	*5.50%*

2 Market Share:

a. On International side, it is assumed that the market share of DCSC will gradually increase and market share of CDCTMIPL will decline in the next control period. It is to be noted that DCSC has a significantly lower revenue share of 24% than that of CDCTMIPL which is 36%.

b. On domestic side, market share of DCSC may remain constant at 75% during the next control period.

Market share	*2013-14*	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*
Celebi Market share						
International	*80%*	*70%*	*60%*	*60%*	*55%*	*55%*
Domestic	*25%*	*25%*	*25%*	*25%*	*25%*	*25%*

DCSC Market share						
International	20%	30%	40%	40%	45%	45%
Domestic	75%	75%	75%	75%	75%	75%

4. Demurrage:

Demurrage is expected to continue to fall as is seen in historic trend. Last two years have shown a negative trend in Import and Export both. It is expected to fall further by 10% year on year.

5. X-Ray Screening:

X-Ray screening income will increase at the growth rate of Export and Outbound Volumes. Hence the average tonnage growth is assumed during the next control period.

B. Forecast methodology:

1. We have extrapolated the total revenue of DIAL based on revenue share of respective service providers to arrive at the total cargo market.

2. This we have bifurcated amongst Handling and Demurrage revenues.

3. We have considered growth on various revenue items as Handling and Demurrage as per the assumptions mentioned above.

4. Thereafter we have divided the total market amongst two concessionaires as given above.

5. Based on revenue share percentage of the concessionaire, the total revenue of DIAL has been arrived.

C. Revenue Forecast:

An overview of the forecast for 1st April 2014 to 31st March 2019 is provided below.

INR Crores	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Cargo Revenues	123.92	122.68	124.52	130.23	134.98	142.21

D. Rationale for Drop in Revenues:

Revenue to DIAL is expected to drop Y-o-Y from FY 12-13 till 2015-16 due to the following reasons:

a. Shift in market share from CDCTMIPL to DCSC with revenue share declining from 36% to 24%.

b. Demurrage is expected to continue to fall as seen in historic trend. This will be enabled by improved facilities of cargo handling.

c. Marginal growth in Tonnage due to global slowdown. In the last 2 years there has been negative growth in International and Domestic."

20.3. DIAL's submission dated 11.11.2013 regarding Ground Handling Revenues is given below,

"B. Ground handling (Bridge-mounted equipment- BME)

Providers of bridge-mounted equipment pay a fixed percentage of revenue as concession fee. The total concession fee payable is calculated by multiplying total revenue by the revenue share percentage. Total revenue consists of following ground handling services:

- *Ground power unit revenue;*
- *Pre air-conditioning unit revenue; and*
- *Potable water revenue.*

forecasts for each revenue stream are based on MOTT forecast of air traffic movements as well as assumptions in aircraft types and use of remote stands. Rates are assumed to remain unchanged in real terms.

Historical trend of BME revenues is as below: INR Crores 2011-12

INR Crores	*2011-12*	*2012-13*	*September 2013 (half year)*
Bridge-mounted equipment revenues	*4.43*	*5.96*	*3.18*

BME Assumptions:

- *Growth of BME business is linked with ATM growth.*
- *We have applied ATM growth rate of 5.37% (CAGR) as forecasted by MOTT.*

- *Apart from above there will not be any growth in this revenue stream from any other factor. There will not be any inflation-linked growth of Non Aeronautical revenues.*

Conclusion

Based on the aforesaid assumptions the forecast for the period starting from 2014-15 to 2018-19 is as below:

INR Crores	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Ground handling Bridge-mounted equipment	6.36	6.70	7.06	7.44	7.84	8.27

C. Ground handling revenues

This section is concerned with the forecast of the ground handling concession fees payable. These are based on concession contracts with ground handling providers, and are fixed until the end of concession term. There are currently four authorised Ground Handling service providers at the airport:

1 Cambata,

2 BWFS,

3 Air India-SATS and

4 Celebi.

These providers make two types of payments:

a. Rental or annual licence fees, which has been covered below land rental below; and

b. A concession fee expressed as a percentage of revenue.

Historical Revenue of ground handling has been as below:

INR Crores	***2012-13***	***September 2013 (half year)***
Revenue from Registered Handlers	*40.66*	*21.82*
3rd Party Ground Handlers	*16.22*	*7.97*
Total Ground handling revenues	*56.88*	*29.80*

The Ground handling revenue of 2013-14 (half year) includes revenue from third party ground handlers of Rs. 7.97 Crores. In future we expect that due to *changes in ground handling policy this revenue will not accrue to us. As such the revenue is forecasted based on only registered ground handlers.*

Ground Handling Forecast Assumptions. This forecast is based on:

- *The ATM forecast, sourced from MOTT.*
- *ATM Growth is assumed to be 5.37% (CAGR) as forecasted by MOTT*
- *We have assumed a decline in rates of 2% due to increased competition.*
- *As per the terms of contract the GH price increase is based on WPI. As per contractual term with GH we are eligible for an increase equivalent to WPI every 3 years.*

The current RBI forecast of WPI for next 5 years is 6.1%.

Accordingly we have considered an increase of 18.3% (6.1% X 3) for the year FY2016 and FY2019. This is based on forecast report of professional forecasters released by RBI.

RBI Forecast of WPI:

- *Extract from RBI Forecast (Results of the Survey of Professional Forecasters on Macroeconomic Indicators – 24th Round (Q1:2013-14).*

Source: rbidocs.rbi.org.in/rdocs/Publications/PDFs/01MSPF270713.pdf

Split between different aircraft types, based on the current split and it is assumed to remain unchanged;

- *No revenues have been considered for NACIL "Air India" Flights (Both International and Domestic) as they are being self-handled by Air India SATS Ground handling company. There is no revenue accruing to DIAL from above.*
- *Apart from above there will not be any growth in this revenue stream from any other factor. There will not be any inflation-linked growth of Non Aeronautical revenues.*

The current ground handling forecast has been based on historic ground handling revenues.

- *The forecasted revenues have been increased at the ATM growth rate of each year.*
- *We have taken the revenue of registered ground handlers for 6 months ending September 2013 and extrapolated the same to arrive at 2013-14 numbers.*
- *These are the base numbers on which we have forecasted future revenues.*

Conclusion:

Based on the aforesaid assumptions the forecast for the period starting from 2014-15 to 2018-19 is as below:

INR Crores	*2013-14*	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*
Ground handling revenues	*43.64*	*45.98*	*57.32*	*60.39*	*63.63*	*79.32*

"

20.4. DIAL's submission dated 11.11.2013 regarding Fuel Throughput Revenue is given as below,

"Fuel throughput revenues

This section is concerned with the forecast of the Fuel Throughput fee revenues.

Fuel farm:

There are two revenue streams from Fuel farm:

- *Rental or an annual licence fee, which has been covered below land rental; and*
- *A royalty income generally referred as volume-based concession fee.*

Historical trend of fuel throughput is as below:

INR Crores	*2012-13*	*September 2013 (half year)*
Fuel Throughput revenues	*119.73*	*66.53*

Fuel Throughput Assumptions:

- *We have assumed that fuel throughput will grow at the growth rate (CAGR) of air traffic movements (ATMs) i.e. 5.37% (as per Mott Study) and*

- *Airport operator fee will increase (As per contractual term) by WPI @ 6.1% as per the forecast report of professional forecasters released by RBI. (However we will request for true-up if actual rates are different from the rate forecasted by us due to change in WPI (from the WPI forecast given by RBI).*
- *Apart from above there is no growth expected due to any other factor including inflation*

Annual Average Percentage Change

	Annual average percentage change over the next five years				Annual average percentage change over the next ten years			
	Mean	Median	Max	Min	Mean	Median	Max	Min
Real GDP	6.9	6.75	8.0	6.3	7.2	7.25	8.5	6.0
WPI Inflation	6.1	6.20	8.0	4.7	5.6	5.90	6.5	4.0
CPI-IW Inflation	7.7	7.50	10.0	6.0	6.8	6.50	8.5	4.5

RBI Forecast of WPI:

- *Extract from RBI Forecast (Results of the Survey of Professional Forecasters on Macroeconomic Indicators – 24th Round (Q1:2013-14)*

Source: rbidocs.rbi.org.in/rdocs/Publications/PDFs/01MSPF270713.pdf

We also foresee a trend among airlines to opt for better fuel-efficient aircrafts such as 787, A320, Q400 etc. to reduce their operational cost. This will have negative impact of 3% on total fuel throughput at IGIA. An overview of the forecast for Financial Year 2013-14 to 2018-19 is provided below.

INR Crores	*2013-14*	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*
Fuel throughput revenues	*133.06*	*144.29*	*156.47*	*169.67*	*183.99*	*199.52*

For the current tariff filing we have assumed the Fuel revenue as Aeronautical. However if due to any judicial pronouncement or any decision by AERAAT or by any other govt body the same is classified as Non Aero then we will amend our application accordingly."

20.5. DIAL's revised submission dated 23.07.2014 on cargo revenues is as below,

"The Cargo revenues stood at INR 140.74 Crores for FY14. The forecasted figures for FY15 -19 have been updated based on the actual numbers of FY14.

In the earlier filing based on the half yearly numbers, we had forecasted the cargo revenue as follows:

In Crores	*2013-14*	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*
Earlier Submission	*123.92*	*122.68*	*124.52*	*130.23*	*134.98*	*142.21*
New Submission	*140.74*	*136.37*	*138.42*	*144.74*	*150.01*	*158.01*

"

20.6. DIAL's revised submission dated 23.07.2014 on ground handling revenues is as below,

"Bridge mount equipment fee:

Revised forecasted figures for FY15-19 have been updated based on the actual numbers of FY14, is as follows:

In Crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*6.36*	*6.70*	*7.06*	*7.44*	*7.84*	*8.26*
New Submission	*4.94*	*5.21*	*5.48*	*5.78*	*6.09*	*6.42*

Ground handling revenues

We are revising the forecast based on the revised WPI forecast of RBI. Extract from RBI Forecast (Results of the Survey of Professional Forecasters on Macroeconomic Indicators – 28th Round (Q4:2013-14)Source:http://www.rbi.org.in/scripts/PublicationsView.aspx?id=15761) giving the latest forecast is as under:

Annual Average Percentage Change								
	Annual average percentage change over the next five years				*Annual average percentage change over the next ten years*			
	Mean	*Median*	*Max*	*Min*	*Mean*	*Median*	*Max*	*Min*
Real GDP	*6.50*	*6.50*	*7.5*	*5.9*	*7.2*	*7.2*	*8.0*	*6.0*
CPI- Inflation	*6.9*	*7.0*	*8.0*	*5.5*	*6.3*	*6.5*	*7.5*	*5.0*
WPI Inflation	*5.4*	*5.5*	*6.2*	*4.3*	*5.1*	*5.5*	*6.0*	*3.5*

Revised forecasted figures for FY15-19 have been updated based on the actual numbers of FY14, is as follows:

In Crores	*FY2014*	*FY2015*	*FY2016*	*FY2017*	*FY2018*	*FY2019*
Earlier Submission	*43.64*	*45.98*	*57.32*	*60.39*	*63.63*	*79.32*
New Submission	*44.64*	*47.04*	*58.03*	*61.14*	*64.42*	*79.48*

"

20.7. DIAL's revised submission dated 23.07.2014 on fuel farm revenues is as below,

"We are revising the forecast based on the revised WPI forecast of RBI. Extract from RBI Forecast (Results of the Survey of Professional Forecasters on Macroeconomic Indicators – 28th Round (Q4:2013-14)Source:http://www.rbi.org.in/scripts/PublicationsView.aspx?id=15761) giving the latest forecast is as under:

Table A.8: Annual Average Percentage Change								
	Annual average percentage change over the next five years				*Annual average percentage change over the next ten years*			
	Mean	*Median*	*Max*	*Min*	*Mean*	*Median*	*Max*	*Min*
Real GDP	*6.50*	*6.50*	*7.5*	*5.9*	*7.2*	*7.2*	*8.0*	*6.0*
CPI- Inflation	*6.9*	*7.0*	*8.0*	*5.5*	*6.3*	*6.5*	*7.5*	*5.0*
WPI Inflation	*5.4*	*5.5*	*6.2*	*4.3*	*5.1*	*5.5*	*6.0*	*3.5*

Further, it is assumed that we would be able to implement the revised rates only from the date of implementation as notified by the Authority. Based on the above, we have assumed that the revised order would be implemented with effect from 1st November, 2014.

An overview of the forecast for Financial Year 2014-15 to 2018-19 is provided below.

INR Crores	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*
Fuel throughput revenues	*139*	*150*	*162*	*174*	*187*

For the current tariff filing we have assumed the Fuel revenue as Aeronautical. However, if due to any judicial pronouncement or any decision by AERAAT or by *any other govt. body the same is classified as Non Aero then we will amend our application accordingly."*

b Authority's Examination of DIAL Submissions on Treatment of Cargo, Ground Handling & Fuel throughput Revenues

20.8. The Authority has carefully examined the submissions of DIAL with regard to treatment of Cargo, Ground Handling & Fuel throughput Revenues. Its examination is presented below.

Authority's Examination of cargo revenues

20.9. The Authority had extensively dealt with the issue of treatment of revenue from Cargo, Ground Handling & Fuel throughput services in its Consultation Paper no 32 / 2011-12 dated 03.01.2012 as well as in its Delhi Tariff Order 03 / 2012-13.

20.10. Vide its Decision No. 24a-24c, with regard to treatment of cargo and ground handling revenue the Authority had stated:

20.10.1. If the service provider of the aeronautical services is the airport operator himself, then revenues accruing from these services to the airport operator would be treated as aeronautical revenue and in such a case, the costs incurred by the service provider, namely the airport operator would also be taken into account while determining the aeronautical tariffs;

20.10.2. If the provision of these services is outsourced to a third party including, as in the case of DIAL a JV, the third party becomes the service provider and comes within the ambit of regulation, including tariff determination. The airport operator, namely, DIAL would receive revenues from such third party concessionaire in the form such as revenue share, rent, dividend or royalties, etc. These revenues obtained from the third party by the airport operator (in the instant case DIAL), would be regarded as non-aero revenues at the hands of the airport operator; however, the costs, if any, in obtaining these revenues from the concessionaire would not be taken into account as a cost pass through as per the provisions of SSA/OMDA.

20.10.3. The Authority decided to treat the Cargo revenue for the period 01.04.2009 to 24.11.2009 as aeronautical, during which DIAL was carrying out the service itself. For the balance period of the Control Period the same had been considered as non-aeronautical.

20.11. Taking into account the views expressed by the stakeholders and its analysis, the Authority, in Decision No. 24.f. of its Delhi Tariff Order 03 / 2012-13, had taken the following view with regards to treatment of revenue from Cargo & Ground handling:

" The Authority infers from the Ministry of Civil Aviation's letter No.AV.24032/4/2012-AD, dated 09.03.2012, that according to its interpretation revenues from Cargo and Ground Handling services accruing to the airport operator should be regarded as non-aeronautical revenues, regardless and irrespective of whether these services are provided by the airport operator himself or concessionaire (including JV) appointed by the airport operator. This inference is being brought to the notice of the Government for confirmation.

Depending on the confirmation of the Government on the treatment of revenues from Cargo and Ground Handling services, the Authority would duly consider the matter and the correction/truing up as appropriate would be considered in the next control period commencing from 1 st April, 2014."

20.12. The Authority subsequently, received letter No. AV.24032/04/2012-AD, dated 10.09.2012 from Ministry of Civil Aviation, which states as under,

"This Ministry had already, in the context of IGI Airport, Delhi, clarified to AERA vide letter dated 9.3.2012 that revenues from Cargo and Ground Handling services accruing to the airport operator should be categorized as non-aeronautical revenues as provided under the OMDA. This categorization is regardless and irrespective of whether these services are provided by the airport operator himself or through concessionaires (including JV appointed by the airport operator). The same clarification holds good even for CSI Airport, Mumbai as OMDAs of both the airports are identical."

20.13. In view of the above and the provisions under SSA / OMDA, the Authority proposes to treat revenue from Cargo and Ground handling as non- aeronautical revenue. However, the Authority proposes to continue to regard the services of Cargo and

Ground handling as aeronautical service even though revenues may be considered non-aeronautical.

20.14. The Authority has had reference to the Delhi Tariff Order 03/2012-13, where it had considered cargo screening service and revenue as aeronautical in nature. Accordingly, the Authority proposes to treat revenue accruing to DIAL from cargo screening as aeronautical revenue. The Authority notes that the cargo screening through X-ray Unit is linked with aircraft safety and operation as per requirement of sl.no 2 of Schedule 5 of OMDA.

20.15. As regards the projections of revenue from cargo for the second Control Period, the Authority has noted that DIAL has concessioned out both cargo and ground handling services. The Authority has noted from DIAL submissions that it has entered into concession agreements with CDCTMIPL and DCSC to provide cargo-handling service at Cargo Terminals at IGI Airport. Further, it has noted that DIAL receives revenue share of 36% and 24% respectively from cargo handling in addition to space rentals. The Authority has noted that DIAL received Rs. 128.46 crore, Rs. 129.36 crore and Rs. 140.74 crore in FY2011-12, FY2012-13 and FY2013-14, respectively, from cargo revenues. The above revenue is inclusive of cargo screening component. The Authority has sought Auditor's Certificates for revenue share from cargo JVCs as well as revenue from cargo screening charges separately.

20.16. The Authority is in receipt of the Auditor's Certificates regarding cargo revenues and will consider the values certified by the Auditor for the same. The Authority is also in receipt of Auditor's Certificates regarding cargo assets in the books of DIAL between FY2006-07 to FY2010-11 and the Authority notes that there are no cargo assets in the books of DIAL as of FY 2010-11.

20.17. The Authority has also sought Auditor's Certificates for breakup of revenues generated from cargo operations in FY2013-14. This includes demurrage revenue, space revenues, handling revenues and other revenues as used in the Tariff Model for cargo revenue calculations.

20.18. The Authority has noted from DIAL submissions the basis considered by it for projection of the cargo revenues. The Authority has noted that the revenue projections are made by DIAL on the basis of various factors including traffic tonnage forecast from Mott McDonald, change in market share of CDCTMIPL vis-à-vis DCSC, 7.5% increase per year in space rentals for Cargo JVs, fall in demurrage revenues consistently by 10% per year, and increase in cargo screening income in the second Control Period (Refer details in Para 20.2 above). The Authority has also noted the rationale for drop in cargo revenues submitted by DIAL. The Authority sought explanation regarding these assumptions.

20.19. The Authority is in receipt of clarification regarding change in market share projections of the cargo JVs vide DIAL submission dated 10.07.2014 as below,

DIAL Response:

Initially DIAL handled Cargo operations from May 2006 till Nov 2009, there after DIAL decided to concession out existing terminal and additionally Greenfield cargo terminal as there is a mandate as per OMDA for DIAL to get the second operator on board in order to get competition at the Airport.

1. Bids for both the terminals were invited and post evaluation two terminal operators came on board.

2. CDCTMIPL bid for 36% revenue share for the existing terminal and DCSC bid for 24% revenue share for the greenfield terminal.

3. CDCTMIPL started Cargo operations in Nov 2009 and DCSC in May 2010, DCSC commenced only domestic operations. They also started the construction of new international Terminal which was operationalized in FY 2012-13.

4. With the 2nd Cargo operator on board, it was known that some Airlines would shift from the existing terminal to the new terminal.

5. Year On Year DCSC is capturing market share of International operations and same trend is expected to follow in future also. It is expected at some point of time both the Cargo Operators would have equal market shares.

Based on above facts we have assumed the following shift in market share among the two operators will happen during 2nd Control period:

Market share	***2013-14***	***2014-15***	***2015-16***	***2016-17***	***2017-18***	***2018-19***
Celebi Market share						
International	*80%*	*70%*	*60%*	*50%*	*55%*	*55%*

Domestic	*25%*	*25%*	*25%*	*25%*	*25%*	*25%*
DCSC Market share						
International	*20%*	*30%*	*40%*	*40%*	*45%*	*45%*
Domestic	*75%*	*75%*	*75%*	*75%*	*75%*	*75%*

"

20.20. For the second Control Period, the Authority has noted DIAL's revised submission dated 23.07.2014 on the projection of cargo revenues based on actual revenues in FY2013-14. The Authority has, for the time being, considered the projections made by DIAL for cargo revenue except that, it has applied inflation to DIAL projections of cargo space rentals (excluding land licence fee from surrendered area) and cargo handling revenues as discussed in the para 19.16 above. Accordingly, the Authority proposes to consider the cargo revenues for the second Control Period as presented in Table 56**Error! Reference source not found.**.

20.21. The Authority proposes to true up revenue from cargo realized by DIAL during the second Control Period at the time of determination of tariff for the third Control Period.

Authority's Examination of Ground handling revenues

20.22. As presented in Paras 20.9, 20.12 and 20.13 above, the Authority proposes to consider the revenue from Ground handling as non-aeronautical.

20.23. As regards the projection of revenue from Ground handling for the second Control Period, the Authority has noted DIAL's submission dated 11.11.2013 as well as its revised submission dated 23.07.2014 as mentioned in Para 20.6 above. Further, the Authority has noted that DIAL's projections for the revenues from Grounding Handling and revenues from BME have considered revenues of FY 2013-14 as the base.

20.24. The Authority has sought Auditor's Certificates for break-up of revenues from Grounding Handling and revenues from BME for the first Control Period. The Authority is in receipt of the Auditor's Certificates for the same.

20.25. As regards the revenue from CUTE counter charges levied by DIAL, the Authority vide Decision No. 20 of its Delhi Tariff Order 03 / 2012-13, had decided to treat the CUTE counter service as aeronautical service and revenues from it as aeronautical revenues.

20.26. The Authority in its Delhi Tariff Order 03/2012-13 had noted that as far as Common User Terminal Equipment (CUTE) charges are concerned, the term CUTE is not as such defined either in the AERA Act or in SSA/OMDA. However, according to the definition {Section 2(a)(iv)} of the AERA Act, "Aeronautical Service" means any service provided for ground handling services relating to aircraft, passengers and cargo at airport. Common User Terminal Equipment is an integral part of service related to passengers. Hence the Authority has taken CUTE service as an aeronautical service which is required to be regulated. The Authority notes that while the CUTE Counter charges are being levied by DIAL on the airlines, the other CUTE charges are levied by the IT-JV formed by DIAL. The Authority advises DIAL to get these CUTE charges approved by the Authority.

20.27. The Authority had also observed from the AAI Ground Handling Regulations 2007, that "Passenger and Baggage Handling at the Airport Terminal" are treated as Ground Handling Services under Para 1.2 of Schedule 2 of the regulations. Since Cute Counters are used for passenger and baggage handling at the Airport Terminal, the service so provided is a ground handling service, which is an aeronautical service. The Authority notes that the service offered through CUTE is not limited to receiving baggage and handing over the Boarding Card, also includes and other related service.

20.28. The Authority has had reference to OMDA and finds the mention of Check-in Concourse under Schedule 5 (Aeronautical services) of OMDA. The Authority is of the view that Check-in Counters would fall under Check-in Concourse and accordingly fall under Schedule 5. The Authority also finds that DIAL in its classification of assets has categorized CUTE Counters as aeronautical asset. The Authority, thus, notes that DIAL has also considered CUTE Counter as an aeronautical asset. In line with the above, the Authority proposes to continue with its earlier decision to treat revenue from CUTE counter as aeronautical revenue.

20.29. The Authority proposes to consider ATM (domestic and international) as the main driver of revenue from Ground handling services and accordingly proposes to apply the growth projections for this driver on the base revenue for Ground handling (for FY 2013-14) along with inflationary growth to derive the projections for the second

Control Period. Accordingly, the Authority proposes to consider the revenue from Ground handling for the second Control Period as presented in Table 56.

20.30. The Authority proposes to true up revenue from Ground handling realized by DIAL during the second Control Period at the time of determination of tariff for the third Control Period.

Authority's Examination of revenues from Fuel throughput

20.31. The Authority, in Decision no 24.d of its Delhi Tariff Order 03 / 2012 -13, had decided to treat the Fuel Throughput revenue as aeronautical revenue. The Authority proposes to continue its treatment of Fuel Throughput revenue as aeronautical revenue.

20.32. The Authority, in Decision no 22.a. of its Delhi Tariff Order 03 / 2012 -13, had decided to treat the concession revenue received by DIAL from the ITP service provider(s) as non-aeronautical revenue in the hands of DIAL. The Authority has re-examined this issue and is of the view that ITP services are aeronautical services in terms of Section 2(a) of the AERA Act. Schedule 5 of OMDA also lists "Common hydrant infrastructure for aircraft fuelling services by authorized providers" under Aeronautical Services. Also there is no mention pertaining to fuel supply in schedule 6 relating to non-aeronautical services. The Authority further notes that supply of fuel to an aircraft can be done in two ways, (a) independent Storage + Mobile supply (b) Storage with interpreted Common Fuel Hydrant + Into-plane Service fuel dispenser. The Into-plane service is used for end delivery of supplying fuel to the aircraft and thus forms an integral part of supply of fuel to the aircraft and is an aeronautical service.

20.33. However, the Authority notes that its reason for treating revenue as non-aeronautical despite considering the service as aeronautical was the fact that these services were concessioned and were being provided by such concessionaires. The Authority notes from the letter from the Ministry of Civil Aviation (refer Para 20.12 above) that revenue from Cargo / Ground handling were to be considered as non-aeronautical regardless and irrespective of whether these services are provided by the airport operator himself or concessionaire (including JV) appointed by the airport operator. Hence, if the differentiation of provision of this service by the airport operator himself or by a concessionaire (including JV) appointed by the airport operator were to be disregarded, the revenue from ITP services in the hands of DIAL should be treated as aeronautical revenue.

20.34. Based on the above, the Authority proposes to treat revenue from ITP services in the hands of DIAL as aeronautical revenue.

20.35. The Authority has sought Auditor Certificates for the breakup of Fuel Farm Revenues into 'Into Plane Revenue' and 'Fuel Throughput Fee Revenues' for each year of the first Control Period.

20.36. The Authority is in receipt of the Auditor's Certificate regarding fuel throughput revenues. The Authority has noted that the values submitted by DIAL for FY2012-13 and FY2013-14 vary slightly from the audited values as below. The Authority has further noted that the difference in the audited values and those submitted by DIAL is equivalent to the values for Into Plane Concession Fee for the respective years as below,

Table 57: Fuel Throughput Revenues as per Auditor's Certificate for the first Control Period

Fuel Farm – Throughput Revenues, INR crore	2012-13	2013-14
As per Auditor's Certificates	120.98	134.81
As per Tariff Model	119.73	133.45
Difference	1.25	1.36
Into Plane Concession Fee Revenues	1.25	1.36

20.37. The Authority has noted from the revised Tariff Model submitted by DIAL dated 23.07.2014 that it has projected fuel throughput revenues for the second Control Period on the basis of FY2013-14 revenues, annual ATM growth projections, average WPI inflation rate of 5.4% (as per RBI forecast) and a -3% growth on account of likely adoption of better fuel-efficient aircrafts such as 787, A320, Q400 etc. by airlines.

20.38. The Authority has computed the projections for revenue from fuel throughput as well as revenue from ITP services for the second Control Period based on average CPI inflation as per (RBI forecasts) and annual growth in ATM traffic as per its Delhi Tariff Order 03/2012-13.

Table 58: Fuel Throughput Revenues considered by the Authority for the second Control Period

INR crore	2014-15	2015-16	2016-17	2017-18	2018-19
Fuel Farm - Throughput Charges	137.56	147.90	159.02	170.98	183.84
Revenue from ITP	1.46	1.56	1.68	1.80	1.93

INR crore	2014-15	2015-16	2016-17	2017-18	2018-19
services					

Proposal No. 18. Regarding treatment of revenue from Cargo, Ground handling and Fuel throughput for the second Control Period

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

i. **To treat services for Cargo, Ground handling and supply of Fuel to aircraft (including ITP services) as aeronautical services**

ii. **To calculate X-factor based on the Ministry of Civil Aviation letter No. AV.24032/04/2012-AD dated 10.09.2012 to treat the revenue from services of cargo and ground handling in Delhi and Mumbai Airports as non-aeronautical revenue**

iii. **To calculate X-factor by treating revenue from CUTE counter as aeronautical revenue**

iv. **To treat revenue from cargo screening as aeronautical revenue**

v. **To treat revenue from ITP services and Fuel throughput as aeronautical revenue**

vi. **To true up revenue from Cargo, Ground Handling and Fuel throughput (including ITP) realized by DIAL during the second Control Period at the time of determination of tariff for the third Control Period**

21. Traffic Forecast

a DIAL Submission on Traffic Forecast

21.1. DIAL's submission on traffic forecast is given as below,

"Traffic forecasts form an important component of the price cap regulatory framework. Once total allowable revenue has been calculated by adding the building blocks, the X factor is worked out based on the forecasted traffic volumes to match the present value of the target revenue within the regulatory period.

A traffic forecast had been prepared by Mott MacDonald (Mott) for DIAL to provide an estimate of future demand for air transport at Delhi Airport from 2006 to 2036. This study was conducted as part of master planning exercise. The forecast made however is robust as confirmed by the past few years' actual data.

However the pace of growth is slowing down as confirmed in 2012-13. In the six years since the original master plan forecasts were produced, there has been significant developments in Indian aviation, some foreseen and some unforeseen. Some of the key issues are:

- *The slowdown of the Indian economy.*
- *Government policy which includes items such as bilateral capacity limits.*
- *The development of airlines in India. There have been failures resulting in consolidation of Indian carriers. The continued growth of low cost airlines, and decline in overall traffic. There have been developments which could have a significant negative impact on traffic performance, such as the grounding of Kingfisher Airlines.*
- *Challenges of global economic environment. There are competitive pressures that Indian airlines in particular have had to face.*
- *The weakened global economic environment and a challenging market for Indian airlines, particularly from the pressure of the large Middle East Gulf carriers.*

The above has resulted in a fall of 4.22% in traffic in 2012-13. This decline is going to take some time to recover. As such we have used the Low case forecast numbers of the Mott McDonald traffic forecast of 2006.

The report for traffic forecasts of Delhi Airport, prepared by Mott, is attached as Annexure E. The tariff determination is worked out considering the low case growth forecasted by Mott.

The low case of MOTT has proved to be 95% accuracy as given below:

Years	Passenger Traffic			Projected: Low Case			Accuracy %			
	Actual Reported Pax Nos.			Mott Study forecast						
	Int'l	Dom	Total	Int'l	Dom	Total	Int'l	Dom	Total	overall
2009-10	8314211	17810484	26124695	8855225	17887627	26742852	107%	100%	102%	
2010-11	9275775	20667113	29942888	9563643	19318637	28882280	103%	93%	96%	
2011-12	10750009	25131956	35881965	10233098	20864128	31097226	95%	83%	87%	
2012-13	11566102	22802309	34368411	10744753	21907335	32652088	93%	96%	95%	95%

Summary of MOTT Traffic Forecast

We have taken the 5 year CAGR of the MOTT forecast for future projections.

1. Passenger Forecast: International Pax forecast Int'l

International Pax forecast	Int'l numbers as per Mott Study	Int'l-Growth (Low case)
Years	Numbers	
2013-14	11,281,990	5.00%
2014-15	11,846,090	5.00%
2015-16	12,379,164	4.50%
2016-17	12,936,226	4.50%
2017-18	13,518,357	4.50%
2018-19	14,126,683	4.50%
5 Year CAGR (5 Yrs)	4.60%	4.60%

Domestic Passenger Forecast	Pax Number as per Mott Study	Dom-Growth (Low case)
Years	Numbers	
2013-14	23,002,701	5.00%
2014-15	24,152,837	5.00%
2015-16	25,239,714	4.50%
2016-17	26,375,501	4.50%
2017-18	27,562,399	4.50%
2018-19	28,802,707	4.50%
5 Year CAGR		4.60%

2. Air Traffic Movement (ATM) Forecast

International ATM	ATM	Growth%

Forecast		
Years	*Numbers*	
2013-14	*87,989*	*5.54%*
2014-15	*92,859*	*5.54%*
2015-16	*98,000*	*5.54%*
2016-17	*101,361*	*3.43%*
2017-18	*104,838*	*3.43%*
2018-19	*108,434*	*3.43%*
5 Year CAGR	*4.27%*	*4.27%*
Domestic ATM Forecast	*ATM numbers as per Mott study*	*Growth %*
Years	*Numbers*	
2013-14	*267090*	*6.16%*
2014-15	*283538*	*6.16%*
2015-16	*301000*	*6.16%*
2016-17	*317329*	*5.43%*
2017-18	*334545*	*5.43%*
2018-19	*352694*	*5.43%*
5 Year CAGR	*5.72%*	*5.72%*

"

21.2. DIAL's revised submission on traffic, dated 23.07.2014 on actual traffic in full year FY2013-14 is as below,

"Following is the actual traffic for 2013-14

Passenger Traffic:

Details of actual reported UDF paying passengers during FY2013-14 is as follows:

Passengers (in Million)	*Departing Passengers*	*Arriving Passengers*	*Total Passengers*
Domestic - Short haul	*0.74*	*0.72*	*1.46*
Domestic - Long haul	*9.37*	*9.35*	*18.72*
Domestic subtotal	*10.11*	*10.07*	*20.18*
International – Short haul	*0.53*	*0.55*	*1.08*
International – Medium haul	*2.17*	*2.10*	*4.27*
International – Long haul	*2.14*	*2.09*	*4.23*
International subtotal	*4.84*	*4.74*	*9.58*
Total Passengers	*14.95*	*14.81*	*29.76*

Air Traffic Movement (ATM):

Following are details of ATM reported during FY2013-14:

Aircraft Category	*A*	*B*	*C*	*D*	*E*	*F*	*Total*
Domestic							

Cargo			*165*	*1,188*			*1,353*
Full Service		*1,423*	*42,090*		*2,237*		*45,750*
Low Cost		*247*	*58,820*		*519*		*59,586*
Non-Schedule	*2,053*	*4,619*	*537*	*80*	*131*		*7,420*
International							
Cargo		*2*	*8*	*266*	*1,465*		*1,741*
Full Service	*69*	*499*	*12,067*	*2,387*	*14,796*	*470*	*30,288*
Low Cost		*1*	*4,290*				*4,291*
Non-Schedule	*81*	*445*	*1,000*	*520*	*1,082*	*10*	*3,138*
Grand Total	*2,203*	*7,236*	*118,977*	*4,441*	*20,230*	*480*	*153,567*

From the above reported details of ATMs following is the ATM which was billed on fixed rate of Rs. 10,700 per ATM:

Aircraft Category	*A*	*B*	*C*	*D*	*E*	*F*	*Total*
Domestic							
Cargo							
Full Service		*1,423*	*4,556*				*5,979*
Low Cost		*247*	*3,694*				*3,941*
Non-Schedule	*1,981*	*4,618*	*411*	*80*	*131*		*7,221*
International							
Cargo							
Full Service			*1*				*1*
Low Cost	*53*	*184*	*7*	*3*			*247*
Non-Schedule							
Grand Total	*2,034*	*6,472*	*8,669*	*83*	*131*		*17,389*

MToW:

Following are details of MToW reported during FY2013-14:

Average of Below 100MT:

Airline Type	*Aircraft Category*					
	A	*B*	*C*	*D*	*E*	*F*
Domestic						
Cargo			*57*	*100*		
Full Service			*77*		*100*	
Low Cost			*74*		*64*	
Non-Schedule	*38*	*45*	*48*			
International						
Cargo		*100*	*82*	*100*	*100*	

Full Service	*100*	*99*	*79*	*99*	*100*	*100*
Low Cost		*30*	*77*			
Non-Schedule	*43*	*49*	*59*	*98*	*100*	*100*

Average of Above 100MT:

Airline Type	*Aircraft Category*					
	A	*B*	*C*	*D*	*E*	*F*
Domestic						
Cargo				*8*		
Full Service					*178*	
Low Cost						
Non-Schedule						
International						
Cargo		*186*	*47*	*108*	*203*	
Full Service	*82*	*154*	*0*	*74*	*183*	*343*
Low Cost						
Non-Schedule	*6*	*58*	*11*	*76*	*237*	*292*

"

b Authority's Examination of DIAL Submissions on Traffic Forecast

21.3. The Authority has carefully examined the submissions of DIAL with regards to the actual traffic in the first Control Period and its traffic forecast for the second Control Period. The Authority's examination is presented below.

21.4. The Authority has noted DIAL's submission on actual passenger traffic numbers realised at IGI Airport, Delhi between FY2009-10 and FY2012-13. The Authority has also noted its submission that the actual passenger traffic broadly follows the low case of Mott McDonald traffic forecast study (2006). This study was commissioned by DIAL to determine traffic forecasts at IGI Airport, Delhi and served as the basis of Master Planning required under the OMDA. The comparison of actual and projected traffic as submitted by DIAL is as follows:

Years	Passenger Traffic			Projected: Low Case		
	Actual Reported Pax Nos.			Mott Study forecast		
	Int'l	Dom	Total	Int'l	Dom	Total
2009-10	8314211	17810484	26124695	8855225	17887627	26742852
2010-11	9275775	20667113	29942888	9563643	19318637	28882280
2011-12	10750009	25131956	35881965	10233098	20864128	31097226
2012-13	11566102	22802309	34368411	10744753	21907335	32652088

21.5. The Authority has also noted DIAL's revised submission dated 23.07.2014 on passenger and ATM traffic realised in FY2013-14.

21.6. The Authority has sought Auditor's Certificates for these numbers for the entire first Control Period with break-up of passenger growth by domestic and international and short haul long haul and medium haul traffic; and for ATM growth traffic by domestic and international and below 100 MT, above 100 MT traffic.

21.7. The Authority is in receipt of the explanation from DIAL that prior to the application of UDF, DIAL did not record passenger traffic based on hauls and thus this information is available only for FY2012-13 and FY2013-14. The Authority is in receipt of Auditor's Certificate for the same. The Authority is also in receipt of the ATM traffic break-up for FY2011-12, FY2012-13 and FY2013-14 which is based on the UDF paid passengers only.

21.8. Further, the Authority has noted that AAI has given the actual Passenger, ATM and cargo freight figures for IGI Airport, Delhi over the past periods till FY 2013-14 on its website. The Authority has noted that the traffic numbers provided by DIAL are different from those provided on AAI website. The difference noted by the Authority is presented in Table 59 and Table 60.

Table 59: Difference in ATM traffic between AAI and DIAL as noted by the Authority

ATM	2009-10	2010-11	2011-12	2012-13	2013-14
Total ATM as per AAI (Int+Dom)	229227	255549	295491	280713	290772
Total ATM as per DIAL (Int+Dom)	229227	255549	316468*	294120*	307134*
*Auditor Certificate submitted by DIAL on the ATMs mentions the following numbers: FY 2011-12: 158234 FY 2012-13: 147060 FY 2013-14: 153567 The Authority notes that these numbers capture landing and departure as one movement, while AAI captures landing and departure as separate movements. Hence the DIAL numbers have been multiplied by two to enable a comparison with AAI numbers.					

Table 60: Difference in passenger traffic between AAI and DIAL as noted by the Authority

Passenger traffic	**2009-10**	**2010-11**	**2011-12**	**2012-13**	**2013-14**
AAI					
Total PAX (Int)	8314211	9275775	10750009	11566102	12681309
Total PAX (Dom)	17810484	20667113	25131956	22802309	24195677
Total PAX (Int+Dom)	26124695	29942888	35881965	34368411	36876986
DIAL					
Total PAX (Int)	17810484	20667113	NA	7.52 Million	9.58 Million
Total PAX (Dom)	8314211	9275775	NA	16.44 Million	20.18 Million

Passenger traffic	2009-10	2010-11	2011-12	2012-13	2013-14
Total PAX (Int+Dom)	26124695	29942888	NA	23.96 Million	29.76 Million

21.9. The Authority sought a reconciliation of these numbers from DIAL. DIAL's response dated 10.07.2014 has been reproduced below,

> *"We would like to clarify that data published by AAI is inclusive of transfer, transit and exempt passengers, which does not generate any revenue to DIAL. The difference between our data and data published by AAI can be attributed to transfer transit and exempt passengers."*

21.10. The Authority has noted DIAL's submission. However DIAL has not furnished the details on transit passengers and exempted passengers for the year 2011-12 onwards. The Authority has sought the details in the form of auditor certificates for both PAX and ATM, which have been exempted for year 2011-12 onwards. Further the Authority would advise AAI and DIAL to reconcile annual passenger as well as ATM data from 2011-12 to 2014-15 with DIAL submission and also put together a system for reconciliation of traffic numbers reported by them.

21.11. The Authority has noted DIAL's submissions regarding traffic projections for the second Control Period for both passenger and ATM segments as in Table 62 and Table 63 below. It has noted that these are based on low case scenario of the Mott McDonald study.

Table 61: Base Passenger traffic and the respective growth rates submitted by DIAL for the second Control Period (Millions)

Passenger Traffic (in crore)	2014-15	2015-16	2016-17	2017-18	2018-19
Growth Rate	4.60%	4.60%	4.60%	4.60%	4.60%

21.12. The Authority, for the time being, proposes to consider the traffic projections considered by DIAL. The Authority also proposes to make 100% correction (truing up) of the traffic.

Table 62: Passenger traffic considered by the Authority for the second Control Period (In Crores)

Passenger Traffic (in crore)	2014-15	2015-16	2016-17	2017-18	2018-19
Domestic arrivals SH	0.075	0.079	0.082	0.086	0.090
Domestic arrivals LH	0.978	1.023	1.070	1.119	1.171
Total Domestic Arrivals (A)	**1.053**	**1.102**	**1.153**	**1.206**	**1.261**
International arrivals SH	0.058	0.060	0.063	0.066	0.069
International arrivals MH	0.220	0.230	0.240	0.251	0.263
International arrivals LH	0.219	0.229	0.239	0.250	0.262

Passenger Traffic (in crore)	2014-15	2015-16	2016-17	2017-18	2018-19
Total International Arrivals (B)	**0.496**	**0.519**	**0.542**	**0.567**	**0.594**
Domestic departures SH	0.077	0.081	0.085	0.089	0.093
Domestic departures LH	0.980	1.025	1.072	1.122	1.173
Total Domestic Departures (C)	**1.058**	**1.106**	**1.157**	**1.210**	**1.266**
International departures SH	0.055	0.058	0.061	0.063	0.066
International departures MH	0.227	0.237	0.248	0.260	0.272
International departures LH	0.224	0.234	0.245	0.256	0.268
Total International Departures (D)	**0.506**	**0.530**	**0.554**	**0.579**	**0.606**
Total Passenger (A + B + C + D)	**3.113**	**3.257**	**3.406**	**3.562**	**3.727**

Table 63: ATM considered by the Authority for the second Control Period

ATM	2014-15	2015-16	2016-17	2017-18	2018-19
Domestic	205,029	216,757	229,155	242,263	256,120
International	81,769	85,260	88,901	92,697	96,655
Total ATM	**286,798**	**302,017**	**318,056**	**334,960**	**352,775**

Proposal No. 19. Regarding traffic forecast to be considered for the second Control Period

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

i. To consider the passenger and ATM traffic as per the Table 62 and Table 63 respectively for the second Control Period.

ii. **To true-up the passenger and ATM traffic based on actual numbers realized during the second Control Period at the time of tariff determination for the third Control Period.**

22. Inflation

a. DIAL Submission on Inflation

22.1. As per the Order No. 03/2012-2013,

"Rate of Inflation" for any Year, shall mean the average inflation rate (as measured by the All India Consumer Price Index – Industrial Workers ("AICPIIW")) for the immediately preceding year."

22.2. DIAL's submission dated 11.11.2013 on inflation is as below,

"RBI has forecasted a growth rate of 7.7% (Mean growth) for the next five year. The relevant extract from RBI Forecast is reproduced here, (Results of the Survey of Professional Forecasters on Macroeconomic Indicators – 24th Round (Q1:2013-14)

(Source: rbidocs.rbi.org.in/rdocs/Publications/PDFs/01MSPF270713.pdf)

Annual Average Percentage Change								
	Annual average percentage change over the next five years				*Annual average percentage change over the next ten years*			
	Mean	*Median*	*Max*	*Min*	*Mean*	*Median*	*Max*	*Min*
Real GDP	*6.3*	*6.9*	*6.75*	*8.0*	*7.2*	*7.25*	*8.5*	*6.0*
WPI Inflation	*6.1*	*6.20*	*8.0*	*4.7*	*5.6*	*5.90*	*6.5*	*4.0*
CPI-IW Inflation	*7.7*	*7.50*	*10.0*	*6.0*	*6.8*	*6.50*	*8.5*	*4.5*

"

22.3. DIAL's revised submission dated 23.07.2014 is as below,

"We are revising the forecast based on the revised WPI forecast of RBI. Extract from RBI Forecast (Results of the Survey of Professional Forecasters on Macroeconomic Indicators – 28th Round (Q4:2013-14, Source:http://www.rbi.org.in/scripts/PublicationsView.aspx?id=15761) giving the latest forecast is as under:

Annual Average Percentage Change								
	Annual average percentage change over the next five years				*Annual average percentage change over the next ten years*			
	Mean	*Median*	*Max*	*Min*	*Mean*	*Median*	*Max*	*Min*
Real GDP	*6.5*	*6.5*	*7.5*	*5.9*	*7.2*	*7.2*	*8.0*	*6.0*
CPI- Inflation	*6.9*	*7.0*	*8.0*	*5.5*	*6.3*	*6.5*	*7.5*	*5.0*
WPI Inflation	*5.4*	*5.5*	*6.2*	*4.3*	*5.1*	*5.5*	*6.0*	*3.5*

"

a Authority's Examination of DIAL Submissions on Inflation

22.4. The Authority has carefully examined the submissions made by DIAL on inflation to be considered for the second Control Period.

22.5. The Authority has noted that DIAL has submitted historical inflation rates (CPI-Industrial Workers, Labour Bureau, and Government of India) for January 2012 to September 2013.

22.6. The Authority has also noted the DIAL submissions of RBI Forecast for WPI and CPI-IW (Results of the Survey of Professional Forecasters on Macroeconomic Indicators – 24th Round (Q1:2013-14) and 28th Round (Q4: 2013-14)[3].

22.7. The Authority noted that the latest RBI forecasts as per the Results of the Survey of Professional Forecasters on Macroeconomic Indicators – 30th Round has been posted by RBI on 30.09.2014 on its website[4] as reproduced below in Table 64 below.

22.8. Hence, the Authority proposes to follow CPI inflation forecast of 6.6% (Annual average percentage over the next 5 years) and WPI inflation forecast of 5.2% (Annual average percentage over the next 5 years) for the second Control Period for appropriate year on year tariff rate increase, wherever required, as well as for projection of various building blocks of the ARR.

Table 64: Inflation forecast – RBI Survey of Professional Forecasters on Macroeconomic Indicators – 30th Round

Annual Average Percentage Change								
	Annual average percentage change over the next five years				Annual average percentage change over the next ten years			
	Mean	Median	Max	Min	Mean	Median	Max	Min
Real GDP	6.8	6.8	7.5	6.0	7.5	7.5	9.0	6.5
CPI Inflation	6.6	6.5	7.5	5.0	5.9	6.0	7.0	5.0
WPI	5.2	5.1	6.0	4.0	4.8	5.0	5.5	3.5

Proposal No. 20. Regarding the matter of Inflation

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

[3] (http://rbi.org.in/scripts/QuarterlyPublications.aspx?head=Survey%20of%20Professional%20Forecasters)
[4] ((http://rbi.org.in/scripts/QuarterlyPublications.aspx?head=Survey%20of%20Professional%20Forecasters))

i. **To follow the CPI inflation forecast of 6.6% and WPI forecast of 5.2% for the next five years of the second Control Period for determination of various building blocks, wherever required.**

23. Quality of Service

a DIAL Submission on Quality of Service

23.1. DIAL has not made any submission related to Quality of Service.

b Authority's Examination on Quality of Service

23.2. The Authority in its Order No 03/2012-13 dated 24.04.2014 had decided, as specified by the Government, to monitor the performance standards as laid down in the OMDA. The Authority had noted that OMDA provides for liquidated damages to be paid by DIAL to AAI, should the quality of service not be achieved by DIAL in line with requirements under OMDA. The Authority had decided that for the first control period it will not impose rebate mechanism in addition to the liquidated damages mechanism in OMDA.

23.3. The Authority notes that as per section 13.1 (ii) of the AERA Act, it shall take into consideration the service provided (by the airport operator), its quality and other relevant factors while determining tariff for aeronautical services. Further section 13.1.d of the Act also requires the Authority to monitor the set performance standards relating to quality, continuity, and reliability of service as maybe specified by the Central Government or any other authority authorized by it in this behalf.

23.4. In this regard the Authority made reference to Chapter X of OMDA, which provides that the JVC shall submit various reports to the AAI on a regular basis including "*Reports on various indicators of performance measurement as specified in this Agreement"*. The Authority thus notes that the JVC is under contractual obligation to report its performance to AAI and based on the performance, the AAI is *"…permitted to inspect at any time but with reasonable prior intimation any part of the Airport Site or any of the assets at the Airport and undertake any survey or other check in order to monitor compliance with the JVC's obligations under this Agreement, or check the quality of service performance by the JVC or any Relevant Authority,…"*.

23.5. In line with the above, the Authority would like to be advised by the AAI on the performance standards maintained by DIAL during the first Control Period and on any liquidated damages levied by AAI on DIAL. The Authority is not in receipt of any such information from AAI. In absence of the same, the Authority has made reference to media reports as well as ACI website, which state that Delhi has been consistently adjudged the second best airport in the world for its service quality among the airports handling 25-40 million passengers per annum (MPPA), by Airports Council International in 2011, 2012 and 2013 (ASQ Awards). Based on the information available to it, the Authority finds that the ASQ rating awarded to DIAL for FY 2011-12 and FY 2012-13 are 4.83 and 4.84 respectively. The Authority notes that provisions under OMDA require DIAL to *"…achieve a rating of 3.75 in the IATA/ACI AETRA passenger survey or greater and maintains the same throughout the Term."*

23.6. The Authority thus is unable to consider any adjustments towards determination of aeronautical tariff on account of service quality maintained by DIAL during the first Control Period.

23.7. On balance, the Authority proposes to continue with its earlier decision to monitor the performance standards as laid down in the OMDA for the second Control Period and not to impose the rebate mechanism in addition to the provision of liquidated damages in the OMDA.

Proposal No. 21. Regarding the matter of Quality of Service

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

- **i. As specified by the government, to monitor the performance standards as laid down in the OMDA for the second Control Period**
- **ii. To not impose rebate mechanism in addition to the provision of liquidated damages in the OMDA.**

24. Sensitivity Analysis

24.1. As per the Base Model submitted by DIAL, the X Factor submitted by DIAL is (-) 42.64926% considering the date of implementation of new tariff as 01.11.2014. The Authority has analysed DIAL submissions on each of the regulatory building block and presented its analysis in the respective sections above. The impact of the Authority's tentative proposals in respect of various building blocks is presented in respective sections. The summary of these sensitivity analyses is presented below and the cumulative impact of all the tentative proposals is also presented.

Table 65: Sensitivity Analysis against the X-factor submitted by DIAL and the proposals made by the Authority

Sensitivity 1: Impact on X Factor Considering Into Plane Revenues as Aero Revenues	
As per DIAL Base Model	(-)42.65%
X Factor Considering Cargo Screening & Into Plane Revenues as Aero Revenues	(-)41.65%
Sensitivity 2: Impact on X Factor Considering 0% Return on RSD	
As per DIAL Base Model	(-)42.65%
X Factor Considering 0% Return on RSD	(-)21.39%
Sensitivity 3: Impact on X Factor with correction in HRAB	
As per DIAL Base Model	(-)42.65%
X Factor Considering correction in X Factor	(-)35.87%
Sensitivity 4: Impact on X Factor Considering Cost of Equity as 16%	
As per DIAL Base Model	(-)42.65%
X Factor Considering Cost of Equity as 16%	(-)20.09%
Sensitivity 5: Impact on X Factor Disallowing Annual Escalation in Cost of Debt	
As per DIAL Base Model	(-)42.65%
X Factor Disallowing Annual Escalation in Cost of Debt of 25 BPS	(-)41.84%
Sensitivity 6: Impact on X Factor Considering AERA's Approach for Building Block True up	
As per DIAL Base Model	(-)42.65%
X Factor Considering AERA's Approach for Building Block True up	(-)12.87%
Sensitivity 7: Impact on X Factor Considering FY2013-14 as Efficient Operating Expense and Projecting Expenses for the Second Control Period at 8%	
As per DIAL Base Model	(-)42.65%
X Factor Considering FY2013-14 as Efficient Operating Expense and Projecting Expenses for the Second Control Period at 8%	(-)36.60%
Sensitivity 8: Impact on X Factor Considering FY2013-14 Revenues as Base Values and Projecting Non Aero Revenues for the Second Control Period	
As per DIAL Base Model	(-)42.65%
X Factor Considering FY2013-14 Revenues as Base Values and Projecting Non Aero Revenues for the Second Control Period	(-)39.74%
Sensitivity 9: Impact on X Factor Considering the Value of CPI at 6.6 %	

Sensitivity 1: Impact on X Factor Considering Into Plane Revenues as Aero Revenues	
As per DIAL Base Model	(-)42.65%
X Factor Considering the Value of CPI at 6.6 %	(-)39.58%
Sensitivity 10: Impact on X Factor Considering Date of Implementation of New Tariff as 01.02.2015	
As per DIAL Base Model	(-)42.65%
X Factor Considering Date of Implementation of New Tariff as 01.02.2015	(-)46.09%
Sensitivity 11: Impact on X Factor Correcting for Model Errors & Linkages	
As per DIAL Base Model	(-)42.65%
X Factor Correcting for Model Errors & Linkages	(-)42.69%
Sensitivity 12: Impact on X Factor Adjusting for Opening Gross block and Accumulated Depreciation Based on Updated DF adjustment and Capex Addition	
As per DIAL Base Model	(-)42.65%
X Factor Adjusting for Opening Gross block and Accumulated Depreciation Based on Updated DF adjustment and Capex Addition	(-)31.24%
Sensitivity 13: Impact on X Factor Adjusting CPI on Target Revenue and Projected Revenue Both	
As per DIAL Base Model	(-)42.65%
Impact on X Factor Adjusting CPI on Target Revenue and Projected Revenue Both	+1.48%
Sensitivity 14: Impact on X Factor Adjusting for Return on Internal Accrual	
As per DIAL Base Model	(-)42.65%
Impact on X Factor Adjusting for Return on Internal Accrual	(-)43.57%
Sensitivity 15: Impact on X Factor Capping the Rate of Interest on New Debt to the Value of WACC	
As per DIAL Base Model	(-)42.65%
X Factor Capping the Rate of Interest on New Debt to the Value of WACC	(-)42.65%
Sensitivity 16: Impact on X Factor Accounting for the Impact of CPI to DIAL's Cargo Projections	
As per DIAL Base Model	(-)42.65%
on X Factor Accounting for the Impact of CPI to DIAL's Cargo Projections	(-)42.24%
Sensitivity 17: Impact on X Factor adjusting for Correcting for Audited Values	
As per DIAL Base Model	(-)42.65%
X Factor adjusting for Correcting for Audited Values	(-)33.37%
Sensitivity 18: Impact on X Factor Considering AAI Revenue Share as an Expense in Calculating Aero Financials	
As per DIAL Base Model	(-)42.65%
X Factor Considering AAI Revenue Share as an Expense in Calculating Aero Financials	(-)10.16%
Sensitivity 19: Impact on X Factor adjusting for ECB and Foreign exchange	
As per DIAL Base Model	(-)42.65%
X Factor Considering AAI Revenue Share as an Expense in Calculating Aero Financials	(-)35.86%
Sensitivity 20: Impact on X Factor adjusting for CPI in Capex Addition	
As per DIAL Base Model	(-)42.65%
X Factor adjusting for CPI in Capex Addition	(-)42.65%
Sensitivity 21: Impact on X Factor considering Airport Operator Fee as 3% Percentage of Aero	

Sensitivity 1: Impact on X Factor Considering Into Plane Revenues as Aero Revenues	
Revenue	
As per DIAL Base Model	(-)42.65%
X Factor considering Airport Operator Fee as 3% Percentage of Aero Revenue	(-)41.61%
Sensitivity 22: Impact on X Factor adjusting for upfront fee in Equity Share Capital	
As per DIAL Base Model	(-)42.65%
X Factor adjusting for upfront fee in Equity Share Capital	(-)42.05%
Cumulative Impact on X Factor adjusting for Correcting for Audited Values	
As per DIAL Base Model	(-)42.65%
X Factor adjusting for Correcting for Audited Values	+78.24%

24.2. The following graph shows the cumulative impact of adjustments and the corresponding X factor for these changes (A positive value of X Factor represents a decrease in UDF).

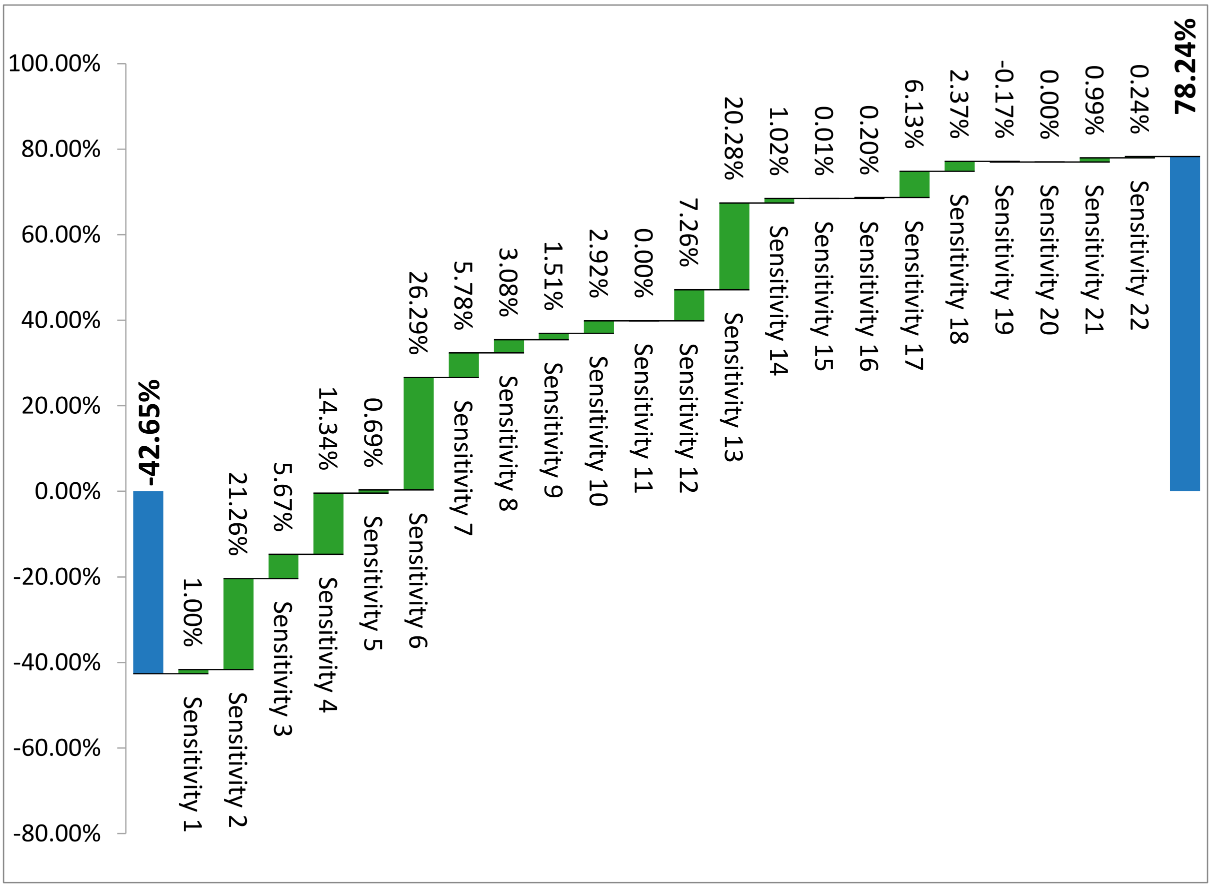

Figure 1: Chart represents the cumulative impact of each sensitivity on the final X Factor

24.3. Taking into account the impact of the above sensitivities, the Authority has calculated the Target Revenue as follows:

Table 66: Calculation of Target Revenue and projected aeronautical revenue based on date of implementation of new tariff as 01.02.2015

In Crore	**FY2014-15**	**FY2015-16**	**FY2016-17**	**FY2017-18**	**FY2018-19**
RAB	6,945.16	6,553.93	6,213.78	5,872.59	5,541.57
WACC	9.99%	9.99%	9.99%	9.99%	9.99%
Return on RAB	693.55	654.48	620.52	586.44	553.39
Operations and Maintenance Expenses	752.68	798.10	805.52	867.13	939.36
Depreciation	536.82	508.67	513.21	519.36	524.33
Tax	0.00	0.00	0.00	0.00	0.00
Target Revenue	1,983.05	1,961.25	1,939.24	1,972.93	2,017.08
Non-aeronautical Revenue	1,079.64	1,180.93	1,290.94	1,401.39	1,558.06
Cross-Subsidization @ 30%	323.89	354.28	387.28	420.42	467.42
True up	**-188.96**				
Net Target Revenue	**1,470.19**	**1,606.97**	**1,551.96**	**1,552.51**	**1,549.66**
NPV Target Revenue as on 01.02.2015	**1,591.56**	**1,581.68**	**1,388.84**	**1,263.19**	**1,146.39**
Sum of NPV of Target Revenue for 2nd Control Period					**6,971.66**
Projected Aeronautical Revenue to match Target Revenue					
FTC Revenue	137.56	147.90	159.02	170.98	183.84
ITP Revenue	1.46	1.56	1.68	1.80	1.93
CUTE counter	12.27	13.72	15.34	17.15	19.18
Cargo Screening Rev	23.43	25.07	26.82	28.70	30.71
Revenue from aeronautical charges (LPH and UDF)	2,382.80	867.86	966.87	1,077.27	1,200.37
Total Aeronautical Revenue	**2,557.53**	**1,056.11**	**1,169.73**	**1,295.90**	**1,436.03**
NPV of Aeronautical Revenue as on 01.02.2015	**2,768.65**	**1,039.49**	**1,046.79**	**1,054.40**	**1,062.33**
Sum of NPV of Aeronautical Revenue for 2nd Control Period					**6,971.66**

25. Tariff Structure/ Rate Card

a DIAL Submission on Tariff Structure/ Rate Card

25.1. DIAL's initial submission dated 11.11.2013 on its tariff proposal and determination of X factor is given as below,

"1. The first five year tariff period is assumed to start from April 1st 2014 and ending on March 31st 2019.

2. Based on the assumptions discussed in this submission, the target revenues for the 5 year in the control period is as below:

INR Crore	*FY 2015*	*FY 2016*	*FY 2017*	*FY 2018*	*FY 2019*
Return on RAB	*1410*	*1314*	*1226*	*1145*	*1073*
Operating expenses	*960*	*960*	*1084*	*1137*	*1150*
Depreciation	*783*	*695*	*644*	*645*	*594*
Corporate Tax	*410*	*604*	*769*	*981*	*1237*
True - up adjustment for previous control period	*1579*	*0*	*0*	*0*	*0*
Target revenue	*5142*	*3573*	*3723*	*3908*	*4054*
Non Aero – Subsidization	*(299)*	*(317)*	*(336)*	*(350)*	*(374)*
Net Target revenue	*4843*	*3256*	*3387*	*3557*	*3680*
Projected revenue	*3523*	*3691*	*3868*	*4053*	*4247*
Discount factor	*0.85*	*0.72*	*0.62*	*0.52*	*0.45*
NPV of Target revenue	*4119*	*2356*	*2084*	*1862*	*1638*
NPV of Projected revenue	*2996*	*2670*	*2380*	*2122*	*1891*
One Time X Factor Increase	*18.8%*	*-*	*-*	*-*	*-*
Step Up X Factor Increase	*6.5%*	*6.5%*	*6.5%*	*6.5%*	*6.5%*
CPI Increase	*7.7%*	*7.7%*	*7.7%*	*7.7%*	*7.7%*

As per the SSA, the X factor is the average equalization factor of the discounted target and projected aeronautical revenues over the regulatory period.

4. The X factor could be a onetime increase or a step up increase.

5. The X factor has been calculated as an average percentage increase as of 1st April 2014 by discounting the above target revenue with the WACC. This X factor work out to a

1. One Time Increase:

One-time increase of 18.8% and additional CPI of 7.7% Y-O-Y

2. Step Up Increase:

Step Up increase of 6.5% and additional CPI of 7.7% Y-O-Y

During course of tariff consultation we will further submit our request between the above two choices to be used for the tariff rate determination.

Inflation has not been factored in our forecast for future years. The tariff filing is without incorporation of inflation and it is assumed the Authority will provide inflation over and above the X factor.

6. The current proposal is for the approval of an average percentage increase 'X' in aeronautical tariff. During the course of finalization, we shall submit a detailed pricing proposal to achieve this average increase which may be a combination of various aeronautical charges including UDF."

25.2. DIAL subsequently revised its tariff proposal vide submission dated 23.07.2014 as follows,

"The five year tariff period is assumed to start from April 1st 2014 and ending on March 31st 2019. Charging period has been assumed to start from 1st November 2014.

Based on the assumptions discussed in our earlier submission and current revision, the target revenues for the 5 year in the control period are as under:

INR Crores	*FY 2015*	*FY 2016*	*FY 2017*	*FY 2018*	*FY 2019*
Return on Aero RAB	*1,426*	*1,298*	*1,194*	*1,098*	*1,013*
Aero Operating expenses	*913*	*962*	*1104*	*1151*	*1164*
Aero Depreciation	*935*	*828*	*758*	*757*	*672*
Aero Corporate Tax	*250*	*711*	*891*	*1129*	*1413*
True - up adjustment for previous control period	*2,244*				
Target revenue	*5,768*	*3798*	*3947*	*4135*	*4262*
Non Aero – Subsidization	*318*	*337*	*355*	*371*	*396*
Net Target revenue	*5450*	*3461*	*3592*	*3764*	*3866*
Projected revenue	*3308*	*4166*	*4365*	*4573*	*4791*
Discount factor	*0.85*	*0.72*	*0.62*	*0.52*	*0.45*
NPV of Target revenue	*13050*				
NPV of Projected revenue	*13050*				
One Time X Factor Increase	*42.6%*				
Step Up X Factor Increase	*12.1%*	*12.1%*	*12.1%*	*12.1%*	*12.1%*

CPI Increase	*7.7%*	*7.7%*	*7.7%*	*7.7%*	*7.7%*

As per the SSA, the X factor is the average equalization factor of the discounted target and projected aeronautical revenues over the regulatory period.

The X factor could be a onetime increase or a step up increase.

The X factor has been calculated as an average percentage increase as of 1st Nov 2014 by discounting the above target revenue with the WACC. This X factor work out to be:

One Time Increase:

One-time increase of 42.6% and additional CPI of 7.7% Y-O-Y

Step Up Increase:

Step Up increase of 12.1% and additional CPI of 7.7% Y-O-Y

Inflation has not been factored in our forecast for future years. The tariff filing is without incorporation of inflation and it is assumed the Authority will provide inflation over and above the X factor.

25.3. As regards the Annual Tariff Proposal, DIAL has submitted as under,

"We would like to submit that as of now, the assumption is that the new tariff rates would be implemented from 1st November, 2014. However based on the final date of implementation the X factor may undergo a change.

The current proposal is for the approval of an average percentage Increase 'X' in aeronautical tariff. After approval of MYTP we shall submit a detailed pricing proposal to achieve this average increase which may be a combination of various aeronautical charges including UDF."

b Authority's Examination of DIAL Submissions on Tariff Structure/ Rate Card

25.4. The Authority has carefully examined DIAL submissions on tariff structure / rate card. The Authority has noted that DIAL has not submitted the Annual Tariff Proposal. The Authority has also noted that DIAL has requested to submit the detailed pricing proposal after approval of MYTP.

25.5. The Authority notes that DIAL has proposed an X factor of negative (-) 42.6%, in its revised submission dated 23.07.2014. Whereas based on the Authority's examination of DIAL's submissions, the Authority has worked out an X factor of (+)

78.24%. Accordingly the Authority finds that the existing aeronautical tariffs at IGI Airport, Delhi will need to be reduced by such an extent.

25.5.1. The Authority has also noted that the X factor will need to be updated based on the following:

25.5.1.a. The Authority's consideration of stakeholder responses to its proposals in this Consultation Paper

25.5.1.b. Information received from DIAL on various building blocks as highlighted in respective sections

25.5.1.c. The Authority's treatment of monetization of land by DIAL during the first Control Period and proposed monetization over the second Control Period

25.6. The Authority has noted the second Control Period estimated X-factor to be (+ 78.24 %), which is arrived considering the date of tariff implementation effective from 01.02.2015. The X–factor (+78.24%) as per proposal means reduction in existing tariff (the tariff as of 31.03.2014, presently being continued) with effect from 01.02.2015. In other words, positive X factor implies a required reduction in aeronautical tariff from the date considered for such implementation of tariff. The Authority further notes that the aeronautical revenue already collected as per present tariff till the actual date of implementation of revised tariff will be more than what is due to DIAL as per determination of ARR. The calculations of Target Revenue and ARR projection in this Consultation Paper are based on considering the date of tariff implementation for the second Control Period as 01.02.2015.

25.7. Based on the value of X-factor at the time of finalization of the Tariff Order, the Authority would publish the tariff structure / rate card in respect of IGI Airport, Delhi.

Proposal No. 22. Regarding the matter of Tariff Structure/ Rate Card

22.a. The Authority proposes:

i. **To consider the X factor in respect of the aeronautical tariffs for the second Control Period (01.04.2014 - 31.03.2019) for the IGI Airport, Delhi at (+78.24%) based on Authority's computation discussed above,**

provided that the revised tariff is made effective from 01.02.2015 (Refer para 25.5 and para 25.6 above)

ii. **Accordingly the Authority proposes to bring the above X-factor into effect in respect of aeronautical tariffs at IGI Airport and expects DIAL to submit the tariff card addressing the same.**

26. Viability of IGI Airport, Delhi

26.1. The Airport Authority of India (AAI), vide their letter No.AAI/MC/DIAL-25/MYTO/2014-15 dated 31.12.2014 and DIAL vide their letter No.DIAL/2014-15/Fin-Acc/6029 dated 06.01.2015 have written to the Ministry of Civil Aviation regarding AERA's proposed approach to be adopted for the second Control Period. The Ministry of Civil Aviation, vide their letter No. AV.24011/06/2012-AD dated 15.01.2015 has stated the issues raised in these two letters and requested AERA to look into these matters in the light of the provisions of the AERA Act 2008 and State Support Agreement entered into by the GOI, to ensure sufficient cash flow of airport operations, debt services etc. and ensure viability of the airport, while determining the aeronautical tariff for the second Control Period for IGI Airport, Delhi.

26.2. The various issues raised by the DIAL have already been addressed in the respective sections of this Consultation Paper (Refer paras 17.29 and 17.30 above – Airport Operator Fee, para 12.1 above – Foreign exchange fluctuation, 6.14 above - RAB, 5.18 above – Adjustment of RAB on account of DF, paras 6.20 and 6.21 above – Efficiency study for Operation and Maintenance Expenses, paras 6.45.2 and 6.47 above – True-up of non-aeronautical revenue, paras 6.26.6 and 6.26.7 above – Interest on account of DF securitization loan, para 6.43 above – Other Income, paras 7.19 and 7.20 above – Asset allocation, para 17.60 above – Water supply and paras 17.63 to 17.65 above – Property tax). The methodology followed throughout the Consultation Paper is in line with the provision of the AERA Act, Concession Agreements (SSA and OMDA) and based on this the Authority's decisions have been proposed an Aggregate Revenue Requirement due to DIAL for Aeronautical Services has been estimated. The due ARR estimated for Aeronautical Services is based on principles, provisions, facts and standard accounting policy. The Authority notes that DIAL would need to avail Rs. 410 crores as additional loan for meeting part of additional capital expenditure during the second Control Period.

26.3. As per SSA clause 3.1.1, the upfront fee and the annual fee paid/payable by the JVC to AAI under OMDA shall not be included as part of cost for provision of aeronautical services and no pass-through work be available in relation to the same. Moreover, as per OMDA clause 11.1.2.1, JVC shall pay to AAI an annual fee at 45.99% of the revenue for the said year for each year during the term of the concession as per open competitive bidding. Hence, the Authority is of the view that shortfall in cash flow or debt servicing, if any, needed by DIAL should be addressed by AAI as well as the Government as the concession has been granted at a quote of 45.99% Revenue Share. The Authority has arrived at the Aggregate Revenue Requirement based on the principles laid down in the AERA Act and SSA (refer para 3 above) and has provided for the same.

27. Summary of Proposals

28. Stakeholder Consultation Timeline

28.1. In accordance with the provisions of Section 13(4) of the AERA Act 2008, the proposal contained in the Summary of Proposals (Para 26 above) read with the Authority's analysis, 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. 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 AERA Act.

28.2. The Authority welcomes written evidence-based feedback, comments and suggestions from stakeholders on the proposals made in this Consultation Paper, latest by 27.02.2015 at the following address:

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Secretary
Airports Economic Regulatory Authority of India
AERA Building,
Administrative Complex,
Safdarjung Airport,
New Delhi- 110003
Email: alok.shekhar@gov.in
Tel: 011-24695040
Fax: 011-24695039

The Authority

29. List of Tables

30. Annexures

Sr. No.	Date of Submission	Particulars
1	10.11.2013	Submission of tariff filling of DIAL for the second control period
2	16.01.2014	Proposal for assisting the Authority for determination of tariff in respect of Delhi International Airport Limited for second control period
3	03.03.2014	Aeronautical Tariffs continuation after 31st March 2014 - Reg
4	14.03.2014	Clarifications on the Financial Model
5	11.04.2014	Tariff being levied at IGI, Airport
6	14.04.2014	Second Control Period MYTP clarifications
7	29.04.2014	Continuation of Airport Charges after 31st May 2014
8	15.05.2014	Queries on MYTP for 2nd Control Period FY 2015 to FY 2019 for IGI Airport
9	23.06.2014	Response of DIAL for clarification and information sought in respect of MYTP for 2nd Control Period and Asset allocation study
10	10.07.2014	Response of DIAL for clarification and information sought in respect of MYTP for 2nd Control Period and Asset allocation study
11	23.07.2014	Revision of tariff filing of DIAL for the second control period
12	13.08.2014	Addition information / clarifications
13	20.08.214	Determination of Tariff for 2nd MYTP(2014-15 to 2018-19) at Delhi Airport-Extension
14	25.08.2014	Request by DIAL Extenstion of Agreement No. 01/2014-15
15	09.09.2014	2nd Control Period MYTP - Additional clarifications
16	09.09.2014	2nd Control Period MYTP - Additional clarifications
17	12.09.2014	Queries on MYTP for 2nd Control Period FY 2015 to FY 2019 for IGI Airport

Sr. No.	Date of Submission	Particulars
18	20.09.2014	Clarification and Information sought in r/o MYTP for 2nd Control Period
19	13.10.2014	2nd Control Period MYTP - Additional clarifications
20	Annual Reports - 2008 to 2013	
21	21.11.2014	Submission of queries raised in respect of MYTP II
22	01.12.2014	Tariff for 2nd control period FY 2015 to FY 2019 for IGI Airport, Delhi
23	11.12.2014	Submission of Area and Asset Allocation Report as on 31st March 2012
24	15.12.2014	DIAL MYTP II control period - Presentaion made on 15th Dec 2014
25		ICWA Asset Allocation and O&M Efficiency Report
26	05.01.2015	Additional submission by DIAL
27	15.01.2015	MoCA letter on Vialbility of IGI Airport - Reg

Annexure CP no. 16-2014-15