F. No. AERA/20010/AAI-UDF/2009-10

Consultation Paper 05/2009-10

सत्यमेव जयते

Airports Economic Regulatory Authority of India

Proposal of AAI to levy User Development Fee at Trivandrum International Airport

Rajiv Gandhi Bhawan
Safdarjung Airport
New Delhi – 110 003

26th March, 2010

Subject: TO CONSIDER THE PROPOSAL OF AAI TO LEVY USER DEVELOPMENT FEE (UDF) AT TRIVANDRUM AIRPORT.

The Airports Authority of India (AAI), is a body constituted under the Airports Authority of India Act, 1994. AAI manages 128 airports including Civil Enclaves. AAI also provides air navigation services over the Indian airspace covering an area of 2.8 million square nautical miles of land mass and the adjoining oceanic area.

2. Trivandrum International Airport is one of the airports owned and managed by the AAI. The actual annual passenger throughput at this airport during 2008-09 was 19,54,882, which is in excess of 1.5 million passengers per annum (mppa). Hence, Trivandrum International Airport is a 'major airport' as defined in clause (i) of Section 2 of the Airports Economic Regulatory Authority of India Act, 2008 ('the Act'). As per 2008-09 traffic statistics, the international passengers comprised 75.39% of the total passenger throughput. Further, in terms of Sec 13 (1) (b) of the Act, Authority shall, inter alia, determine the amount of development fees in respect of major airports. Furthermore, Rule 89 of the Aircraft Rules, 1937, provides that the licensee (of an aerodrome) may levy and collect at a major airport the User Development Fee at such rates as may be determined under clause (b) of sub-section (1) of Section 13 of the Act.

3.1 AAI has made an application on 24.12.2009 to the Authority seeking levy of User Development Fee (UDF), at Trivandrum International Airport in view of the construction of the New International Terminal Building (NITB) thereat. As has been indicated subsequently, Authority examined this proposal and had series of consultations with AAI. It has been stated that with the saturation of the existing international terminal building and with no scope for expansion at its present location due to site constraints, AAI has constructed the NITB (towards Chakai canal side) that will cater to 800 departing and 800 arriving passengers at a time. The existing terminal area of 9000 sq. mtr. would increase to 32000 sq. mtr. after the commissioning of NITB. The project was approved by the Central Government, at an estimated cost of Rs.245.58 crores, vide letter AV.24018/1/1999-VB dated 3rd October, 2006 (**Annexure-I**). Further, AAI vide their additional submission dated 22.03.2010, stated that the completion cost of the project is estimated at Rs.289.60 crores (**Annexure II**). It, inter alia, includes the cost of aerobridges, apron, taxi link, car park and approach road. AAI have stated that the Internal Rate of Return (IRR) and the Economic Rate of Return (ERR) of the project, calculated as per Government guidelines, works out to -0.71% and 0.24%, respectively. Pursuant to several discussions and exchange of correspondence, the AAI made final submissions, in respect of the proposal, containing requisite details vide letter No.AAI/CHQ/REV/AERA/09 dated 19.03.2010 (**Annexure-III**).

3.2 AAI has submitted that the NITB is likely to be commissioned during March-April, 2010 and in order to make the project viable and to attain a reasonable rate of return the levy of UDF is imperative. AAI has proposed to levy and collect UDF @ Rs.550/-per embarking domestic passenger and @ Rs. 1020/- per embarking international passenger, on an ad-hoc basis, for a period of 10 years effective April, 2010. Alternately, a levy @ Rs.280/- per embarking domestic passenger and @ Rs. 715/- per embarking international passenger has been proposed, on an ad-hoc basis, for a 15 year period.

3.3 Further, AAI has vide letter No.AAI/CHQ/REV/AERA/10 dated 22.03.2010, stated that the NITB is complete and that it would like to operationalise the same at the earliest. It has been requested that *"levy of UDF at Trivandrum Airport may be approved so that the levy may coincide with the commissioning of the terminal."*

4.1 The Authority is, presently, in the process of finalizing its regulatory philosophy and approach in economic regulation of airports and air navigation services. In this connection, a Consultation Paper (No.03/2009-10) has been issued on 26.02.2010 wherein the Authority has set out its tentative positions on various issues before it, including in respect of levy of UDF. In view of the submission of AAI, the Authority proposes to proceed with ad-hoc determination of UDF pending tariff determination in the first cycle.

4.2 Rule 89 of the Aircraft Rules, 1937 reads as under:
User Development Fee — The licensee may

(a) Levy and collect at a major airport the User Development Fees at such rate as may be determined under clause (b) of sub-section (1) of section 13 of the Airports Economic Regulatory Authority of India Act, 2008;

(b) levy and collect at any other airport the User Development Fees at such rate as the Central Government may specify.

However, no methodology has been prescribed in the Aircraft Rules for determining the UDF. The Concession Agreements for Bangalore International Airport Ltd (BIAL) and Hyderabad International Airport Ltd (HIAL) provide for levy of UDF "from embarking domestic and international passengers, for the provision of passenger amenities, services and facilities" and for the UDF to be "used for the development, management, maintenance, operation and expansion of the facilities at the Airport". The draft guidelines issued by the Ministry of Civil Aviation noted that levy of UDF was to be considered only in cases and years where the target revenue of a major airport was projected to fall short of the admissible expenditure. Hon'ble High Court of Kerala, in its judgement in the case of Commissioner of Central Excise Vs. Cochin International Airport Ltd. [2009 (16) S.T.R. 401 (Ker.)], has noted that the purpose of UDF "is to augment revenue". Thus, UDF may be taken as a revenue enhancing measure to ensure economic viability of the airport operations.

5. It is noted that:

(i) The project has an IRR and ERR of -0.71% and 0.24% respectively, which is way below the benchmark rate of 12% for the public projects.

(ii) The project, including the project cost estimate, has been approved by the Central Government after due consideration.

(iii) The NITB is expected to be commissioned shortly. Therefore, a decision regarding levy of UDF needs to be taken immediately.

(iv) The Authority has not yet taken a final position in respect of economic regulation of airports. Therefore, the tariff determination in respect of the Trivandrum International Airport would take time. In the interim, the revenue enhancement through UDF could be considered, on an ad-hoc basis, as proposed by AAI. In case this is not considered, the target revenue and the loss to be recouped would be higher at the time of tariff determination.

(v) The proposal made by the AAI does not contemplate any change in aeronautical tariff (i.e. airline related charges). The rates of UDF would have to be, therefore, calibrated based on the changes in the airline related charges that the Authority may allow at the commencement of first tariff cycle. Any increase in airline related charges is likely to result in reduction in rate/tenure of UDF.

6.1 In the light of the position noted in para 5 above, the submissions made by AAI along with the workings have been examined.

6.2 **Return** - AAI, has calculated the UDF rate such that the Net Present Value (NPV) of the profit after tax, from aeronautical revenues equals the NPV of the expected post tax return on the capital employed. The Target Revenue (TR) has been computed as: TR= (EA+NA) * 12%
EA= Value of the existing assets at Trivandrum Airport

NA= Value of the New Asset

UDF = TR- Projected Revenue.

6.3 **Regulatory Asset Base (RAB)** - For the purpose of arriving at the RAB, the book value of the assets as on 31.03.2009 (Rs.78 crores) and value of the new assets (Rs.289.60 crores), i.e., the NITB to be commissioned in April'2010, has been considered.

6.4 **Traffic Projections** – Following traffic projections have been made in respect of passenger traffic and aircraft movements:

Passenger	Domestic	15% in 2009-10, 12% thereafter
	International	10% in 2009-10 to 2011-12 & 12% thereafter
Aircraft	9.7% in 2010-11	
	8.9% in 2011-12	
	10% in 2012-13 to 2016-17 and @ 10.9% upto 2019-2020	

It is noted that the traffic projections are broadly in line with the past national trends viz. domestic traffic grew at a CAGR of 13% over the last 8 years; international traffic @ 13.9 % over the last 8 years and the aircraft movements @ 16.5 % over the 8 year period from 2001-02 to 2008-09.

6.5 **Revenue :**

6.5.1 **Aeronautical Revenue -** The growth of aeronautical revenues (landing, housing & parking) and Passenger Service Fee (PSF) is in line with the traffic projections for aircraft and passenger growth. However, no increase in rates of these charges has been contemplated. AAI has not considered any revenue from the Security Component of PSF and has correspondingly excluded the security expenses of the airport from the purview of UDF determination.

6.5.2 No revenues from Terminal Navigation & Landing Charges (TNLC) and Route Navigation Facility Charge (RNFC), for incoming flights, have been considered and the corresponding expenses have also been excluded.

6.6 **Non-Aeronautical Revenue**

6.6.1 Based on the increase in the terminal floor space due to the addition of the NITB (from 9000 sq mtr to 32000 sq mtr) AAI has projected its non-aero revenue from trading concessions, rent and services, to increase by nearly 100% (i.e. double) in the first year of commissioning, i.e., 2010-11. Thereafter, taking in to account the built-in escalation clauses in its commercial agreements as also agreements with Oil Companies for throughput charges, taking a long term view, 10% growth rate has been considered. Authority will go deeper into these projections at the time of final tariff determination and based on its final position in this regard as may be crystallized after taking into account the responses and submissions it has received on the Consultation Paper No. 03/2009-10 of 26.02.2010 referred to above.

6.6.2 AAI has not considered any revenue from City Side development at Trivandrum Airport. It has been stated that *"AAI has decided to take up development of 10 airports in first phase i.e. Amritsar, Jaipur, Lucknow, Vizag, Bhubneswar, Indore, Ahmedabad, Begumpet, Kolkata & Guwahati. Since Trivandrum airport is not included in list, no revenue from it has been considered in the calculations."*

6.7 **Expenditure :**

6.7.1 **Pay and Allowances** – An increase of 25% in pay & allowances has been assumed in 2010-2011, 8% p.a from FY 2011-2012 to FY 2019-2020, excepting in FY 2017-2018 where the increase is assumed @ 30%. It has been stated that the effect of increments, increase in DA and promotions works out to approximately 8% and increase in staff expenses on commissioning of new terminal building by 25% takes care of the regular increase as also deployment of manpower commensurate with size and operation of the NITB. The 30% increase in FY 2017-2018 is estimated due to likely revision of pay scales w.e.f. 2017. It is reasonable to assume that the manpower requirement for managing the much bigger NITB would be on a higher side. The quantum of increase would require detailed examination at the tariff determination stage. However, the same is being accepted for the time being as AAI has projected an increase of 25% only when the area to be maintained would be three times bigger. Other assumptions also appear to be, prima-facie, reasonable in as much as :

a) The 8% growth rate is stated to be based upon historical trends.
b) The wage revision in Central Public Sector Undertakings is normally taken up after every 10 years and the last revision was effective 2007.

6.7.2 **Repairs and Maintenance (R&M)** - A 100% increase in R&M expenses in the year of commissioning (over the previous year's actuals) has been assumed and thereafter an increase at a rate of 10% pa. AAI has assumed a higher initial expenditure due to increase in terminal building area from 9000 sq mtr to 32000 sq mtr (old+new) involving larger area for upkeep, more civil & electrical repairs and inclusion of new equipments & systems under R&M. The projected increase, therefore, appears to be, prima-facie, reasonable, subject to detailed examination at the tariff determination stage.

6.7.3 **Electricity & Water Charges -** AAI has assumed an increase of 150% in the electricity and water charges (based on actuals of previous year) in the year of commissioning and thereafter an increase at a flat rate of 10% pa. The higher initial expenditure estimated by AAI is due to increase in terminal building area and consequently the increase in air-conditioning expenses, lighting and electrical & electronic equipments. The projected increase, therefore, appears to be, prima-facie, reasonable subject to detailed examination at the tariff determination stage.

6.7.4 **Interest on Borrowings** – AAI has assumed an interest rate of 9% on a loan of Rs.95 crores with 25% repayment from the financial year 2013-14 onwards. However, the same is only based on the action plan of AAI and the actual amount of loan and the interest rate may vary. In view of this uncertainty, the cost of debt cannot be determined. Hence, the same is not being provisioned for the present.

6.7.5 **Other miscellaneous expenditure** - AAI has not given any break-up of the miscellaneous expenditure. They have assumed an increase of 100% in the miscellaneous expenditure in the year of commissioning (over the previous year's actuals) and thereafter a regular increase @ 10% pa. Considering the large increase in the size of the terminal(s), these assumptions could be accepted for the time being subject to detailed examination at a later stage.

6.7.6 **Apportionment of Corporate Head Quarters (CHQ)/Regional Head Quarters RHQ Expenses** - AAI has assumed a uniform growth rate of 7.5% pa except in 2017-18 where a rate of 12% is considered. The expenses of CHQ & RHQ have been apportioned over the airports based on the number of employees which is, as per the existing accounting policy of AAI.

6.7.7 **Depreciation** – The depreciation rate applied is as per AAI's approved accounting policy considering the useful life of the assets. However, in the instant proposal, AAI has considered depreciation on straight line method at weighted average rate of 10% on the entire RAB (i.e. existing & new assets) and has claimed depreciation from 2009-10 on the new asset in their calculations. In the Consultation Paper No.03/2009-10, the Authority has stated that it will adopt a capitalised financing approach, which will ensure that users do not have to pay for assets until they have been commissioned and are in use. Hence, the UDF needs to be reworked to capture depreciation from FY 2010-11 onwards for the new asset, i.e., the NITB. Further, for a more accurate determination, the depreciation rates need to be considered as under :

a) Actual rates, as per accounting policy, in respect of existing assets; and
b) in respect of new assets in the absence of breakup of the individual components, the weighted average depreciation rate (11.75%) based on the classification of existing assets.

6.8 **Weighted Average Cost of Capital (WACC)** - AAI has assumed a post tax nominal WACC of 12%, which is the bench mark rate for public projects. Authority at this stage refrains from commenting on the this benchmark rate since this exercise is for ad-hoc determination of UDF. Tentative position of the Authority in regard to fair rate of return and determination of WACC is put forth in the Consultation Paper dated 26.02.2010 referred to above.

6.9 **Till** – AAI have assumed hybrid till with 30% non aeronautical revenue being considered for the UDF determination. However, the Authority in its Consultation Paper dated 26.02.2010, has tentatively decided to adopt "Single Till" approach. Thus, the "Single Till" approach could be adopted in the present case.

6.10 **Corporate Tax** – AAI has considered corporate tax rate @ 33.99%, i.e., standard rate.

6.11 **Discount rate** – AAI has adopted a discount @ 12% to determine the NPV of Target Revenue. Considering that the WACC is being taken @ 12%, the Authority, for the present, has taken the discount at the same rate as the WACC rate.

6.12 **Service Tax** – AAI has considered the levy of Service Tax on the UDF and has proposed the rates inclusive of Service Tax. Authority is conscious of the fact that in the case of Commissioner of Central Excise Vs. Cochin International Airport Ltd. (Supra), the Hon'ble High Court of Kerala has held that Service Tax is not leviable on UDF. However, this is an issue to be decided by the relevant tax authorities based upon the laws of the land. Therefore, UDF rates have been worked out exclusive of Service Tax. In case the same is held to be leviable, the incidence of such tax would be a pass through.

6.13 To Summarise:

(i) AAI's projections in respect of traffic (passenger & Aircraft movements), aeronautical revenue, expenditure (except interest on borrowings and depreciation) are proposed to be accepted for the present subject to detailed examination at the final determination of stage.

(ii) The cost of borrowings is not being considered for the time being for reasons explained in para 6.7.4 above.

(iii) New assets are proposed to be depreciated at weighted average rate of 11.75 from the year 2010-11 onwards.

(iv) AAI has assumed a WACC of 12%, which is the same as benchmark rate for public projects. Discount rate is proposed at the same rate as the WACC.

(v) Single Till is being adopted as against the 30% hybrid till proposed by AAI.

(vi) Corporate tax is considered at the standard rate. Further, UDF rates are calculated net of Service Tax, if any.

7.1 Keeping in view the position explained above, the proposal has been reworked for a 10 year period and 15 year period. Calculations are also made if UDF is recovered only from international passengers. The details of four different scenarios are at **Annexures – IV, V, VI & VII**, which are summarized below :

UDF per embarking Passenger	Domestic	International
Net for 10 year period (Rs)	130	713 (say 710)
	0	759 (say 755)
Net for 15 year period (Rs)	130	529 (say 525)
	0	575

7.2.1 It is observed that in terms of Section 13 (2) of the Act, the tariff determination is to be made on a quinquennial basis. Therefore, it is for consideration whether UDF determination could be made for a 10 year or 15 year period.

7.2.2 UDF is considered a measure of revenue enhancement. From this perspective, Authority proposes to determine UDF over the five year term, recognizing the fact that in the second tariff cycle, UDF will need to be reworked based on the experience of the first regulatory cycle and future projections/forecasts for the subsequent ones.

8. In the above facts and circumstances, following options are available :

(i) Whether to levy UDF @ Rs. 130/- per embarking domestic passenger and @ Rs. 710/- per embarking International passenger, on an ad-hoc basis, based on the figures for a period of 10 years; or

(ii) Whether to levy UDF @ Rs. 130 /- per embarking domestic passenger and @ Rs.525/- per embarking International passenger on an ad-hoc basis, based on the figures for a period of 15 years; or

(iii) Whether to levy UDF @ Rs. 755 /- per embarking International passenger on an ad-hoc basis, based on the figures for a period of 10 years; or

(iv) Whether to levy UDF @ Rs. 575 /- per embarking International passenger on an ad-hoc basis, based on the figures for a period of 15 years.

9. On a careful consideration, it is felt that:

(i) Balancing the interest of passengers (i.e. keeping the charges as low as possible) and the viability of the project, the UDF rates could be considered on the basis of figures for 10 year period.

(ii) The determination is being made on an ad-hoc basis. NITB is meant only for international passengers. In the personal submissions made before the Authority, AAI has, on the balance, indicated a preference for restricting the levy to international passengers only based on the figures for a period of 10 years. Thus, for the present, levy is proposed only in respect of international passengers.

10. In view of the above, the Authority proposes to approve the levy of UDF at the Trivandrum International Airport @ Rs.755/- per embarking international passenger, (exclusive of statutory levies, if any) purely on an ad-hoc basis, with effect from the date of commissioning of the New International Terminal Building, based on the figures for a period of 10 years. This ad-hoc determination would be reviewed at the stage of tariff determination for the first cycle and thereafter at such intervals as the Authority may decide.

11. The Authority solicits feedback, comments and suggestions from stakeholders on the proposal contained in para 10 above. Comments/submissions may please be furnished to the Authority, **latest by Friday, 9th April, 2010,** at the following address:

Shri Sandeep Prakash,
Secretary,
Airports Economic Regulatory Authority of India,
Room No. 58, Rajiv Gandhi Bhawan,
New Delhi.
Tel: 011-24616025 Fax: 011-24656214
Email: **sandeep.moca@nic.in**
sandeep.prakash@aera.gov.in

Yashwant S. Bhave
Chairperson

Most Immediate
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ANNEXURE - I

No.AV.24018/1/1999-VB
Government of India
Ministry of Civil Aviation
******

J - on leave

ops office

'B' Block, Rajiv Gandhi Bhavan
New Delhi, Dated 3rd October, 2006

To
The Chairman
Airports Authority of India
R G Bhavan
New Delhi.

Sub - Construction of New International Terminal Building at Trivandrum airport at an estimated cost of Rs.245.58 crores (Phase-I Rs.165.58 crores + Phase II Rs 80 crores)

Sir,

I am directed to refer to AAI's U.O. No.Plg/518/2.9/Triv/2006 dated 16th March, 2006 on the above subject and to convey the approval of the competent authority for the construction of New International Terminal Building at Trivandrum airport in two phases at an estimated cost of Rs.245.58 crores with a foreign exchange component of Rs.26.92 crores (Phase-I Rs.165.58 crores + Phase II Rs.80 crores) as per the scheme contained in the feasibility report submitted to the Government. The terminal should conform to best Asian Service Standards and the project implementation should be closely monitored to avoid time and cost overrun.

Yours faithfully,

(B.K. Dhal)
Under Secretary to the Government of India

ANNEXURE - II

775/Secy/10
22/3/10
567-AERA-10
23.03.10

भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

सुरक्षा सहित सेवा

AAI/CHQ/REV/AERA/09 22nd March, 2010

The Secretary,
AERA,
Rajiv Gandhi Bhawan
New delhi-110003

PSD - II

Sub: levy of UDF at Trivandrum Airport

Sir,

Kindly refer to our letter of even no. dated 19th March, 2010 on the above subject.

In this regard it is informed that the project was approved by PIB for an amount of Rs. 245.58 crores. A copy of the approval conveyed by the ministry vide letter no. AV.24018/1/1999-VB dated 3rd October, 2006 is enclosed. Further, the completion cost of the project is estimated to be Rs. 289.60 crores. A copy of the report given by the Trivandrum Project office vide letter no. AAT/ENGG(C)/PD/2009 dated 05.03.2009 is also enclosed for information.

Yours faithfully,

(M. Ravi Varma)
General Manager(F&A)

Encl. : As above.

राजीव गाँधी भवन सफदरजंग हवाई अड्डा, नई दिल्ली - ११०००३ दूरभाष : २४६३२९५० फैक्स : ९१-११-२४६३२९९०
Rajiv Gandhi Bhavan Safdarjung Airport, New Delhi - 110003 Phone : 24632950 Fax : 91-11-24632990

Most Immediate
Out Today

No.AV.24018/1/1999-VB
Government of India
Ministry of Civil Aviation
******

— on leave

— OPS office

'B' Block, Rajiv Gandhi Bhavan
New Delhi, Dated 3rd October, 2006

To
The Chairman
Airports Authority of India
R G Bhavan
New Delhi.

Sub - Construction of New International Terminal Building at Trivandrum airport at an estimated cost of Rs.245.58 crores (Phase-I Rs.165.58 crores + Phase II Rs.80 crores)

Sir,

I am directed to refer to AAI's U.O. No.Plg/518/2.9/Triv/2006 dated 16th March, 2006 on the above subject and to convey the approval of the competent authority for the construction of New International Terminal Building at Trivandrum airport in two phases at an estimated cost of Rs.245.58 crores with a foreign exchange component of Rs.26.92 crores (Phase-I Rs.165.58 crores + Phase II Rs.80 crores) as per the scheme contained in the feasibility report submitted to the Government. The terminal should conform to best Asian Service Standards and the project implementation should be closely monitored to avoid time and cost overrun.

Yours faithfully,

(B.K. Dhal)
Under Secretary to the Government of India

+Aero +2 cr

आई.एस.ओ. 9001-2000 प्रमाणित एयरपोर्ट
ISO 9001-2000 Certified Airport

भारतीय विमानपत्तन प्राधिकर
AIRPORTS AUTHORITY OF INDIA

No.AAT/ENGG(C)/PD/2009/ Dated: 05.03.2009

Executive Director Engg.
Airports Authority of India,
Operational Offices,
Gurgaon Road,
New Delhi.

Sub: Year-wise expenditure details for the New International Terminal Complex at Trivandrum Airport

Sir,

As desired the details of expenditure, year-wise is given below for your kind information.

Rupees in crores

S.No.	Name of Work	2006-07	2007-08	2008-09		2009-10
				Upto Feb.09	Likely Exp. upto Mar 09	Likely Exp.
1.	C/o NITC across the runway on Chackai side at Trivandrum Airport	14.13	42.47	70.28	93.00	140.00

total 289.60

Thanking you,

Yours faithfully,
(V.K. MALHOTRA) 05/03/09
GENERAL MANAGER (ENGG)

Copy to:

Shri L. Kuppulingam,
DGM (E&A) ...

ANNEXURE - III

भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

AAI/CHQ/REV/AERA/09 19th March, 2010

The Secretary,
Airports Economic Regulatory Authority of India
Rajiv Gandhi Bhawan
New Delhi-110003

Sub: Levy of UDF at Trivandrum Airport

Sir,

In continuation to our letter of even no. Dated 25.02.2010, we are enclosing a revised proposal for levy of UDF at Trivandrum Airport duly incorporating the details of Non-Traffic Revenue and CHQ expenses etc. The key assumptions have also been amplified and justification for the growth rate adopted in expenses and revenue has been indicated.

It is requested that approval of AERA may be conveyed for the proposal at the earliest.

Yours faithfully,

(M. Ravi Varma)
General Manager(F&A)

Encl.: As above.

राजीव गाँधी भवन सफदरजंग हवाई अड्डा, नई दिल्ली-११०००३ दूरभाष : २४६३२९५० फैक्स : ९१-११-२४६३२९९०
Rajiv Gandhi Bhawan Safdarjung Airport, New Delhi-110003 Phone : 24632950 Fax : 91-11-24632990

सुरक्षा सहित सेवा

AIRPORTS AUTHORITY OF INDIA

Revised Proposal for levy of UDF

At

Trivandrum Airport

FINANCE & ACCOUNTS DIRECTORATE

CONTEXT

Airports Authority of India manages 128 airports including Civil Enclaves. AAI also manages the Indian airspace covering an area of 2.8 million square nautical miles of land mass and the adjoining oceanic area as accepted by International Civil Aviation Organization (ICAO). However, very few of these airports are profit making. The airports are being provided and managed to meet the Socio-economic objectives of the Govt. and also to provide connectivity.

AAI has set an ambitious targets of over Rs. 12000 crores for modernization/up-gradation of the airports infrastructure and air navigational services across the country during 11th Five Year plan which includes modernization / up-gradation of Non-Metro airports and two mega projects at Kolkata & Chennai airports, besides modernizing Air Traffic facilities.

As many of these airports are loss making, it is imperative that UDF is levied to attain a reasonable rate of return.

PROJECT BRIEF

1. INTRODUCTION

Trivandrum airport initially handled Domestic traffic and few International flights. As per the Government policy it was a Custom Airport As the passenger traffic increased due to job opportunities in the Gulf countries and international tourism in the catchment areas, the need for direct international flights was felt. Hence, the airport was declared as International Airport in 1991. The Government of Kerala was also interested in the development of Trivandrum Airport, as it was the only international airport in Kerala at that time.

The existing International Terminal Building can cater to 260 arriving and 260 departing passengers. The international traffic during 2004-05 was 8.71 lakhs passengers which had increased to 14.73 lakhs (FY 2008-09). The existing terminal building is already saturated and there was no scope for expansion for the existing terminal at its present location due to site constraints.

2. PRESENT PROPOSAL

The New International Terminal building is coming up towards Chakai canal side and will handle 800 departing and 800 arriving passengers. The project cost of new terminal building has been worked out to be Rs. 289.60 crores, which includes the cost of the aerobridges, apron, taxi link, car park and approach road.

3. SALIENT FEATURES OF THE PROJECT

3.1 Centrally air-conditioned integrated Terminal Building of plinth area of 23299 Sqms. including all passenger facilities.

3.2 Construction of two in-contact and two remote bays.

3.3 Taxi link.

3.4 Approach Road and Car parking.

3.5 Bulk services, sewerage, drainage water and power supply.

3.6 Horticulture work.

3.7 Sewerage Treatment Plant.

4. PERIOD OF CONSTRUCTION

The new international terminal building is nearing completion and is expected to be completed in the month of March, 2010.

5. INTERNAL RATE OF RETURN

The IRR and ERR of the project works out -0.71% and 0.24%

respectively. In order to provide the world class facilities to the customers and to boost tourism & economic growth of the region, the construction of new international terminal building has been taken up.

6. ESSENTIALITY OF THE PROJECT

In pursuit of the corporate mission of AAI " To provide utmost satisfaction to the passengers" and constantly works towards up gradation of the passenger facilities to International standards, the project is being taken up. The guide lines and directives given by Ministry of Civil Aviation to enhance the International passenger facilities at Trivandrum Airport shall also be met by the present project. The construction of the new International terminal building will enhance passenger facilities in tune with the international standards, besides attracting international tourist, promote health tourism and help towards over all growth of the region.

LEGAL FRAMEWORK FOR LEVY OF UDF

I AAI Act:

As per Section 22A of AAI Act, the Authority may, after the previous approval of the Central Government in this behalf, levy on, and collect from, the embarking passengers at an airport, the development fees at the rate as may be prescribed and such fees shall be credited to the Authority and shall be regulated and utilized in the prescribed manner, for the purposes of :-

(a) funding or financing the costs of upgradation, expansion or development of the airport at which the fee is collected; or

(b) establishment or development of a new airport in lieu of the airport referred to in clause (a); or

(c) investment in the equity in respect of shares to be subscribed by the Authority in companies engaged in establishing, owning, developing, operating or maintaining a private airport in lieu of the airport referred to in clause (a) or advancement of loans to such companies or other persons engaged in such activities.

II Aircraft Rules, 1937

As per Section 89 of the Aircraft Rules, 1937, The licensee may, -

(i) levy and collect at a major airport the User Development Fee at such rate as may be determined under clause (b) of sub-section (1) of section 13 of the Airports Economic Regulatory Authority of India Act, 2008;

(ii) levy and collect at any other airport the User Development Fees at such rate as the Central Government may specify.

III ICAO Guidelines

Section 29 of ICAO's Policies on Airport Charges (Doc 9082, 2009 edition) states that "…where an airport is provided for international use, the users shall ultimately bear their full and fair share of the cost of providing the airport..."

Section 30 of the above-mentioned document, among other things, states that:

a) '…The cost to be shared is the full cost of providing the airport and its essential ancillary services, including appropriate amounts for cost of capital and depreciation of assets, as well as the costs of maintenance, operation, management and administration, but allowing for all aeronautical revenues plus contributions from non-aeronautical revenues accruing from the operation of the airport to its operators

b) '…airports may produce sufficient revenues to exceed all direct and indirect operating costs (including general administration, etc.) and so provide for a reasonable return on assets at a sufficient level to secure financing on favorable terms in capital markets for the purpose of investing in new or expanded airport infrastructure and, where relevant, to remunerate adequately holders of airport equity.'

The proposal for levy of UDF at Trivandrum Airport is fully compliant with the provision of Section 89 of Aircraft Rules, 1937 and within the ambit of AAI Act & ICAO guidelines on airport charges.

SOME OF THE FOREIGN AIRPORTS WHERE UDF IS BEING CHARGED

S No	Airport	UDF per passenger Domestic	UDF per passenger International
1	London – Heathrow	GBP 11.50	GBP 19.65
2	London – Gatwick	GBP 7.11	GBP 10.83
3	Frankfurt	EUR 13.65	• EUR 9.80 –transfer and transit passengers • EUR 15.20 – EU flights • EUR 16.75 – Non EU European flights • EUR 18.80 – intercontinental flights
4	Sydney	• AUD 4.95 –flights within NSW • AUD 8.15 – others	AUD 26.06
5	Singapore		• SGD 15 – Budget terminal • SGD 28 – Main terminal
6	Kuala Lumpur	RM 6	• RM 45 – Main Terminal • RM 25 – Low cost terminal

MAJOR INDIAN AIRPORTS
WHERE UDF HAS BEEN LEVIED

[AMT. IN RS.]

S No	Airport	UDF per passenger Domestic	UDF per passenger International
1.	BANGALORE	260	1070
2.	HYDERABAD	375	1000

CALCULATION OF AD-HOC UDF

The New Terminal Building is likely to be commissioned during larch-April, 2010. The levy of UDF has been assumed to be effective from .pril, 2010.

1. Value of total asset base of the airport for the purpose of ad-hoc UDF calculation is computed as Rs 367.60 crores. This comprises Rs 289.60 crores of capital expenditure for the New International Terminal Building and Rs 78 crores as book value of existing assets at the airport. The computation of return on regulated asset base is shown in Annex-I. Details of existing assets pertaining to airport are presented in Annex -II.

2. The weighted average depreciation rate of the new assets is taken as 10 percent. For calculation purposes, the useful life of the new assets is assumed to be 10 years. The target revenue requirement has, therefore, been projected for a 10 year period.

3. The revenues from Route Navigation Facility Charge (RNFC) for incoming flights at Trivandrum have not been considered in the calculations as the same forms part of a different nationwide service (Air Navigation Service), the charges for which would be regulated separately by AERA. Since the revenue from RNFC has not been considered, the corresponding expenses attributed to RNFC have also been excluded.

4. The discount factor for calculating the NPV of net profit and return on capital employed has been taken as 12 percent.

5. The corporate tax rate has been assumed as 33.99 percent and service tax as 10.3 percent. In addition, a collection charge of Rs 5 per departing passenger has been assumed to arrive at the ad-hoc UDF levy.

6. 'Going Concern' approach has been adopted for computation of ad-hoc levy of UDF.

   (i) An airport is a going concern and it needs to develop airport infrastructure to cater to future demand.

   (ii) As a going concern for recovery of capital employed at airport, it should take into account book value of existing assets and incremental capital expenditure for new assets being created for users over a period of time.

7. The ad-hoc UDF has been calculated such that Net Present Value(NPV) of the profit after tax equals the NPV of the expected post tax return on the capital employed. The Targeted Rate(TR) has been computed as: TR= (EA+NA)* 12%

   ER= Existing Assets, NR= New Project Assets

   UDF = TR- Projected Revenue.

The UDF is calculated such that the NPV of the profit after tax(PAT) from aeronautical revenues equals the NPV of the expected returns on capital employed.

8. The other key assumptions employed in the calculations are as per Annex. - III

9. AAI request that a UDF of Rs. 550/- per domestic embarking pax and Rs. 1020/- per international embarking pax may be levied at Trivandrum airport for a period of 10 years. Alternately UDF may be levied @ 280/- per domestic embarking passenger and Rs. 715/- per international embarking passenger for 15 years.

Annexure I

TRIVANDRUM AIRPORT

Snapshot of Ad-hoc UDF Computation

(For 10 years period)												
Particulars	Unit	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
ROCE (Aero)	Rs. Cr											
RB*WACC (Aero ROCE)	#	**41.91**	**37.50**	**33.08**	**28.67**	**24.26**	**19.85**	**15.44**	**11.03**	**6.62**	**2.21**	0.00
Discount Factor	Rs. Cr	1.00	0.89	0.80	0.71	0.64	0.57	0.51	0.45	0.40	0.36	0.32
PV of Aero ROCE	Rs. Cr	41.91	33.48	26.37	20.41	15.42	11.26	7.82	4.99	2.67	0.80	0.00
NPV of Aero ROCE		**165.13**										
PAT (Aero)	Rs. Cr											
LHPC	Rs. Cr	20.44	22.42	24.42	26.86	29.55	32.50	35.75	39.33	43.61	48.37	53.64
TNLC	Rs. Cr	7.83	8.59	9.42	10.34	11.34	12.44	13.65	14.97	16.42	18.01	19.76
PSF- only px facilitation	Rs. Cr	7.42	9.25	10.22	11.45	12.83	14.36	16.09	18.02	20.18	22.60	25.31
Total Revenue	Rs. Cr	35.69	40.26	44.07	48.65	53.71	59.30	65.48	72.31	80.21	88.98	98.71
ADD:30% of Non-Aero Revenue	Rs. Cr	5.29	9.40	10.33	11.36	12.49	13.73	15.09	16.59	18.24	20.06	22.05
ADD: UDF (10 yr Stdream)	Rs. Cr	0.00	97.49	107.54	120.45	134.90	151.09	169.22	189.53	212.27	237.75	266.28
Projected Revenue	Rs. Cr	40.98	147.15	161.94	180.46	201.10	224.13	249.80	278.44	310.73	346.79	387.04
Projected Expenses	Rs. Cr	67.18	96.67	104.11	112.17	118.79	126.16	134.35	143.42	171.50	185.99	201.72
EBITD	Rs. Cr	-26.20	50.48	57.84	68.28	82.31	97.96	115.45	135.01	139.23	160.79	185.32
Less Depreciation	Rs. Cr	36.76	36.76	36.76	36.76	36.76	36.76	36.76	36.76	36.76	36.76	0.00
PBT	Rs. Cr	-62.96	13.72	21.08	31.52	45.55	61.20	78.69	98.25	102.47	124.03	185.32
Less: Income Tax	Rs. Cr	-21.34	4.65	7.15	10.69	15.44	20.75	26.68	33.31	34.74	42.05	62.82
Less: income tax - condition	Rs. Cr	0.00	4.65	7.15	10.69	15.44	20.75	26.68	33.31	34.74	42.05	62.82
PAT	Rs. Cr	-62.96	9.07	13.93	20.84	30.11	40.45	52.01	64.95	67.73	81.99	122.50
Discount Factor	#	1.00	0.89	0.80	0.71	0.64	0.57	0.51	0.45	0.40	0.36	0.32
PV of PAT	Rs. Cr	-62.96	8.10	11.11	14.83	19.13	22.95	26.35	29.38	27.36	29.57	39.44
NPV of PAT	Rs. Cr	**165.26**										

GROSS UDF(After service tax and collection Chrgs.)			Amt. in Rs.	
UDF CALCULATION	NET UDF	UDF + Service Tax@10.3%	GROSS UDF(UDF+ST+COLL CHARGE Rs. 5)	
DOMESTIC	496.00	547	552	(Say Rs. 550/-)
INTERNATIONAL	921.00	1016	1021	(Say Rs. 1020/-)

TRIVANDRUM AIRPORT

Snapshot of the ad-hoc UDF computation
(15 years period)

Particulars	Units	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
10 Year UDF Stream	Rs. Cr		97.49	107.54	120.45	134.90	151.09	169.22	189.53	212.27	237.75	266.28				
Discounting Factor			1.00	0.89	0.80	0.71	0.64	0.57	0.51	0.45	0.40	0.36				
PV of UDV	Rs. Cr		97.49	96.02	96.02	96.02	96.02	96.02	96.02	96.02	96.02	96.02				
NPV of 10 Year UDF	Rs. Cr	961.69														
Domestic Passengers		0.28	0.31	0.35	0.39	0.44	0.49	0.55	0.61	0.68	0.77	0.86	0.95	1.04	1.14	1.26
International Passengers		0.81	0.89	0.98	1.10	1.23	1.38	1.54	1.73	1.94	2.17	2.43	2.72	3.05	3.41	3.82
Total Passengers		1.09	1.20	1.33	1.49	1.67	1.87	2.09	2.34	2.62	2.94	3.29	3.66	4.09	4.56	5.08
15 yr UDF - Dom	per pax	251.00														
15 yr UDF - Int'l	per pax	644.00														
UDF Collection -Dom	Rs. Cr		7.78	8.71	9.75	10.92	12.24	13.70	15.35	17.19	19.25	21.56	23.72	26.09	28.70	31.57
UDF Collection -Int'l	Rs. Cr		57.42	63.17	70.75	79.23	88.74	99.39	111.32	124.68	139.64	156.40	175.16	196.18	219.72	246.09
Total UDF			65.20	71.87	80.50	90.16	100.98	113.10	126.67	141.87	158.89	177.96	198.88	222.27	248.43	277.66
Discounting Factor			1.00	0.89	0.80	0.71	0.64	0.57	0.51	0.45	0.40	0.36	0.32	0.29	0.26	0.23
PV of 15 yr UDF	Rs. Cr		65.20	64.17	64.17	64.17	64.17	64.17	64.17	64.17	64.17	64.17	64.03	63.90	63.76	63.63
NPV of 15 yr UDF	Rs. Cr	961.60														

GROSS UDF(After service tax and colln. charges) [Amt. in Rs]

UDF CALCULATION	NET UDF	UDF + Service Tax@10.3 %	GROSS UDF(UDF+ST+COLL CHARGE Rs. 5)	
DOMESTIC	251.00	277	282	(Say Rs. 280/-)
INTERNATIONAL	644.00	710	715	

TRIVANDRUM AIRPORT
Computation of UDF at Varying Rates

Particulars	Unit	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Domestic Passengers	#	276607	309799	346975	388612	435246	487475	545972	611489	684868	767052	859098
Rate of UDF	Rs.	0.00	496.00	496.00	496.00	496.00	496.00	496.00	496.00	496.00	496.00	496.00
Total UDF (D)	Rs. in Crs	0.00	15.37	17.21	19.28	21.59	24.18	27.08	30.33	33.97	38.05	42.61
International Passengers	#	810605	891666	980832	1098532	1230356	1377998	1543358	1728561	1935989	2168307	2428504
Rate of UDF	Rs.	0.00	921.00	921.00	921.00	921.00	921.00	921.00	921.00	921.00	921.00	921.00
Total UDF (I)	Rs. in Crs	0.00	82.12	90.33	101.17	113.32	126.91	142.14	159.20	178.30	199.70	223.67
Grand Total of UDF (D + I)		0.00	97.49	107.54	120.45	134.90	151.09	169.22	189.53	212.27	237.75	266.28
Calculation of PSF (Facilitation)			9.25	10.22	11.45	12.83	14.36	16.09	18.02	20.18	22.60	25.31

TRIVANDRUM AIRPORT
Computation of Expenditure

Particulars	Unit	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Pay & Allowances	Rs. Cr	24.47	30.58	33.03	35.67	38.52	41.61	44.93	48.53	63.09	68.13	73.58
Other Staff Benefits	Rs. Cr	8.54	10.68	11.53	12.45	13.45	14.52	15.69	16.94	22.02	23.78	25.69
Repair & Maintenance	Rs. Cr	5.33	10.66	11.72	12.89	14.18	15.60	17.16	18.88	20.76	22.84	25.12
Consumption of Stores&Spares	Rs. Cr	0.27	0.54	0.58	0.62	0.66	0.71	0.76	0.81	0.87	0.93	0.99
Financing charges	Rs. Cr	1.43	8.55	8.55	8.55	6.41	4.28	2.14	0.00	0.00	0.00	0.00
Electricity & Water Charges	Rs. Cr	4.20	10.50	11.55	12.71	13.98	15.37	16.91	18.60	20.46	22.51	24.76
Other Exp (other than Dep & Security)	Rs. Cr	2.87	3.59	3.95	4.34	4.78	5.26	5.78	6.36	7.00	7.70	8.47
Apportionment of CHQ Overhead & Provisions for Trivandrum Airport	Rs. Cr	20.08	21.58	23.20	24.94	26.81	28.82	30.98	33.31	37.30	40.10	43.11
Grand Total	Rs. Cr	67.18	96.67	104.11	112.17	118.79	126.16	134.35	143.42	171.50	185.99	201.72
Depreciation		36.76	36.76	36.76	36.76	36.76	36.76	36.76	36.76	36.76	36.76	0.00

TRIVANDRUM

COMPUTATION OF NON-TRAFFIC REVENUE

Particulars	Unit	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Trading Concessions												
Restaurant/Snackbars	Rs. Cr	1.74	3.48	3.83	4.21	4.63	5.10	5.60	6.17	6.78	7.46	8.21
T.R. Stall	Rs. Cr	0.57	1.14	1.25	1.38	1.52	1.67	1.84	2.02	2.22	2.44	2.69
Hoarding & Display	Rs. Cr	0.76	1.52	1.67	1.84	2.02	2.23	2.45	2.69	2.96	3.26	3.58
Duty Free Shop	Rs. Cr	5.33	10.66	11.73	12.90	14.19	15.61	17.17	18.88	20.77	22.85	25.14
Others	Rs. Cr	0.82	1.64	1.80	1.98	2.18	2.40	2.64	2.91	3.20	3.52	3.87
Total		9.22	18.44	20.28	22.31	24.54	27.00	29.70	32.67	35.93	39.53	43.48
Rent and Services												
Land Lease	Rs. Cr	1.72	1.89	2.08	2.29	2.52	2.77	3.04	3.35	3.68	4.05	4.46
Throughput Charges	Rs. Cr	0.00	2.00	2.18	2.38	2.59	2.82	3.08	3.35	3.66	3.99	4.34
Hangers	Rs. Cr	0.05	0.06	0.07	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14
Building (Residential)	Rs. Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
Building (Non-Residential)	Rs. Cr	2.14	4.28	4.71	5.18	5.70	6.27	6.89	7.58	8.34	9.17	10.09
Income from Other Services	Rs. Cr	0.42	0.47	0.52	0.57	0.63	0.69	0.76	0.83	0.92	1.01	1.11
Total		4.33	8.70	9.55	10.49	11.51	12.64	13.87	15.23	16.72	18.35	20.15
Miscellaneous			-									
Car Parking	Rs. Cr	2.28	2.29	2.52	2.77	3.05	3.35	3.69	4.06	4.46	4.91	5.40
Admission Tickets	Rs. Cr	0.11	0.12	0.13	0.15	0.16	0.18	0.19	0.21	0.23	0.26	0.28
Rest Rooms	Rs. Cr	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Ground handling	Rs. Cr	1.60	1.69	1.86	2.04	2.25	2.47	2.72	2.99	3.29	3.62	3.98
Others	Rs. Cr	0.08	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.16	0.17	0.19
Total		4.07	4.18	4.60	5.06	5.57	6.13	6.74	7.41	8.15	8.97	9.87
Total Non-Aero Revenues	Rs. Cr	17.63	31.33	34.44	37.86	41.63	45.76	50.31	55.31	60.81	66.85	73.50

ANNEX - II

TRIVANDRUM AIRPORT

ASSET SCHEDULE(EXISTING ASSETS) as on 31st March 2009

S.NO.	DESCRIPTION	(Rs. In Crores)
1	FREE-HOLD LAND	6.58
2	RUNWAYS	22.05
3	TAXIWAYS	8.3
4	APRONS	21.18
5	ROAD,BRIDGES & CULVERTS	12.27
6	TERMINAL & OTHER BUILDINGS IN OPL. AREA	25.14
7	BUILDINGS - TEMPORARY	0.66
8	BUILDINGS - RESIDENTIAL	0.57
9	SECURITY FENCING- TEMPORAY	1.08
10	BOUNDARY WALL-OPERATIONAL	0.12
11	BOUNDARY WALL-RESIDENTIAL	0.14
12	OTHER BUILDINGS- UNCLASSIFIED	2
13	COMPUTERS & I.T. HARDWARE & ACCESS	1.96
14	INTANGIBLE ASSET-COMPUTER SOFTWARES	0.01
15	PLANT & MACHINERY	16.53
16	TOOLS & EQUIPMENTS	2.63
17	OFFICE FURNITURE & FIXTURES	1.18
18	VEHICLES	1.71
19	ELEC. INSTLLN/AIR-CONDITIONERS	31.28
20	OTHER OFFICE EQUIP/APPLIANCES	0.36
21	FUR. & FIX.:OPERATIONAL AREA	1.99
22	X-RAY BAGGAGE INSPN SYSTEM	4.02
23	C.F.T / FIRE FIGHTING EQUIP.	17.32
	Total Gross Block	179.08
	Less: Accumulated Depreciation	100.17
	Total Net Block	78.91

ANNEXURE III

Key Assumptions (Trivandrum)

Sl no	Parameters	Assumptions	Basis of assumption
1	**Traffic**		
i	Passenger growth rate per annum	Domestic: 15% in 09-10, 12% thereafter	Adopted forecast made by CPMS
	(as per Forecast made by CPMS)	International:10% in 09-10,10-11,11-12 & 12% thereafter	Adopted forecast made by CPMS
ii	Growth rate of aircraft momements per annum (as per Forecast made by CPMS)	9.7% in 10-11,8.9% in 11-12,10% in 12-13 to 16-17 then 10.9% upto 19-20	Adopted forecast made by CPMS
iii	Date of commencement of operation for new terminal	April, 2010	
iv	Percentage of departing passengers	50% total passengers handled at the airport	
2	**Revenue**		
i.	Growth rate of Landing, housing & Parking Revenue	9.7% in 10-11,8.9% in 11-12,10% in 12-13 to 16-17 then 10.9% upto 19-20	As per the aircraft movements projected by CPMS
ii	Growth rate of passenger service fee	Same as passenger growth rate mentioned above	As per the passenger movements projected by CPMS
iii	Passenger service fee	Security component of PSF not considered similarly security expenses not included in the calculations	
3	**Non-Traffic Revenue**		
i	Trading Concessions including Restaurant, Hoarding & display, Duty Free shops	100% increase in 2010-11 on commissioning of new terminal building. 10% increase afterwards	Built-in escalation in the commercial agreements vary from 7.5% to 10% Hence a uniform rate of 10% assumed.
ii	Rent and Services including throughput charges(on aircraft fuel)	100% increase in Building rent(Non-Residential) in 2010-11 on commissioning of new terminal building. 10% growth rate assumed thereafter. Throughput charges increased by 9% from 2011-12 onwards	Agreements with oil cos reached for levy of throughput charges & additional revenue of Rs. 2 crs are likely to received in 2010-11. considering this , growth of aircraft movements and taking long term view, growth rate of 9% adopted for throughput charges. Rentel agreements includes esclation clause for increase of rent by 7.5% , considering this and taking long term view , 10% growth rate considered
iii	Miscellaneous revenue including Car Parking etc.	10% over previous year	Misc. revenue during 2008-09 dropped by 32% over preivious year and further decrease of 26% in 2009-10 over over 2008-09 is estimated. However, taking a longer term view 10% growth rate has been adopted.
iv	Revenue from City Side Development	Revenue from City Side developments not considered.	AAI has decided to take up development of 10 airports in first phase i.e. Amritsar, Jaipur, Lucknow, Vizag, Bhubneswar, Indore, Ahmedabad, Begumpet, Kolkata & Guwahati. Since Trivandrum airport is not included in list, no revenue from it has been considered in the calculations.
4	**Expenses**		

i	Growth rate of pay and allowances FY11 onwards	25% increase in pay & allownaces in 2010-11. 8% from FY 11-12 to FY 19-20.except FY 17-18 where it is 30%	The effect of increments, increase in DA and promotions comes to approx. 8%. . Increase in staff expenses on commission of new terminal builidng by 25% takes care of the regular increase as well as deployment of manpower comensurate with size and operation of new terminal building. 30% increase in FY17-18 is estimated due to likely revision of pay scales w.e.f. 2017.
ii	Growth rate of repairs and maintenance FY 11 onwards	100% in the year of commissioning and thereafter regular growth rate of 10%	Higher initial expenditure estimated due to increase in terminal building area from 9000 Smts to 32000 Smts (old+new) involving larger area for upkeep and maintenance and more civil & electrical repairs and new equipments & systems under R&M
iii	Growth rate of consumption of stores	100 % increase in year of commissioning and thereafter regular growth rate of 7%	As above.
iv	Electricity & Water Charges	150% increase in the year of commissioning thereafter flat growth rate of 10%	Higher initial expenditure estimated due to increase in terminal building area from 9000 Smts to 32000 Smts. Increase in air-conditioning expenses, lighting and electrical & electronic equipments.
v	Interest on Borrowings	9% on loan of Rs. 95 crores with 25% repayment from 13-14 onwards	as per the action plan of AAI
vi	Security expenses	Not considered	
vii	Other miscellaneous expenditure	25% in first year of commission thereafter flat growth rate of 10%	Higher initial expenditure estimated due to increase in terminal building area from 9000 Smts to 32000 Smts and increase in operations
	Apportionment of CHQ/RHQ Expenses	A uniform growth rate of 7.5% assumed except in 2017-18 where 12% growth is considered.	The expenses of CHQ & RHQ have been apportioned over the airports based on the number of employees which is, as per the existing methodology and policy of AAI
5	**Tax rates**		
i	Corporate tax	33.99%	
ii	Service tax	10.30%	
6	**Assets**		
i	Value of the new International Terminal Building to be capitalised	Rs. 289.60 crores	The project cost was approved by PIB at an estimated cost of Rs. 245.58 crores. The project cost of the New International Terminal Building has now been firmed up at Rs.289.60 crores. It inter alia, includes the cost of aerobridges, apron, tax link, car park and approach road.
ii	Opening balance for old assets	Rs. 78 crores	

iii	Depreciation rate	10%	Depreciation rate followed by AAI is as per accounting policy approved by AAI Board considering the useful life of the assets. However, in the instant proposal depriciation has been considered on straight line method at weighted avg rate of 10%
7	**Post tax nominal WACC**	12%	The post tax nominal WACC has been kept at 12% which is the minimum requirement for any project for approval by the PIB/GoI.
8	**Ad-hoc UDF Assumption**		
	UDF collection charge per passenger	Rs. 5	
9	**Borrowings**		
i	Loan for the Project	Rs 95 crores	
ii	Rate of interest	9%	
iii	Schedule of repayment	25% repayment from FY 13-14 onwards	
iv	Interest charges	Rs.0.90 crores from 10-11 to 12-13, Rs.0.68 crores in 13-14,Rs. 0.45 crores in 14-15 and Rs. 0.23 crores in 15-16	

UDF Calculation - 10 yr International & Domestic

Annexure IV

All numbers are in Million Rs			2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
			Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5	Yr. 6	Yr. 7	Yr. 8	Yr. 9	Yr. 10	Yr. 11	Yr. 12	Yr. 13	Yr. 14	Yr. 15	Yr. 16
Aeronautical Revenue		AR	304	1,013	1,113	1,241	1,384	1,544	1,722	1,921	2,146	2,398	2,680	2,994	3,346	3,739	4,178	4,670
Non Aeronautical Revenues		NAR	160	279	306	337	371	408	449	493	543	597	657	722	795	874	962	1,058
Admissible Capital Base		C	689	3,228	2,749	2,342	1,980	1,643	1,320	1,001	683	373	145	68	68	67	67	67
O&M cost		OMA	658	881	956	1,036	1,124	1,219	1,322	1,434	1,715	1,860	2,018	2,188	2,374	2,575	2,794	3,032
Depreciation		D	198	516	441	375	348	327	319	319	319	301	154	0	0	0	0	0
Tax payable		T	-	-	8	57	96	138	180	225	223	283	396	519	600	693	797	916
WACC			12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%
Admissible Expenditure E = CxROCE + OMA + OMNA + D + T			939	1,785	1,734	1,749	1,806	1,881	1,979	2,098	2,338	2,490	2,585	2,716	2,983	3,276	3,600	3,956
Target Revenue R = AR+NAR			464	1,291	1,419	1,578	1,755	1,952	2,170	2,414	2,689	2,995	3,336	3,717	4,141	4,613	5,140	5,727
Target Deficit TD = E - R			474	494	315	171	51	(71)	(191)	(316)	(350)	(505)	(752)	(1,001)	(1,158)	(1,337)	(1,540)	(1,771)
NPV of target deficit		(0)	474	494	281	136	36	(45)	(108)	(160)	(159)	(204)	(271)	(322)	(333)	(343)	(353)	(362)
Domestic departing Pax				0.31	0.35	0.39	0.44	0.49	0.55	0.61	0.68	0.77	0.86	0.96	1.08	1.21	1.35	1.51
International departing Pax				0.89	0.98	1.10	1.23	1.38	1.54	1.73	1.94	2.17	2.43	2.72	3.05	3.41	3.82	4.28
UDF Incremental Revenue - Domestic				40	45	51	57	63	71	79	89	100	112	125	140	157	176	197
UDF Incremental Revenue - International				636	700	784	878	983	1,101	1,233	1,381	1,547	1,733	1,940	2,173	2,434	2,726	3,053
Net Incremental revenue - UDF				676	745	834	934	1,046	1,172	1,313	1,470	1,647	1,844	2,066	2,313	2,591	2,902	3,250

	Existing UDF	UDF after Increase
Domestic UDF in Rs.	-	130
International UDF in Rs.	-	713

Annexure V

UDF Calculation 15 yr International & Domestic

All numbers are in Million Rs			2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
			Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5	Yr. 6	Yr. 7	Yr. 8	Yr. 9	Yr. 10	Yr. 11	Yr. 12	Yr. 13	Yr. 14	Yr. 15	Yr. 16
Aeronautical Revenue		AR	304	848	932	1,039	1,157	1,290	1,437	1,602	1,789	1,998	2,232	2,493	2,785	3,110	3,474	3,881
Non Aeronautical Revenues		NAR	160	279	306	337	371	408	449	493	543	597	657	722	795	874	962	1,058
Admissible Capital Base		C	689	3,228	2,749	2,342	1,980	1,643	1,320	1,001	683	373	145	68	68	67	67	67
O&M cost		OMA	658	881	956	1,036	1,124	1,219	1,322	1,434	1,715	1,860	2,018	2,188	2,374	2,575	2,794	3,032
Depreciation		D	198	516	441	375	348	327	319	319	319	301	154	0	0	0	0	0
Tax payable		T	-	-	-	-	19	52	83	116	101	147	244	349	410	479	558	648
WACC			12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%
Admissible Expenditure E = CxROCE + OMA + OMNA + D + T			939	1,785	1,726	1,692	1,729	1,794	1,883	1,990	2,217	2,354	2,433	2,546	2,792	3,062	3,360	3,688
Target Revenue R = AR+NAR			464	1,127	1,238	1,376	1,528	1,698	1,886	2,096	2,332	2,595	2,889	3,215	3,579	3,984	4,436	4,938
Target Deficit TD = E - R			474	658	488	317	201	97	(3)	(106)	(115)	(242)	(456)	(670)	(787)	(922)	(1,075)	(1,251)
NPV of target deficit		(0)	474	658	436	252	143	62	(2)	(54)	(52)	(98)	(164)	(216)	(226)	(237)	(246)	(256)
Domestic departing Pax				0.31	0.35	0.39	0.44	0.49	0.55	0.61	0.68	0.77	0.86	0.96	1.08	1.21	1.35	1.51
International departing Pax				0.89	0.98	1.10	1.23	1.38	1.54	1.73	1.94	2.17	2.43	2.72	3.05	3.41	3.82	4.28
UDF Incremental Revenue - Domestic				40	45	51	57	63	71	79	89	100	112	125	140	157	176	197
UDF Incremental Revenue - International				472	519	581	651	729	817	915	1,024	1,147	1,285	1,439	1,612	1,805	2,022	2,264
Net Incremental revenue - UDF				512	564	632	708	792	888	994	1,113	1,247	1,397	1,564	1,752	1,962	2,198	2,461

	Existing UDF	UDF after Increase
Domestic UDF in Rs.	-	130
International UDF in Rs.	-	529

Annexure VI

UDF Calculation Only International 10 years

All numbers are in Million Rs

		2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
		Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5	Yr. 6	Yr. 7	Yr. 8	Yr. 9	Yr. 10	Yr. 11	Yr. 12	Yr. 13	Yr. 14	Yr. 15	Yr. 16
Aeronautical Revenue	AR	304	1,013	1,113	1,241	1,384	1,544	1,722	1,920	2,146	2,398	2,679	2,994	3,346	3,739	4,178	4,669
Non Aeronautical Revenues	NAR	160	279	306	337	371	408	449	493	543	597	657	722	795	874	962	1,058
Admissible Capital Base	C	689	3,228	2,749	2,342	1,980	1,643	1,320	1,001	683	373	145	68	68	67	67	67
O&M cost	OMA	658	881	956	1,036	1,124	1,219	1,322	1,434	1,715	1,860	2,018	2,188	2,374	2,575	2,794	3,032
Depreciation	D	198	516	441	375	348	327	319	319	319	301	154	0	0	0	0	0
Tax payable	T	-	-	8	57	96	138	180	225	223	283	396	519	600	693	797	916

WACC		12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%
Admissible Expenditure E = CxROCE + OMA + OMNA + D + T		939	1,785	1,734	1,749	1,806	1,881	1,979	2,098	2,338	2,490	2,585	2,716	2,983	3,276	3,600	3,956
Target Revenue R = AR+NAR		464	1,292	1,419	1,578	1,755	1,951	2,170	2,414	2,689	2,995	3,336	3,716	4,140	4,613	5,140	5,727
Target Deficit TD = E - R		474	493	315	171	51	(71)	(191)	(316)	(350)	(505)	(751)	(1,000)	(1,158)	(1,337)	(1,540)	(1,771)
NPV of target deficit	(0)	474	493	281	136	36	(45)	(108)	(160)	(158)	(204)	(271)	(322)	(333)	(343)	(353)	(362)
Domestic departing Pax			0.31	0.35	0.39	0.44	0.49	0.55	0.61	0.68	0.77	0.86	0.96	1.08	1.21	1.35	1.51
International departing Pax			0.89	0.98	1.10	1.23	1.38	1.54	1.73	1.94	2.17	2.43	2.72	3.05	3.41	3.82	4.28
UDF Incremental Revenue - Domestic			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UDF Incremental Revenue - International			677	745	834	934	1,046	1,172	1,312	1,470	1,646	1,844	2,065	2,313	2,591	2,901	3,250
Net Incremental revenue - UDF			677	745	834	934	1,046	1,172	1,312	1,470	1,646	1,844	2,065	2,313	2,591	2,901	3,250

	Existing UDF	UDF after Increase
Domestic UDF in Rs.	-	-
International UDF in Rs.	-	759

Annexure VII

UDF Calculation - Only International 15 years

All numbers are in Million Rs

		2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
		Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5	Yr. 6	Yr. 7	Yr. 8	Yr. 9	Yr. 10	Yr. 11	Yr. 12	Yr. 13	Yr. 14	Yr. 15	Yr. 16
Aeronautical Revenue	AR	304	849	932	1,038	1,157	1,290	1,437	1,602	1,789	1,998	2,232	2,493	2,784	3,110	3,474	3,880
Non Aeronautical Revenues	NAR	160	279	306	337	371	408	449	493	543	597	657	722	795	874	962	1,058
Admissible Capital Base	C	689	3,228	2,749	2,342	1,980	1,643	1,320	1,001	683	373	145	68	68	67	67	67
O&M cost	OMA	658	881	956	1,036	1,124	1,219	1,322	1,434	1,715	1,860	2,018	2,188	2,374	2,575	2,794	3,032
Depreciation	D	198	516	441	375	348	327	319	319	319	301	154	0	0	0	0	0
Tax payable	T	-	-	-	-	19	52	83	116	101	147	244	349	410	479	558	648

WACC		12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%
Admissible Expenditure E = CxROCE + OMA + OMNA + D + T		939	1,785	1,726	1,692	1,729	1,794	1,883	1,990	2,217	2,354	2,433	2,546	2,792	3,062	3,360	3,688
Target Revenue R = AR+NAR		464	1,128	1,238	1,375	1,528	1,697	1,886	2,095	2,332	2,595	2,889	3,215	3,579	3,984	4,435	4,938
Target Deficit TD = E - R		474	657	488	317	201	97	(3)	(106)	(115)	(242)	(456)	(669)	(787)	(922)	(1,075)	(1,250)
NPV of target deficit	0	474	657	436	253	143	62	(2)	(54)	(52)	(98)	(164)	(216)	(226)	(237)	(246)	(256)
Domestic departing Pax			0.31	0.35	0.39	0.44	0.49	0.55	0.61	0.68	0.77	0.86	0.96	1.08	1.21	1.35	1.51
International departing Pax			0.89	0.98	1.10	1.23	1.38	1.54	1.73	1.94	2.17	2.43	2.72	3.05	3.41	3.82	4.28
UDF Incremental Revenue - Domestic			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UDF Incremental Revenue - International			513	564	632	707	792	887	994	1,113	1,247	1,396	1,564	1,752	1,962	2,197	2,461
Net Incremental revenue - UDF			513	564	632	707	792	887	994	1,113	1,247	1,396	1,564	1,752	1,962	2,197	2,461

	Existing UDF	UDF after Increase
Domestic UDF in Rs.	-	-
International UDF in Rs.	-	575