

# **AIRPORTS AUTHORITY OF INDIA**

**Revised proposal for levy of UDF**

**At**

**Ahmedabad 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 11<sup>th</sup> 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**

1.1 Ahmedabad is a city with a rich blend of Hindu and Islamic architecture. It is regarded as a major centre for textile, pharmaceutical industries and reputed for the country's premier institute of management. Local stalwart in the creation of the India of today was Sardar Vallabh Bhai Patel known as Iron Man of India and remembered in the very name of airport - Sardar Vallabh Bhai Patel International Airport, which is about 8 kms outside Ahmedabad main railway station.

1.2 Ahmedabad Airport having Aerodrome Reference Code of 4E and oriented runway 05-23 of 3505m length. Presently Indian Airlines, Singapore airlines and Malaysian Airlines are operating their schedule service with A-320, A-310, B-772 and A-331 type of aircrafts in international Sector. With the commissioning of new terminal building, more foreign airlines are expected to operate from Ahmedabad Airport.

1.3 The two existing terminals have a total capacity of 7.76 lacs passengers per annum (domestic - 6.40 lacs international - 1.36 lacs) Both the existing Domestic and International Terminals have saturated. The existing apron has space for 13 aircraft stands. Along the existing apron airline maintenance facilities and cargo facilities are operating. The technical buildings like control tower, fire station and other necessary ancillary buildings do exist.

### **2 BACKGROUND**

2.1 Since the International passenger terminal building had already saturated AAI had decided to hold an Architectural competition for design and complete engineering services of a New International passenger Terminal building for Ahmedabad Airport. M/s Kothari & Associates, CPG Consultants Singapore & EIL were declared as the winner of the competition.

### **3. PROJECT DETAILS**

3.1 Govt. of India vide letter no. AV.20036/017/2002-AAI dated 09/01/2007 (copy enclosed) had approved the construction of new International Terminal building at an estimated Project Cost of Rs. 290.92 crores. (Phase-I Rs. 195.92 crores + Phase-II Rs. 95 crores). The new international terminal building will have a total area of 41000 sqm (Phase-I 27331 Sqm & Phase-II - 13669), an increase of 33616 Sqm as compared to existing international terminal building.

The assets-wise breakup of new terminal building project as per approved project cost is enclosed at Annexure-A.

Earlier it was planned that the new international terminal building being constructed under Phase-I would be further expanded under Phase-II in 2013-14 to meet the future traffic growth. However, considering the rapid growth in passenger traffic, the project work under Phase-II has been taken simultaneously along with the work under Phase-I.

The likely project cost has now been worked out at Rs. 296.37 crores, which includes the cost of 4 aerobridges, traveller approach road, car park etc.

3.2 It also includes Apron and Taxi Link for 6 aircraft bays.

3.3 The inter-terminal connectivity between international and domestic terminals has also been provided.

### **4. SALIENT FEATURES OF THE PROJECT**

4.1 With the commissioning of new international terminal building, the peak hour international passenger handling capacity would increase from 500 (Arrival-250 & Departure-250) to 1400



(Arrival-600 & Departure-800.)

- 4.1 Centrally air-conditioned International Passenger Terminal Building having plinth area of 41000 sqm including all passenger facilities.
- 4.2 Construction of 4 in contact and 2 remote bays for wide body aircrafts.
- 4.3 Approach Road and car parking.
- 4.4 Bulk services, sewerage, drainage water and power supply.
- 4.5 Sewerage Treatment Plant.

## **5 PERIOD OF CONSTRUCTION**

The new international terminal is nearing completion and is now expected to be commissioned during the month of May, 2010. Though the new terminal was envisaged to be used as International terminal building, however it is now proposed to be used as Domestic Terminal and the existing domestic terminal would be used as International Terminal. The usage of existing international terminal after commissioning of new terminal building has not yet been firmed up.

## **6 INTERNAL RATE OF RETURN**

- 6.1 The project IRR which was worked out at the time of approval of the Project by the AAI Board was only 6.2% Post tax.
- 6.2 The subject work has been taken up for up-gradation of passenger facilitation. Although the

projected IRR is less than 12% required, the proposal was cleared by PIB considering the prevailing requirements.

## **7. ESSENTIALITY OF THE PROJECT**

In pursuit of the corporate mission of AAI "To provide utmost satisfaction to the passengers" and constantly work towards upgradation 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 Ahmedabad Airport shall also be met by the implementation of the project. The construction of the new International terminal building will enhance passenger facilities in tune with the International standards. The facilities will attract International tourist, promote tourism, IT professionals and help towards 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 up gradation, 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 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	<ul style="list-style-type: none"> <li>• EUR 9.80 –transfer and transit passengers</li> <li>• EUR 15.20 – EU flights</li> <li>• EUR 16.75 – Non EU European flights</li> <li>• EUR 18.80 – intercontinental flights</li> </ul>
4	Sydney	<ul style="list-style-type: none"> <li>• AUD 4.95 –flights within NSW</li> <li>• AUD 8.15 – others</li> </ul>	AUD 26.06
5	Singapore		<ul style="list-style-type: none"> <li>• SGD 15 – Budget terminal</li> <li>• SGD 28 – Main terminal</li> </ul>
6	Kuala Lumpur	RM 6	<ul style="list-style-type: none"> <li>• RM 45 – Main Terminal</li> <li>• RM 25 – Low cost terminal</li> </ul>

**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 expected date of commencement of New Terminal Building is 15<sup>th</sup> May, 2010 and the levy of UDF has been assumed to be effective from 15.05.2010.

1. Value of total asset base of the airport for the purpose of ad-hoc UDF calculation is computed as Rs 426.39 cr. This comprises Rs 296.37 crores of capital expenditure for the New International Terminal Building and Rs 130.02 crores as book value of existing assets and it includes new Domestic terminals. 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. Though apart from the new terminal, Capital investments are likely to be made year to year, the same has not been projected.
4. The revenues from Route Navigation Facility Charge (RNFC) & TNLC for incoming flights at Ahmedabad 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.

5. The discount factor for calculating the NPV of net profit and return on capital employed has been taken as 12 percent.
6. 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.
7. '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.
8. 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.

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

10. AAI request that a UDF of Rs. 270/- per domestic embarking pax and Rs. 1000/- per international embarking pax may be levied at Ahmedabad airport for a period of 10 years. Alternately, UDF may be levied at Ahmedabad Airport @ 150/- per domestic embarking passenger and Rs. 755/- per international embarking passenger for 15 years.



IMMEDIATE

No. AY/20036/017/2002-AAI

Government of India

Ministry of Civil Aviation

(AAI Section)

"B" Block, Rajiv Gandhi Bhawan,  
Safdarjung Airport, New Delhi 110 003

Dated: 09/01/2007

To:  
The Chairman  
(Dr. K. Ramalingam)  
Airports Authority of India  
Rajiv Gandhi Bhawan, "A" Block,  
Safdarjung Airport, New Delhi - 110 003

Subject: Construction of New International Terminal Building at  
Ahmedabad Airport at an estimated cost of Rs. 290.92 Crores  
(Phase I - Rs. 195.92 Crores + Phase II - Rs. 95.00 Crores)-Regarding  
NOTE FOR THE CABINET COMMITTEE ON ECONOMIC  
AFFAIRS.

Sir,

I am directed to refer to various communications of even number of this  
Ministry on the above-mentioned subject and to say that the competent authority  
has accorded approval for construction of New International Terminal Building  
at Ahmedabad Airport at an estimated cost of Rs. 290.92 Crores (Phase I - Rs.  
195.92 Crores + Phase II - Rs. 95.00 Crores).

Yours faithfully,

(Sarvesh Kr. Arya)

Under Secretary

Teletax No. 246 40 27

Above has been  
collected by hand. Chandra

(Sg.) out for

Chairman

## ANNEXURE-A

# CONSTRUCTION OF PROPOSED INTERNATIONAL PASSENGER TERMINAL BUILDING AT AHMEDABAD

## SUMMARY

ITEMS	amount in crores
1A MAIN TERMINAL BUILDING	Rs. 123.96
1B SERVICE AND ANCILLARY BUILDING	Rs. 12.52
1C FURNISHING	Rs. 2.32
1D SITE DEVELOPMENT	Rs. 5.59
1E WORKS RELATED TO EQUIPMENT DIRECTORATE	Rs. 6.38
1F WORKS RELATED TO COMMUNICATION DIRECTORATE	Rs. 0.15
1 TOTAL COST OF BUILDING (i/c- aerobridges, carpark, approach road)	Rs. 150.92
2 APRON, TAXI LINK	Rs. 15.00
3 EXPENDITURE ON PRE PROJECT ACTIVITIES	Rs. 10.00
SEMI GROUND COVERED PARTHWAY-INTER TERMINAL LINK WITH 4 WALKATHONS	Rs. 20.00
SUB TOTAL OF THE PROJECT IN PHASE-1	Rs. 195.92
EXPENDITURE ON LINEAR EXPANSION OF TERMINAL BUILDING IN 5 2013-14 IN PHASE-II	Rs. 95.00
TOTAL COST OF THE ULTIMATE PROJECT	Rs. 290.92

**AHMEDABAD AIRPORT**  
**Snapshot of Ad-hoc UDF Computation**

(For 10 years period)			2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Particulars	Unit											
ROCE (Aero)	Rs. Cr											
RB*WACC (Aero ROCE)	#		47.05	41.93	36.82	31.70	26.58	21.47	16.35	11.23	6.12	1.78
Discount Factor	Rs. Cr		1.00	0.89	0.80	0.71	0.64	0.57	0.51	0.45	0.40	0.36
PV of Aero ROCE	Rs. Cr		47.05	37.44	29.35	22.56	16.89	12.18	8.28	5.08	2.47	0.64
NPV of Aero ROCE			181.95									
PAT (Aero)	Rs. Cr											
LHPC	Rs. Cr		40.66	44.08	47.78	51.79	56.14	60.86	65.97	72.83	80.40	88.77
PSF- only px facilitation	Rs. Cr		13.16	14.48	16.00	17.68	19.53	21.59	23.85	26.84	30.20	33.99
Total Revenue	Rs. Cr		53.82	58.56	63.78	69.47	75.68	82.44	89.82	99.67	110.61	122.75
ADD: 30% of Non-Aero Revenue	Rs. Cr		14.26	15.68	17.23	18.94	20.83	22.90	25.17	27.68	30.44	33.48
ADD: UDF (10 yr Stdream)	Rs. Cr		59.81	75.19	83.53	92.80	103.12	114.58	127.33	144.06	163.00	184.45
Projected Revenue	Rs. Cr		127.89	149.42	164.54	181.22	199.62	219.92	242.33	271.42	304.05	340.68
Projected Expenses	Rs. Cr		83.74	90.68	98.24	105.03	112.56	120.90	130.15	151.75	165.28	180.03
EBITD	Rs. Cr		44.15	58.74	66.30	76.19	87.05	99.02	112.18	119.67	138.77	160.64
Less Depreciation	Rs. Cr		42.64	42.64	42.64	42.64	42.64	42.64	42.64	42.64	42.66	29.64
PBT	Rs. Cr		1.52	16.11	23.66	33.55	44.42	56.38	69.54	77.03	96.12	131.01
Less: Income Tax	Rs. Cr		0.51	5.46	8.02	11.37	15.06	19.11	23.58	26.11	32.58	44.41
Less: income tax - condition	Rs. Cr		0.51	5.46	8.02	11.37	15.06	19.11	23.58	26.11	32.58	44.41
PAT	Rs. Cr		1.00	10.65	15.64	22.18	29.36	37.27	45.97	50.92	63.53	86.60
Discount Factor	#		1.00	0.89	0.80	0.71	0.64	0.57	0.51	0.45	0.40	0.36
PV of PAT	Rs. Cr		1.00	9.51	12.47	15.79	18.66	21.15	23.29	23.03	25.66	31.23
NPV of PAT	Rs. Cr		181.77									

GROSS UDF (Inclusive of Service tax and Coll. Ch.) [Amt. in Rs]

	NET UDF	NET UDF+ S.TAX @ 10.30%	GROSS UDF (UDF+ST+COLL CHARGE Rs. 5)
UDF CALCULATION			
DOMESTIC	239.00	264	269
INTERNATIONAL	903.00	996	1001

(Say Rs. 270/-)  
(Say Rs. 1000/-)



**AHMEDABAD AIRPORT**

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

Particulars	Units	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
10 Year UDF Stream	Rs. Cr	59.81	75.19	83.53	92.80	103.12	114.58	127.33	144.06	163.00	184.45					
Discounting Factor		1.00	0.89	0.80	0.71	0.64	0.57	0.51	0.45	0.40	0.36					
PV of UDF	Rs. Cr	59.81	67.13	66.59	66.06	65.53	65.02	64.51	65.17	65.83	66.51					
NPV of 10 Year UDF	Rs. Cr	<b>652.16</b>														
Domestic Passengers	# in million	1.30	1.43	1.57	1.72	1.90	2.09	2.30	2.57	2.88	3.22	3.55	3.90	4.29	4.72	5.19
International Passengers	# in million	0.41	0.46	0.51	0.57	0.64	0.72	0.80	0.91	1.04	1.19	1.33	1.49	1.67	1.87	2.10
Total Passengers	# in million	1.71	1.88	2.08	2.30	2.54	2.80	3.10	3.49	3.92	4.41	4.88	5.39	5.96	6.59	7.29
15 yr UDF - Dom	per pax	<b>132</b>														
15 yr UDF - Int'l	per pax	<b>680</b>														
UDF Collection -Dom	Rs. Cr	14.97	18.81	20.69	22.76	25.04	27.54	30.30	33.93	38.01	42.57	46.82	51.51	56.00	62.32	66.56
UDF Collection -Int'l	Rs. Cr	24.63	30.97	34.68	38.85	43.51	48.73	54.56	62.22	70.93	80.86	90.56	101.43	113.60	127.23	142.50
Total UDF		39.60	49.78	55.38	61.61	68.55	76.27	84.88	96.15	108.94	123.43	137.39	152.94	170.26	189.56	211.06
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	0.20
PV of 15 yr UDF	Rs. Cr	39.60	44.45	44.15	43.85	43.56	43.28	43.00	43.49	44.00	44.51	44.23	43.97	43.70	43.44	43.19
NPV of 15 yr UDF	Rs. Cr	<b>652.42</b>														

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

	UDF + Service Tax@10.3 %	GROSS UDF(UDF+ST+COLL CHARGE Rs. 5)
UDF CALCULATION	NET UDF	
DOMESTIC	132.00	146
INTERNATIONAL	680.00	750
		<b>755</b>

(Say Rs. 150/-)

# **AHMEDABAD AIRPORT**

## **Computation of UDF at Varying Rates**

Particulars	Unit	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Domestic Passengers	#	1295674	1425241	1567766	1724542	1856996	2086696	2295366	2570809	2879307	3224823
Rate of UDF	Rs.	239.00	239.00	239.00	239.00	239.00	239.00	239.00	239.00	239.00	239.00
Total UDF (D)	Rs. in Crs.	30.97	34.06	37.47	41.22	45.34	49.87	54.86	61.44	68.62	77.07
International Passengers	#	414020	455422	510073	571261	639835	716615	802609	914974	1043071	1183101
Rate of UDF	Rs.	903.00	903.00	903.00	903.00	903.00	903.00	903.00	903.00	903.00	903.00
Total UDF (I)	Rs. in Crs.	37.39	41.12	46.06	51.59	57.78	64.71	72.48	82.62	94.19	107.38
<b>Grand Total of UDF (D + I)</b>		<b>59.81</b>	<b>75.19</b>	<b>83.53</b>	<b>92.80</b>	<b>103.12</b>	<b>114.58</b>	<b>127.33</b>	<b>144.06</b>	<b>163.00</b>	<b>184.45</b>

Calculation of PSF (Facilitation)

	13.16	14.48	16.00	17.68	19.53	21.59	23.85	26.84	30.20	33.99
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Note: UDF in FY 10-11 considered from 15 May 2010 coinciding with likely date of commissioning of new terminal building



**AHMEDABAD AIRPORT**

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AHMEDABAD													
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	
<b>Trading Concessions</b>													
Restaurant/Snackbars	Rs. Cr	1.50	2.70	2.97	3.27	3.59	3.95	4.35	4.78	5.26	5.79	6.37	
T R. Stall	Rs. Cr	0.64	1.15	1.27	1.39	1.53	1.69	1.86	2.04	2.24	2.47	2.72	
Hoarding & Display	Rs. Cr	5.53	9.95	10.95	12.04	13.25	14.57	16.03	17.63	19.40	21.34	23.47	
Duty Free Shop	Rs. Cr	1.53	2.75	3.03	3.33	3.67	4.03	4.44	4.88	5.37	5.90	6.49	
Others	Rs. Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
<b>Total</b>		<b>9.20</b>	<b>16.56</b>	<b>18.22</b>	<b>20.04</b>	<b>22.04</b>	<b>24.25</b>	<b>26.67</b>	<b>29.34</b>	<b>32.27</b>	<b>35.50</b>	<b>39.05</b>	
<b>Rent and Services</b>													
Land Lease	Rs. Cr	3.58	3.94	4.33	4.76	5.24	5.77	6.34	6.98	7.67	8.44	9.29	
Building (Residential)	Rs. Cr	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	
Building (Non-Residential)	Rs. Cr	6.63	11.93	13.13	14.44	15.88	17.47	19.22	21.14	23.26	25.58	28.14	
Income from Other Services	Rs. Cr	1.57	1.79	1.97	2.17	2.38	2.62	2.88	3.17	3.49	3.84	4.22	
<b>Total</b>		<b>11.80</b>	<b>17.68</b>	<b>19.45</b>	<b>21.39</b>	<b>23.53</b>	<b>25.88</b>	<b>28.47</b>	<b>31.32</b>	<b>34.45</b>	<b>37.89</b>	<b>41.68</b>	
<b>Miscellaneous</b>													
Car Parking	Rs. Cr	4.00	4.08	4.49	4.94	5.43	5.97	6.57	7.23	7.95	8.75	9.62	
Porterage	Rs. Cr	0.57	0.64	0.70	0.77	0.85	0.94	1.03	1.13	1.25	1.37	1.51	
Admission Tickets	Rs. Cr	0.79	0.89	0.98	1.08	1.18	1.30	1.43	1.58	1.73	1.91	2.10	
Ground handling	Rs. Cr	1.36	1.50	1.65	1.81	1.99	2.19	2.41	2.65	2.92	3.21	3.53	
Throughput Charges	Rs. Cr	0.65	0.70	0.76	0.83	0.90	0.97	1.05	1.14	1.26	1.39	1.54	
Cargo	Rs. Cr	0.42	0.44	0.46	0.49	0.51	0.54	0.56	0.59	0.62	0.65	0.68	
Others	Rs. Cr	4.39	5.04	5.54	6.10	6.71	7.38	8.12	8.93	9.82	10.80	11.88	
<b>Total</b>		<b>12.18</b>	<b>13.29</b>	<b>14.59</b>	<b>16.01</b>	<b>17.57</b>	<b>19.29</b>	<b>21.18</b>	<b>23.25</b>	<b>25.55</b>	<b>28.08</b>	<b>30.86</b>	
<b>Total Non-Aero Revenues</b>	<b>Rs. Cr</b>	<b>33.18</b>	<b>47.53</b>	<b>52.25</b>	<b>57.44</b>	<b>63.15</b>	<b>69.42</b>	<b>76.32</b>	<b>83.90</b>	<b>92.27</b>	<b>101.47</b>	<b>111.59</b>	

## ANNEXURE -II

**BOOK VALUE OF OLD ASSETS - AHMEDABAD AIRPORT**  
**(as on 31st March, 2009)**

S. NO.	PARTICULARS	Net Block (Rs. In Crores)
1	Runways	0.53
2	Taxiways	3.15
3	Apron	20.33
4	Roads, Bridges & Culverts	1.91
5	Building -Terminal & Others	53.25
6	Computers & IT Hardwares	0.29
7	Machinery & Equipments	8.98
8	Tools & Plant	0.21
9	Office Furnitures & Fixtures	0.13
10	Vehicles - Others	0.64
11	Vehicles - Motor Cars/Jeeps	0.1
12	Electrical Installations	27.55
13	X-Baggage Inspection Sys.	9.89
14	Office Equipments	0.07
15	Typewriters & Other Office Appliances	0.8
16	Crash Fire Tenders/Fire fighting Eqpt.	0.05
17	Boundary Wall	1.92
18	Computer Softwares	0.22
	<b>TOTAL</b>	<b>130.02</b>

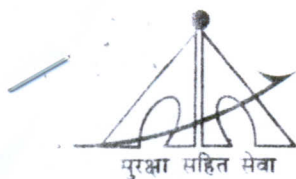
## Key Assumptions (Ahmedabad)

Sl no	Parameters	Assumptions	Basis of assumption
<b>1</b>	<b>Traffic</b>		
i	Passenger growth rate per annum	Domestic: 10% in 10-11 to 16-17 & 12% thereafter	Adopted forecast made by CPMS
	(as per Forecast made by CPMS)	International: 10% in 10-11, 11-12 & 12% in 12-13 to 16-17 & 14% thereafter	Adopted forecast made by CPMS
ii	Combined growth rate (Dom+Intl) of aircraft movements per annum (as per Forecast made by CPMS)	5.5% in 10-11, 8.4% in 11-12 to 16-17 then 10.4% thereafter	Adopted forecast made by CPMS
iii	Date of commencement of operation for new terminal	May/June, 2010	
iv	Percentage of departing passengers	50% total passengers handled at the airport	
<b>2</b>	<b>Revenue</b>		
i.	Growth rate of Landing, housing & Parking Revenue	8.4% in 11-12 to 16-17 then 10.4% thereafter	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)	Security component of PSF not considered similarly security expenses not included in the calculations	
<b>3</b>	<b>Non-Traffic Revenue</b>		
i	Trading Concessions including Restaurant, Hoarding & display, Duty Free shop	80% increase in 2010-11 on commissioning of new terminal building. 10% increase afterwards	Higher initial increase in 10-11 due to increase in area available for commercial activities. Further, Built-in escalation in the commercial agreements vary from 7.5% to 10% Hence a uniform rate of 10% assumed from 11-12 onwards.
ii	Rent and Services including Land lease and building non-residential	80% increase in Building rent(Non-Residential) in 2010-11 on commissioning of new terminal building. 10% growth rate assumed thereafter.	Higher initial increase in 10-11 due to increase in area available for commercial activities. Further, Built-in escalation in the commercial agreements vary from 7.5% to 10% Hence a uniform rate of 10% assumed from 11-12 onwards.
iii	Miscellaneous revenue including Car Parking, Throughput charges, Ground handling, Cargo etc.	10% increase over previous year in respect of Car parking, Admission Tickets, Porterage, Ground handling. 8.4% increase in throughput charges, 5% in Cargo	Misc. revenue during 2009-10 estimated to decrease by 5.9% over previous year. However, taking a longer term view 10% growth rate has been adopted for the most of the revenue sources. Growth rate in throughput charges assumed to be same as that of aircraft movements mentioned above.
iv	Revenue from City Side Development	Revenue from City Side developments not considered.	Ahmedabad airport is among the first lot of 10 airports where city side development has been planned, however no concrete plan has been firmed up and no time frame is available for accrual of revenue on this account. Hence no revenue from it has been considered in the calculations.
v	Till adopted	Hybrid till (30% of non-traffic revenue considered in calculations)	AAI is maintaining a number of airports which are loss making and not self sustaining. Following of Hybrid Till will help in cross subsidy of these airports.
<b>4</b>	<b>Expenses</b>		



i	Growth rate of pay and allowances FY11 onwards	25% increase in pay & allowances 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 building by 25% takes care of the regular increase as well as deployment of manpower commensurate with size and operation of new terminal building. 30% increase in FY 17-18 is estimated due to likely revision of pay scales w.e.f. 2017
ii	Growth rate of repairs and maintenance FY 11 onwards	75% in the year of commissioning and thereafter regular growth rate of 10%	Higher initial expenditure estimated due to increase in terminal building area from 36806 Sqm to 77806 Sqm (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	75 % increase in year of commissioning and thereafter regular growth rate of 7%	As above.
iv	Electricity & Water Charges	70% increase in the year of commissioning thereafter flat growth rate of 10%	Higher initial expenditure estimated due to increase in terminal building area from 36806 Sqm to 77806 Sqm. Increase in air-conditioning expenses, lighting and electrical & electronic equipments.
v	Interest on Borrowings	9% on loan of Rs. 55 crores (09-10) & Rs. 10 crores (10-11) with 25% repayment of loan amount 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 36806 Sqm to 77806 Sqm and increase in operations
	Apportionment of Expenses provided at CHQ	A uniform growth rate of 7.5% assumed except in 2017-18 where 12% growth is considered.	The expenses provided at CHQ for the airports have been apportioned over the airports based on the number of employees which is, as per the existing methodology and policy of AAI
5	<b>Tax rates</b>		
i	Corporate tax		33.99%
ii	Service tax		10.30%
6	<b>Assets</b>		
i	Value of the new International Terminal Building to be capitalised	Rs. 296.37 crores	The project cost was approved by Govt. at an estimated cost of Rs. 290.92 crores. It inter alia, includes the cost of Inter Terminal link, Apron etc. The likely expenditure is estimated at Rs. 296.37 crores.
ii	Opening balance for old assets	Rs. 130.02 crores (09-10)	
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 depreciation has been considered on straight line method at weighted avg rate of 10%

7	<b>Post tax nominal WACC</b>	12%	The post tax nominal WACC has been kept at 12% which is the minimum requirement for any project for approval by the PIB/Gol
8	<b>Ad-hoc UDF Assumption</b>		
	UDF collection charge per passenger	Rs. 5	
9	<b>Borrowings</b>		
i	Loan for the Project	Rs 155 crores	
ii	Rate of interest	9%	
iii	Schedule of repayment	25% repayment from FY 13-14 onwards	



No.AAI/CHQ/REV/AERA/UDF/2010

Dated: 19.4.2010

To

The Secretary,  
Airports Economic Regulatory Authority of India,  
Room No. 58, B Block,  
Rajiv Gandhi Bhawan,  
New Delhi- 110 003.

19/4  
OSD-II  
GM (Shri Saxena)

**Subject: Levy of UDF at Ahmedabad- regarding**

Sir,

In continuation our discussions on 19.4.2010, the following points are clarified:

1. **Through put charges:**

It is confirmed that growth in Throughput Charges have been maintained at the same level as that of combined aircraft movements growth (i.e. 5.5% in 2010,11, 8.4% in 2011-12 to 2016-17 and 10.4% thereafter). This has already been indicated in column 3 (iii) – Basis of assumptions. However in the second column – Assumptions, only 8.4% have been shown which is for longer duration.

2. **Traffic Forecast:**

The traffic forecast was done by our Corporate Planning Directorate using econometric modeling. A copy of the forecast given by them is enclosed for information.

3. **Cargo Revenue:**

The Cargo handled at Ahmedabad Airport during the last 3 years is given below:

<u>YEAR</u>		<u>MT</u>
2007-08	-	23576
2008-09	-	23033
2009-10	-	18196 ( upto Jan '10)

It may be seen that during 2008-09 Cargo had a negative growth of 2% and during 2009-10 the growth was – 8.8%. However, taking the long term growth in view, a growth of 5% is adopted.

4. **AREA**

The increases in Area at Ahmedabad Airport is 111% as given below:

	<b><u>Existing</u></b>	<b><u>After Commissioning</u></b> ( in sq.mtrs)
International	7384	7384
Domestic	29422	29422
New Terminal	-	41000
	<hr/>	<hr/>
<b>Total</b>	<b>36806</b>	<b>77806</b>
	<hr/>	<hr/>

Increase % = 111%

Against the increase in area by 111% the non traffic revenue has been increased by 80% in the year of commissioning.

Hope this clarifies the position.

Yours faithfully,



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

**Encls: As above**



**AHMEDBAD AIRPORT  
TRAFFIC FORECAST**

YEAR	PASSENGERS(IN NOS.)		
	INT'L	DOM	TOTAL
2008-09 (BASE YEAR)	684330	2141609	2825939
GROWTH RATE	10.0%	10.0%	10.0%
2009-10	752763	2355770	3108533
GROWTH RATE	10.0%	10.0%	10.0%
2010-11	828039	2591347	3419386
GROWTH RATE	10.0%	10.0%	10.0%
2011-12	910843	2850482	3761325
GROWTH RATE	12.0%	10.0%	10.5%
2012-13	1020144	3135530	4155674
2013-14	1142562	3449083	4591644
2014-15	1279669	3793991	5073660
2015-16	1433229	4173390	5606620
2016-17	1605217	4590729	6195946
GROWTH RATE	14.0%	12.0%	12.5%
2017-18	1829947	5141617	6971564
2018-19	2086140	5758611	7844751
2019-20	2378200	6449644	8827843
2020-21	2711148	7223601	9934749
2021-22	3090708	8090433	11181141

Updated 30/03/2010

**AHMEDBAD AIRPORT  
TRAFFIC FORECAST**

YEAR	AIRCRAFT(IN NOS.)		
	INT'L	DOM	TOTAL
2008-09 (BASE YEAR)	5635	26043	31678
GROWTH RATE	5.0%	3.0%	3.4%
2009-10	5917	26824	32741
GROWTH RATE	8.0%	5.0%	5.5%
2010-11	6390	28166	34556
GROWTH RATE	10.0%	8.0%	8.4%
2011-12	7029	30419	37448
GROWTH RATE	10.0%	8.0%	8.4%
2012-13	7732	32852	40584
2013-14	8505	35480	43986
2014-15	9356	38319	47675
2015-16	10291	41384	51676
2016-17	11320	44695	56016
GROWTH RATE	12.0%	10.0%	10.4%
2017-18	12679	49165	61844
2018-19	14200	54081	68281
2019-20	15904	59489	75394
2020-21	17813	65438	83251
2021-22	19950	71982	91932



### UDF Calculation

**All numbers are in Million Rs**

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
		Yr. 0	Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5	Yr. 6	Yr. 7	Yr. 8	Yr. 9	Yr. 10
Aeronautical Revenue	AR	525	874	955	1,047	1,149	1,261	1,384	1,520	1,699	1,899	2,124
Non Aeronautical Revenues	NAR	312	453	499	548	603	663	729	801	881	969	1,066
Admissible Capital Base	C	1,235	2,513	3,642	3,216	2,790	2,363	1,997	1,511	1,084	658	231
O&M cost	OMA	568	779	848	924	1,007	1,097	1,195	1,302	1,518	1,653	1,801
Depreciation	D	130	278	426	426	426	426	426	426	426	426	426
Tax payable	T	47	92	61	83	108	136	167	202	216	268	327

WACC			12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%
Admissible Expenditure $E = C + ROCE + OMA + OMINA + D + T$			893	1,451	1,773	1,820	1,876	1,943	2,021	2,111	2,291	2,427	2,582
Target Revenue $R = AR + NAR$			837	1,327	1,453	1,595	1,752	1,924	2,113	2,321	2,580	2,868	3,189
Target Deficit $TD = E - R$			56	123	319	224	124	19	(92)	(210)	(290)	(442)	(607)
NPV of target deficit		(10)	56	123	285	179	88	12	(52)	(107)	(131)	(178)	(219)
Domestic departing Pax				1.30	1.43	1.57	1.72	1.90	2.09	2.30	2.57	2.88	3.22
International departing Pax				0.41	0.46	0.51	0.57	0.64	0.72	0.80	0.91	1.04	1.19
UDF Incremental Revenue - Domestic				144	158	174	191	210	232	255	285	319	358
UDF Incremental Revenue - International				170	187	209	235	263	294	330	376	428	488
Net Incremental revenue - UDF				314	345	383	426	473	526	584	661	748	846

	Existing UDF	UDF after Increase
Domestic UDF in Rs.	-	111
International UDF in Rs.	-	411

All numbers are in Million Rs

1997

All numbers are in Million R₹		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
Aeronautical Revenue	AR	Yr. 0	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
Non Aeronautical Revenues	NAR	525	694	756	827	905	990	1,084	1,186	1,322	1,473	1,662	1,830	2,041	2,276	2,538	2,831
Admissible Capital Base	C	1,235	2,513	3,642	3,216	2,790	2,363	1,917	1,511	1,084	658	231	9	-	-	-	-
O&M cost	OMA	568	779	848	924	1,007	1,195	1,302	1,518	1,653	1,801	1,962	2,137	2,329	2,538	2,766	2,997
Depreciation	D	130	278	426	426	426	426	426	426	426	426	426	426	426	426	426	426
Tax payable	T	47	31	-	9	26	44	65	88	88	123	163	348	405	464	530	605

[illegible]