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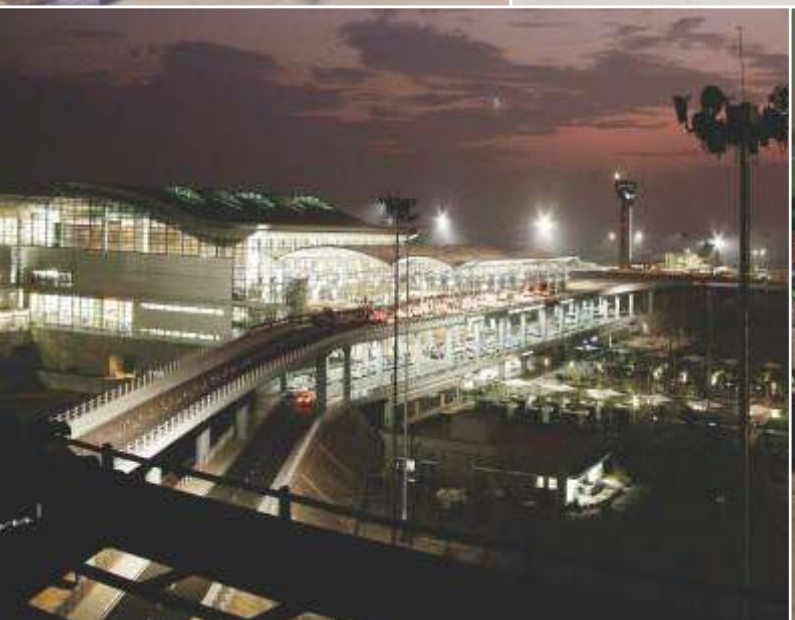
Government of India

Report of the Task Force

Financing Plan for Airports

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Foreword

The quality of airport infrastructure contributes directly to a country's economic growth and international competitiveness by facilitating smooth and efficient movement of people and high value cargo while spurring trade and tourism. In recent years, the rate of growth of air passenger traffic in India has been one of the highest in the world. This, in turn, has exerted pressure on the existing infrastructure, which is already suffering from congestion and inefficiency.

Following concerted efforts during the Eleventh Five Year Plan, the airport infrastructure has expanded at a rapid pace. The private sector has played a major role in the development of metro airports through Public Private Partnership (PPP). During this period, private investment in the airport sector exceeded Rs. 26,500 crore out of a total investment of about Rs. 41,800 crore. The development of greenfield international airports at Hyderabad and Bengaluru along with redevelopment of the Delhi international airport were successfully completed during this period while redevelopment of Mumbai international airport is at an advanced stage of completion.

The domestic and international passenger throughput is projected to grow at an average annual rate of about 12 per cent and 8 per cent respectively during the Twelfth Plan period. Similarly, the domestic and international cargo is projected to grow at a rate of 12 per cent and 10 per cent respectively. This will require a significant upgradation and augmentation of the airport infrastructure, implying a large volume of investment in capacity addition. The Planning Commission, at the request of the Ministry of Civil Aviation, had constituted an inter-ministerial Task Force under the chairmanship of Shri B.K. Chaturvedi, Member, Planning Commission to prepare a financing plan for the Twelfth Plan period. The Task Force has provided a blue-print for robust expansion and modernisation of airports across the country, especially with private participation. It has recommended the development and operation of several metro, non-metro, greenfield and non-operational airports through PPP. It has also recommended several steps for improving the navigational and surveillance facilities as well as the air cargo logistics infrastructure.

The Task Force has projected a total investment of Rs. 71,000 crore for the development of airport infrastructure during the Twelfth Plan period, of which Rs. 56,500 crore is envisaged from the private sector. While the enabling framework is already in place, concerted efforts in a time-bound manner would be necessary for this plan to fructify. It is hoped that the Ministry of Civil Aviation, with support of other Ministries and the Planning Commission will take up this programme in right earnest.

July 19, 2012

(Montek Singh Ahluwalia)
Deputy Chairman
Planning Commission

List of Abbreviations

AAI	Airports Authority of India
AERA	Airports Economic Regulatory Authority
AP	Andhra Pradesh
ATM	Air Traffic Management
CAGR	Compound Annual Growth Rate
CNS	Communication Navigation and Surveillance
DIAL	Delhi International Airport (Private) Limited
EU	European Union
FDI	Foreign Direct Investment
GAGAN	GPS Aided Geo Augmented Navigation
GBAS	Ground Based Augmentation System
GDP	Gross Domestic Product
GPS	Global Positioning System
ICD	Inland Container Depot
IMG	Inter-Ministerial Group
IT	Information Technology
MCA	Model Concession Agreement
MIAL	Mumbai International Airport (Private) Limited
MMTPA	Million Metric Tonne Per Annum
PPP	Public Private Partnership
ULD	Unit Load Device
USA	United States of America

1. Introduction

1.1 The quality of airport infrastructure contributes directly to a country's international competitiveness and economic growth by facilitating the smooth movement of people and high value cargo, while spurring trade and tourism. Increased air connectivity also enables manufacturing enterprises to exploit the speed and reliability of air transport to ship components across firms that are based in different and distant locations thereby minimising the inventory cost. Countries with better connectivity are also regarded as more successful in attracting Foreign Direct Investment (FDI).

1.2 The traffic at Indian airports has been growing in all three segments- passenger, freight and aircraft movement. Air passenger growth rate in India has been one of the highest in the world. During the 12th Plan period (2012-17), the domestic passenger throughput is projected to grow at an average annual rate of about 12% to reach 209 million by 2016-17 from about 122 million in 2011-12. Similarly, international passenger throughput is estimated to grow at an average annual rate of 8% during the Twelfth Plan period to reach 60 million passengers by 2016-17 from a level of 41 million in 2011-12. During the Twelfth Plan period, the domestic and international cargo is projected to grow at a rate of 12% and 10% respectively to reach 1.7 MMTPA and 2.7 MMTPA respectively by 2016-17.

1.3 To meet the growth projections in aviation traffic, airport development has to keep pace with the growth of the economy. To ensure upgradation and modernisation of airport infrastructure, a Financing Plan for airports was prepared in 2006. The recommendations made in the Financing Plan are at various stages of implementation. To prepare and recommend a Financing Plan for the Twelfth Plan period, an inter ministerial Task Force was constituted as follows.

(i) Shri B.K.Chaturvedi, Member, Planning Commission - Chairperson

(ii) Secretary, Ministry of Civil Aviation

(iii) Secretary, Department of Economic Affairs

(iv) Adviser to Deputy Chairman, Planning Commission

(v) Chairman, Airports Authority of India

1.4 The Task Force was also asked to identify potential projects that could be implemented through the Public Private Partnership (PPP).

2. Background

2.1 Passenger growth

2.1.1 It has been observed that air transport generally grows at a rate which is about twice the GDP growth rate. During the last three years (2009-10 to 2011-12), the total passengers handled at the Indian airports grew at a compound annual growth rate (CAGR) of 14.2%, comprising a growth rate of 8.9% in international traffic and 16.3% in domestic traffic. The passenger growth over the last three years is given in Table 1 below.

Table 1: Passenger growth

(in percent)

Sector	2009-10	2010-11	2011-12
Domestic	15.6	18.1	15.2
International	8.8	10.3	7.6
Total	**13.6**	**15.9**	**13.2**

2.1.2 The reasons for a comparatively lower growth during 2011-12 can be attributed to a significant increase in fares and reduced operations by some of the domestic airlines due to inadequate profitability.

2.2 Cargo growth

2.2.1 India's impressive growth in international and domestic trade over the past few years has augured well for the air-cargo industry in India. The freight traffic handled by Indian airports increased at a CAGR of 8% during the last five years (2007-08 to 2011-12) to reach 2.28 MMTPA by 2011-12. International cargo, which accounts for two-thirds of the total cargo handled, is mainly concentrated at the metro airports of Mumbai, Delhi, Chennai, Bengaluru and Hyderabad. During the 11th Plan period, these international airports witnessed the entry of several leading domestic and global cargo operators in the private sector.

2.2.2 However, the growth in the cargo sector has not been as impressive as passenger growth. Freight is mostly carried by passenger airlines in the aircraft belly. The focus of operations of these airlines has, thus, remained passenger traffic, thereby neglecting cargo handling. The growth in cargo sector during the last three years is given in Table 2 below.

Table 2: Cargo growth

(in percent)

Sector	2009-10	2010-11	2011-12
Domestic	24.3	24.1	-4.7
International	10.5	17.7	-1.9
Total	**15.0**	**20.0**	**-2.9**

2.3 Airports Authority of India

2.3.1 The Airports Authority of India (AAI) manages and operates 123 out of a total of 134 airports in India. This includes 12 international airports, 99 domestic airports and 12 customs airports. The remaining eleven airports (5 international airports and 6 domestic airports) are managed by PPP concessionaires, State Governments and the private sector. Of the airports managed by AAI, only 7 make profit while 32 are still non-operational. The profit-making airports are Chennai, Kolkata, Goa, Calicut, Ahmedabad, Pune and Juhu.

2.3.2 Internationally, non-aeronautical revenues contribute 50 to 70 percent of the total airport revenues, whereas in India they contribute a mere 20 percent of total revenues. As the share of non-aeronautical revenues is very small, the users are forced to pay higher aeronautical charges. Consequently, there is a need to focus on non-aeronautical revenues as a means to reduce airport charges and yet increase airport profitability.

2.3.3 There is an urgent need to upgrade and modernise the airport infrastructure by addressing the problems of outdated infrastructure, inadequate ground handling and night landing facilities, and poor passenger amenities. At the same time it is also necessary to operationalise non-functional airports and develop new airports to open up the hinterland.

2.4 Growth factors

2.4.1 The factors contributing to air traffic growth in India are entry of low cost carriers, higher household incomes, strong economic growth, increased FDI inflows, increasing tourist travel, rising middle class population, increasing competition, untapped market, increasing business travel, increased cargo movement and supportive government policies.

2.4.2 This rise in air traffic growth needs to be supported with infrastructure development at airports which require large investments. The Government has acknowledged the infrastructure deficit and invited private sector participation to accelerate development of airports. Four metro airports at Delhi, Mumbai, Bengaluru and Hyderabad have been redeveloped and modernised through PPP. The investments made in these four airports during the Eleventh Plan period (2007-12) are given in Table 3 below:

Table 3: Investment in PPP airports in the Eleventh Plan

(Rs. in crore)

Airport	Investment
Delhi	12,825
Mumbai	7,252
Bengaluru	1,436
Hyderabad	1,674
Total	**23,187**

2.4.3 The investment projections at the aforesaid four metro airports during the Twelfth Plan period are as given in Table 4 below:

Table 4: Projected investment in PPP metro airports in the Twelfth Plan

(Rs. in crore)

Airport	Investment
Delhi	800
Mumbai	5,800
Bengaluru	11,100
Hyderabad	300
Total	**18,000**

3. Deliberations of the Task Force

3.1 In the first meeting of the Task Force held on May 10, 2012, it was observed that adequate capacity needs to be created at the airports to meet the projected demand in the next 5 to 10 years. It was felt that more attention should be paid to development and operation of airports in Tier II and III cities through PPP. The objective should be to ensure that airports generate 40-50% of their revenues from non-aeronautical services. It was observed that AAI should adopt the PPP mode for efficient development and operation of the newly constructed airports. The revenue generated by this arrangement can in turn be used for development of new airports to open the hinterland to air connectivity.

3.2 To formulate a plan of action for the Twelfth Plan, the Task Force constituted a Sub-Committee under the chairmanship of Secretary, Ministry of Civil Aviation to examine:

(a) Operation and maintenance of the redeveloped airports at 35 non-metro towns through PPP;

(b) operation and maintenance of Kolkata and Chennai airports through PPP;

(c) construction of greenfield airports through PPP on airstrips not under use;

(d) expansion of 85 small airports through PPP;

(e) attracting investment in the logistics sector; and

(f) identifying locations for development of new greenfield airports such as Navi Mumbai, Goa, Chandigarh and Patna.

3.3 The Sub-Committee held five meetings and made recommendations which were discussed by the Task Force in its meeting held on July 6, 2012. Based on the deliberations of the Task Force, this Report was prepared and approved in the final meeting of the Task Force held on July 13, 2012.

4. Review of the Progress in Eleventh Plan

4.1 The Indian civil aviation industry has shown robust growth in both passenger and cargo traffic during the Eleventh Plan period when India became the 9th largest civil aviation market in the world; passenger traffic grew at a CAGR of 11%; passenger handling capacity has risen three-folds from 72 million in 2005-06 to over 198 million in 2010-11; and cargo handling capacity has risen from 0.5 million MT in 2005-06 to 3.3 million MT in 2010-11.

4.2 Metro Airports

4.2.1 During the 11th Five Year Plan (2007-12), the private sector played a major role in the development of metro airports through PPP. The development of greenfield international airports at Hyderabad and Bengaluru along with redevelopment of the Delhi international airports were successfully completed during this period. The redevelopment of Mumbai international airport, which was also taken up through PPP, is at an advanced stage of completion. Against the projected investment of Rs. 21,630 crore by the private sector, the actual investment during the Eleventh Plan period has been Rs. 23,187 crore.

4.2.2 It was noted that introduction of PPP has led to a significant rise in the collection of revenues, especially non-aeronautical revenues. The statement in Table 5 shows the rise in the total revenues of Delhi and Mumbai airports over the past decade.

Table 5: Total Revenues of Delhi & Mumbai airports

(Rs. in crore)

S.No	Year	Delhi	Mumbai
1	2002-03	369	423
2	2003-04	408	436
3	2004-05	489	489
4	2005-06	670	665
5	2006-07	720	719
6	2007-08	876	857
7	2008-09	958	955
8	2009-10	1,172	997
9	2010-11	1,255	1,180
10	2011-12	1,531	1,314

4.2.3 Of the aforesaid total revenues of Delhi and Mumbai airports, the non-aeronautical revenues during the past 10 years (pre and post - PPP) are shown in Table 6 below which also indicates the share of non-aeronautical revenue as a proportion of the total revenues of the respective airports.

Table 6: Non-aeronautical revenues of Delhi and Mumbai airports

(Rs. in crore)

S.No	Year	Delhi Airport		Mumbai Airport	
		Non Aero. Revenue	Percentage of total revenue	Non Aero. Revenue	Percentage of total revenue
1	2002-03	113	30	135	31
2	2003-04	130	31	141	32
3	2004-05	159	32	160	32
4	2005-06	183	27	184	27
5	2006-07	240	33	253	35
6	2007-08	350	39	322	37
7	2008-09	404	42	402	42
8	2009-10	574	48	392	39
9	2010-11	652	51	481	40
10	2011-12	920	60	552	41

4.2.4 The net income of AAI from Delhi and Mumbai airports for the past 10 years (pre and post - PPP) is shown in the Table 7 below:

Table 7: Net Income of AAI from Delhi and Mumbai airports

(Rs. in crore)

S.No.	Year	Delhi Airport			Mumbai Airport		
		Total Income	Expenditure	Net Income	Total Income	Expenditure	Net Income
1	2001-02	347	219	128	387	217	170
2	2002-03	369	180	189	423	233	190
3	2003-04	408	180	228	436	238	198
4	2004-05	489	178	311	489	301	188
5	2005-06	670	244	426	665	291	374
6	2006-07	401	61	340	357	68	289
7	2007-08	403		403	332		332
8	2008-09	441		441	370		370
9	2009-10	539		539	386		386
10	2010-11	577		577	456		456
11	2011-12	704		704	509		509

Note: 1. Revenue Share received @ 45.9% and 38.7% from DIAL and MIAL respectively from 2006 onwards. No expenditure by AAI thereafter.

4.3 Non-Metro airports

4.3.1 AAI has made investments of about Rs. 12,500 crore during the Plan period. As a part of its investments, AAI is upgrading and modernising 35 non-metro airports at an estimated cost of about Rs. 4,500 crore. Of these, 27 have already been developed while the remaining are likely to be completed by the end of 2012-2013. The details of these airports are given in Table 8 below.

Table 8: Investment and passengers at non-metro airports

S.No	Airport	Investment (Rs. in crore)	Passengers (2011-12) (in lacs)
I. Completed			
1	Ahmedabad	330	47.0
2	Pune	110	33.0
3	Trivandrum	260	28.2
4	Calicut	120	22.1
5	Lucknow	175	20.2
6	Jaipur	150	18.3
7	Srinagar	130	16.3
8	Nagpur	70	14.2
9	Coimbatore	120	13.4
10	Indore	215	11.1
11	Visakhapatnam	100	9.6
12	Trichy	100	9.1
13	Mangalore	150	8.9
14	Amritsar	165	8.9
15	Chandigarh	75	8.0
16	Varanasi	110	7.5
17	Imphal	13	7.3
18	Vadodara	150	6.7
19	Madurai	165	5.1
20	Bhopal	235	4.2
21	Aurangabad	125	4.0
22	Udaipur	130	3.7
23	Dibrugarh	120	2.3
24	Dehradun	50	1.8
25	Surat	90	0.6
26	Mysore	80	0.1
27	Agra	3	0.1
	Total	**3,541**	**311.7**
II. Under Progress			
1	Goa	345	35.2
2	Guwahati	60	22.5
3	Bhubaneswar	165	12.5
4	Agartala	55	8.4
5	Raipur	130	8.0
6	Port Blair	27	6.1
7	Ranchi	150	4.8
8	Khajuraho	92	0.8
	Total	**1,024**	**98.3**
	Grand Total	**4,565**	**410.0**

4.3.2 AAI is also enhancing air connectivity by constructing Greenfield airports at Pakyong (Sikkim), Itanagar (Arunachal Pradesh), Kishangarh (Rajasthan) and Deogarh (Jharkhand).

4.4 CNS/ATM

4.4.1 To improve the CNS/ATM services to international standards, the Airports Authority of India and Indian Space Research Organisation have jointly undertaken the implementation of GPS Aided Geo Augmented Navigation (GAGAN) System over Indian airspace. The first phase of the project has been completed and the second phase is in progress. Investment of about Rs. 1,000 crore has been made in the CNS/ATM sector during the Eleventh Plan period.

4.4.2 Performance Based Navigation (PBN) has been implemented at seven international airports for reducing capacity constraint, communication congestion, bunching and delays. Ground Based Augmentation System (GBAS) will be implemented to support terminal navigation and precision approaches at airports where instrument landing system is not available. To ensure 100% overlapping of radar surveillance cover through the entire continental airspace, four additional radar sensors are being provided in addition to the existing 26.

4.4.3 Automation system for Air Traffic Management (ATM) is in place at Mumbai, Delhi, Bengaluru, and Hyderabad, and is nearing completion at 38 other stations including Guwahati, Nagpur, Mangalore, Trivandrum, Ahmedabad and Varanasi. This would enhance safety through safety nets, increase capacity and improve efficiency by situational awareness for the controllers. Meteorological information including latest satellite/ Doppler radar images, Metars and on-line briefing have also been provided.

5. Recommendations of the Task Force

5.1 Metro airports at Chennai and Kolkata

5.1.1 AAI has undertaken redevelopment and expansion of metro airports at Kolkata and Chennai at a cost of Rs. 2,325 crore and Rs. 2,015 crore respectively. The works at Chennai have already been completed and works at Kolkata airport are likely to be completed over the next two months. The next challenge for AAI would be to ensure their management and upkeep at a level commensurate with the high quality of these terminals. Moreover, the potential for non-aeronautical revenues from car parking, cargo facilities, hotels, passenger amenities, shopping etc. cannot be fully harnessed by AAI due to the inherent constraints of a public sector entity. The anticipated shortfall in non-aeronautical revenues is bound to lead to higher passenger and aeronautical charges.

5.1.2 Problems related to monitoring and supervision of the large number of sub-optimal service contracts being awarded by AAI could also be eliminated if a single PPP concession for operation and maintenance of the entire airport is granted to an experienced and competent entity.

5.1.3 It was noted that after making large investments in these airports, AAI would need to generate considerable revenues from non-aeronautical services in order to reduce the burden on aeronautical services and to make air travel affordable. AAI would also need to generate significant revenues from these metro airports in order to invest in development of new airports. As an example, the Task Force examined the tariff filings of AAI before the airport regulator (AERA). It was noticed that AAI proposes to increase its present passenger fees at Chennai airport from Rs. 77 to Rs. 237 (over three fold increase) in case of domestic passengers and from Rs. 77 to Rs. 577 (over seven fold increase) in case of international passengers. This would be very burdensome for the passengers and may also affect the growth in traffic. In case such an increase is not allowed, AAI is likely to make losses which will affect its operations elsewhere. It was felt that if a PPP concessionaire was engaged, it could raise significant non-aeronautical revenues which in turn would reduce the passenger fees significantly and also achieve the primary purpose of setting up the AAI i.e., provide better passenger services at affordable fees.

5.1.4 The Task Force noted that in the tariff filing before AERA, AAI has sought a pre-tax return of 24% on its equity investments. While the cost of debt is shown as 12.85%, AAI does not propose to utilise any debt in order to keep the costs lower. On the other hand, AAI has projected a very low rate of growth in non-aeronautical revenues, which in turn has pushed up the user charges for aeronautical services and passengers. These limitations are best addressed through PPP where the user charges could be fixed upfront at a reasonable level and then the bidders may be asked to offer a revenue share. Such an arrangement would be welcome for all airlines and passengers who will not only get the benefit of lower user charges but also efficient airport services.

5.1.5 The Committee noted that in case of metro airports (Delhi, Mumbai, Bengaluru and Hyderabad), passenger tariffs have gone up significantly mainly because of a 'cost plus' tariff structure as well as a very high revenue share to be paid to AAI in the case of Delhi and Mumbai airports. Experience from these projects suggests that 'cost plus' tariffs should be avoided in future, and PPP projects may be structured in line with other sectors such as power, roads and ports where the tariff is pre-determined at the time of bidding with appropriate indexation. This will not only protect user interests but also eliminate regulatory uncertainty over tariff fixation as also the potential for gold-plating of costs.

5.1.6 While structuring the PPP documents, the interests of AAI in terms of an adequate revenue share to service its investments may be kept in view. As traffic grows, the upside should also be shared with AAI. In case of Chennai, the possibility of a second airport should be clearly addressed in the bid documents.

5.1.7 It was noted that the Planning Commission, in consultation with the Ministry of Civil Aviation, other stakeholders and experts has developed a Model Concession Agreement (MCA) for development and operation of airports through PPP. MCA provides for: (a) operation and maintenance of terminal building including the commercial exploitation of specified spaces; (b) development and operation of the car park and cargo facilities; and (c) real estate development in the form of hotels, convention centres and related business on the land identified for commercial use. In addition, the airside facilities may also be included as a part of the PPP concession.

5.1.8 The framework contained in the MCA seeks to ensure that the airports developed by AAI are operated and maintained to world class standards while the commercial potential of each airport is maximised. The private entity will be expected to cross-subsidise the expenditure on operation and maintenance of these airports from the revenues that it would generate from non-aeronautical activities. This would provide a mechanism for optimising on the overall operations of the airport while reducing the costs to the public exchequer and the user.

5.1.9 The proposed framework for these airports would, therefore, include (a) operation and maintenance of the airport to world class standards; (b) commercial exploitation for maximising the revenue potential; (c) real estate development in the form of hotels, convention centers and related businesses; (d) development and operation of cargo and logistics facilities; and (e) construction of additional facilities specified upfront (based on future traffic growth).

5.1.10 Recommendations

The Task Force recommends that the operation and maintenance of the entire airport, including air side and city side facilities at Chennai and Kolkata airports may be awarded to the private sector through a PPP

Concession. While structuring this arrangement, it should be ensured that the interests of AAI employees are fully protected. To start with, Chennai airport could be awarded within the next four months followed by Kolkata airport soon thereafter.

5.2 Greenfield airports

5.2.1 The Task Force noted that development of new airports at some important locations was necessary during the Twelfth Plan period and this may require the State Governments / AAI to award PPP concessions. It was noted that the Planning Commission has developed a Model Concession Agreement (MCA) for greenfield airports to enable the State Governments / AAI to take up the development of new airports through PPP. The Government of Uttar Pradesh is already using this MCA for awarding a new airport at Kushinagar.

5.2.2 The Task Force noted that 'in principle' approval has been granted to 14 greenfield airport projects for development by private sector entities. The policy for greenfield airports was approved by the Government in April, 2008 to enable setting up of such airports by private companies. Foreign direct investment upto 74% is also permitted through the automatic approval route.

5.2.3 Recommendations

The Task Force recommends development of the following six greenfield airports through PPP during the Twelfth Plan period. The list along with indicative investment is given in Table 9 below.

Table 9: Development of greenfield airports through PPP

(Rs. in crore)

S.No	City	Investment
1	Navi Mumbai	15,000*
2	Goa	4,000
3	Kannur	1,000
4	Chandigarh	1,500
5	Kota	500
6	Agra	500
	Total	**22,500**

** includes Rs. 1,000 cr of investment by the State Government.*

5.3 Non-metro Airports

5.3.1 AAI has undertaken development of 35 Non-metro airports during the Eleventh Plan. The works have already been completed at 27 airports and the same are in progress at other airports. The investment made by AAI in the development of these airports was about Rs. 4,565 crore up to March, 2012. These airports would need to generate significant revenues to pay for the investment made. However, since most of these airports are making losses, the Task Force recognised that unless the revenue potential from non-aeronautical services is fully tapped, AAI finances may become unviable. Moreover, some of these airports need further

investments which AAI may find difficult to mobilise and hence private participation may be necessary for upgrading these airports.

5.3.2 Recommendations

The Task Force identified 15 Non-metro airports for development and operation through PPP. This programme may be taken up in two phases. To start with nine airports may be taken up in the first phase while 6 airports may be taken up in the second phase. The development of these airports may be based on the MCA to be provided by the Planning Commission on lines similar to that of Chennai and Kolkata airports mentioned above. Details of the Non-metro airports proposed to be developed and operated through PPP, along with the indicative investment required at each airport, are given in Table 10 below.

Table 10: Development of Non-metro airports through PPP

S. No	Airport	Passenger Traffic (in lacs) (2011-12)	Investment (Rs. in crore)
Phase-I			
1	Ahmedabad	47.0	860
2	Guwahati	22.4	970
3	Lucknow	20.2	510
4	Jaipur	18.3	800
5	Bhubaneswar	12.5	455
6	Amritsar	8.9	50
7	Udaipur	3.7	25
8	Gaya	1.0	200
9	Khajuraho	0.8	40
Phase-II			
1	Coimbatore	13.4	920
2	Trichy	9.1	380
3	Varanasi	7.5	175
4	Tuticorin	0.4	220
5	Pantnagar	0.1	235
6	Puducherry	0.0001	160
	Total	**-**	**6,000**

5.3.3 Airports included in Phase-I above may be awarded during 2012-13 and 2013-14 while the remaining airports may be awarded during the next two years.

5.3.4 For the remaining non-metro airports developed by AAI during the Eleventh Five Year Plan, the Ministry of Civil Aviation may formulate separate proposals for development of city side facilities.

5.4 Non-operational airports

5.4.1 There are about 32 airports under AAI where the air strips are non-operational as no aircraft operations are being carried out at present. These assets have been deteriorating over time. It was felt that development of these airports could be taken up in a phased manner through the PPP mode as low cost airports.

5.4.2 Recommendations

The Task Force recommends the following non-operational airports under the control of AAI for development and operation through PPP. The indicative details are given in Table 11 below.

Table 11: Development of non-operational airports through PPP

S.No	Airport	Investment
1	Jharsuguda (Odisha)	*
2	Warangal (AP)	*
3	Chakulia (Jharkhand)	*
4	Raxaul (Bihar)	*
5	Rupsi (Assam)	*
6	Kishtwar	*
7	Lahual Spiti (Jammu & Kashmir)	*
8	Hissar	*
9	Karnal	*
10	Ludhiana	*
11	Adampur (Punjab)	*
12	Radhanpur (Gujarat)	*
13	Parsoli (Gujarat)	*
14	Chandrapur	*
15	Karwar	*
16	Donakonda (AP)	*
17	Durgapur	*
18	Malda	*
19	Bhagalpur	*
20	Muzaffarpur	*
21	Jogbani	*
22	Madhubani	*
23	Jagdalpur	*
24	Ambikapur	*
25	Daltonganj (Jharkand)	*
26	Jaypore (Odisha)	*
27	Utkela (Odisha)	*
28	Gopalpur (Odisha)	*
29	Lenglec (Mizoram)	*
30	Agartala	*
31	Kamalpur (Tripura)	*
32	Juhu (Mumbai)	*
	Total	**6,000**

** Being assessed by AAI*

5.5 Other airports

5.5.1 AAI also has some non-functional airports in the vicinity of functional airports. These airports do not have any potential for passenger or freight operations and could, therefore, be developed for activities like aero sports and flying clubs as well as training centres for security and fire fighting.

5.5.2 Recommendations

The Task Force recommends that the airports at Vellore (Tamil Nadu), Chakeri (Kanpur), Nadirgul (Andhra Pradesh), and Deesa (Gujarat) may be taken up through PPP for activities like aero sports and flying clubs as well as training centres for security and fire-fighting.

5.6 Cargo logistics

5.6.1 The Task Force noted that the four airports at Delhi, Mumbai, Bengaluru and Hyderabad handle 67% of the total air cargo traffic in India. The forecast of air cargo volume for India suggests that the domestic and international air cargo throughput is expected to grow by 7-10 times from the present level over the next twenty years. Catering to a growth of this magnitude would involve expansion of infrastructure facilities, simplification of procedures, and adoption of information technology/ automation, besides development of human resources. An efficient logistics infrastructure can reduce the cost of transportation which in turn can contribute directly to global competiveness of the economy.

5.6.2 Indian airports were developed primarily from a passenger perspective and as a result cargo has generally been relegated to sidelines. This has led to inadequate cargo infrastructure and facilities.

5.6.3 Express cargo

It was noted that India's domestic air express business will evolve on similar lines as that of other developed countries. Air express cargo in India is a Rs. 7,000 crore industry, and it has the potential to grow strongly as in the case of USA and EU countries. It was observed that dedicated facilities at airports are critical for promoting growth of air cargo as the economic value of this sector depends on speed and efficiency for guaranteed on-time delivery. It was observed that several facilities available at airports like Chennai, Ahmedabad etc. are either unutilised or under-utilised, while the Air express operators are finding it difficult to get the much needed space for their operations.

5.6.4 In view of the above, the Task Force recommends that AAI should identify and exploit the potential for air express cargo. It should not construct these facilities on its own. Instead, the private sector should be enabled to develop and manage the required facilities. This would be mutually beneficial as it would provide AAI with additional revenue and the industry with the much needed space, besides enabling more efficient operations.

5.6.5 International transhipment hub

While intra-Asia growth is expected to dominate the air cargo growth, it is necessary for India to create a stronghold in the air cargo market. It was noted that the transhipment cargo is crucial for the growth of cargo hubs and India has the potential to improve the transhipment cargo in airports from its present level of 2% to about 10% of the total cargo movement in India. Indian airports are strategically located to act as a transfer hub for various intercontinental routes like Europe to Australia and Europe to South East Asia. These routes are currently dominated by European, Middle Eastern and South Eastern Asian carriers. In spite of the geographical advantage of Indian airports, they have not been able to successfully compete in the market to capture such intercontinental cargo traffic. Among other measures, there is a need to standardise and simplify the customs procedures and policies for gateway operations at various airports.

5.6.6 Development of off-airport cargo processing facilities

With all the activities related to air cargo processing being done at the cargo terminals in the airport area, the current space at most cargo terminals is proving to be grossly inadequate, leading to severe congestion. In order to reduce congestion and delays at the cargo terminals, off-airport cargo processing facilities on the lines of Container Freight

Stations/ICDs need to be developed. Air cargo terminals at the airports could then serve as a transit point. This will facilitate greater throughput efficiency, reduce dwell time, and maximise the utilisation of capacity.

5.6.7 Performance indicators

Comparison of performance standards for some of the key parameters of Indian air cargo industry with other countries shows substantial gaps in the existing supply chain. Lack of enabling infrastructure, absence of automated material handling systems, high level of manual intervention in the processes and inadequate skilled manpower are some of the key areas where Indian air cargo industry lags behind global standards. One of the key performance indicators of cargo terminal operations at any airport is the dwell time. The dwell time for Indian airports ranges from 11 to 119 hours as against 2 to 8 hours at some of the major international airports like Sharjah, Singapore, Frankfurt, Dubai and Hong Kong. A concerted plan of action is necessary to address the aforesaid bottlenecks.

5.6.8 Inadequate infrastructure facilities

It was observed that the national carriers and also a few international carriers have warehouses at the metro airports of AAI. The smaller airlines do not have their own warehousing facilities and their cargo operations are handled by AAI at its export cargo terminal. The Task Force observed that whereas the warehouses allotted to bigger airlines remained under-utilised, the requirements of growing smaller airlines are not being met due to space constraints. Some of the key infrastructure facilities lacking at the air cargo complexes are shortage of landside truck docks, vehicle holding area and airside operational space, insufficient entry gates and lack of upgraded handling equipment and trolleys, lack of specialised storage and handling facilities for hazardous, radioactive and valuable cargo and lack of sufficient cold storage capacity for perishable cargo. Non-availability of adequate screening machines coupled with lack of skilled staff for troubleshooting as well as for operations are other important infrastructure bottlenecks in the cargo sector. It is expected that when the operation and maintenance of these airports is handed over to the PPP concessionaires, they will resolve most of these problems. For those airports which continue to remain with AAI, these problems will require an early resolution by the Government/ AAI.

5.6.9 Cargo Village

In order to obviate the undue strain on the existing terminal facilities created on scarce airport land and to decongest the cargo terminal at major airports, the concept of setting up Cargo Villages was conceived. The proposed Cargo Village with ground handling facilities could be developed in the vicinity of the international airports preferably within 2 kms from the existing international cargo terminal of the gateway airports. All export related activities including processing of

export cargo, clearance by the customs, and unitisation would be carried out in the Cargo Villages. The unitised cargo, "In ready for Carriage" condition will be brought to the international cargo terminal for onward uplifting by the respective airlines.

5.6.10 Similarly, in case of imports, the loaded Unit Load Devices (ULDs) brought by the airlines shall be shifted from the terminal building to Cargo Villages for onward processing/clearance by customs and its delivery to the respective importers.

5.6.11 Restricted working hours

Limited working hours of concerned agencies such as Customs at the cargo terminals is one of the key reasons for the delay in clearance of international cargo. Given the vibrant growth in imports and exports from and to various destinations covering different time zones, Indian airports require round-the-clock clearance of cargo. Proposals should be formulated by the Ministry of Civil Aviation to address these issues expeditiously.

5.6.12 Recommendations

The Task Force makes the following recommendations for development of cargo operations:

(a) Round-the-clock customs operation;
(b) development of off-airport cargo processing facilities and cargo villages;
(c) increase in the lease period for cargo facilities from the present period of 1-3 years to 20-30 years; and
(d) constitution of an IMG under the chairmanship of Secretary, Ministry of Civil Aviation to examine the issues related to customs procedures, dwell time reduction etc. The Group should review the report of IMG on simplification of customs procedures submitted in July, 2007 and make recommendations for further action. The Group should complete its work by November, 2012.

5.7 Investments by AAI

5.7.1 The Airport Authority of India (AAI) proposes to invest Rs.12,500 crore over the 12th Plan period on the items indicated in Table 12 below.

Table 12: Investment by AAI during the 12th Plan

(Rs. in crore)

S. No.	Item	Amount
1	Non-metro airports	1,500
2	Metro Airports	1,500
3	Greenfield airports	1,200
4	ANS	3,700
5	GAGAN project	700
6	IT, GSS, Equipment & Tech	500
7	Security	3,000
8	Investment in JV Companies	400
	Total investment by AAI	**12,500**

5.7.2 It was noted that AAI expects a budgetary support of Rs. 5,073 crore during the 12th Plan period. The Task Force noted that the above proposals of AAI would be examined and approved as per extant process and subject to availability of funds.

5.8 Constitution of an Inter-Ministerial Group

Implementation of this Financing Plan will require regular review and monitoring. The Task Force, therefore, recommends the constitution of an IMG under the chairmanship of Secretary, Civil Aviation with Secretary, Department of Economic Affairs, Secretary, Planning Commission and Chairman, AAI or their representatives not below the rank of Additional Secretaries, as members. The IMG may meet at least once every quarter and submit its report to Minister, Civil Aviation, Finance Minister and Deputy Chairman, Planning Commission.

6. Summary of Recommendations

6.1.1 The recommendations of the Task Force are summarised in the paragraphs below.

6.1.2 Metro Airports

Development and operation of the entire airports, including the airside and city side facilities at Chennai and Kolkata airports may be undertaken through Public Private Partnership (PPP) on the basis of the existing Model Concession Agreement (MCA) which can be suitably modified as necessary. It should be ensured that the interests of the employees are not compromised. Chennai airport could be taken up in the first phase, followed by Kolkata airport in the second phase.

6.1.3 Greenfield airports

Development of greenfield airports at six locations, viz. Navi Mumbai, Goa, Kannur, Chandigarh, Kota, and Agra may be undertaken through Public Private Partnership on the basis of the existing MCA, which may be suitably modified as necessary.

6.1.4 Non-Metro Airports

Development and operation of both airside and city side facilities at 15 non-metro airports of AAI may be undertaken through Public Private Partnership. This programme may be taken up in two phases. Nine airports viz. Ahmedabad, Guwahati, Lucknow, Jaipur, Bhubaneswar, Amritsar, Udaipur, Gaya, and Khajuraho may be taken up in first phase followed by 6 airports viz. Coimbatore, Trichy, Varanasi, Tuticorin, Pantnagar, and Puducherry, in the second phase.

6.1.5 Non-operational and other Airports

Development and operation of the non-operational airports at Jharsuguda (Odisha), Warangal (AP), Chakulia (Jharkhand), Raxual (Bihar), Rupsi (Assam) and at 27 other airports may be taken up through PPP. Development of airports at Vellore (Tamil Nadu), Chakeri (Kanpur), Nadirgul (Andhra Pradesh), and Deesa (Gujarat) may also be taken up through PPP for activities like aero sports, flying clubs as well as training centres for security and fire-fighting.

6.1.6 Cargo logistics

The Task force makes the following recommendations for development of cargo operations:

(a) Round-the-clock customs operation;

(b) development of off-airport cargo processing facilities and cargo villages;

(c) increase the lease period for cargo facilities from the present period of 1-3 years to 20-30 years; and

(d) constitution of an IMG under the chairmanship of Secretary, Ministry of Civil Aviation to examine the issues related to customs procedures, dwell time reduction etc. The Group should review the report of IMG on simplification of customs procedures submitted in July,

2007 and make recommendations for further action.

6.1.7 Implementation of this Financing Plan will require periodic review and monitoring. An Inter-Ministerial Group under the chairmanship of Secretary, Civil Aviation and including Secretary, Department of Economic Affairs, Secretary, Planning Commission and Chairman, AAI or their representatives not below the rank of Additional Secretaries may be constituted. The IMG should submit quarterly reports to Minister, Civil Aviation, Finance Minister and Deputy Chairman, Planning Commission.

6.2 Investment during the 12th Plan

6.2.1 The projected investments indicated in section 5 are summarised in Table 13 below.

Table 13: Projected investments in airport sector

(Rs. in crore)

S.No	Item	Source	Investment
I	**Private Investment**		**56,500**
1	Metro airports (Table 4)	Private	18,000
2	Non-metro airports (Table 10)	Private	6,000
3	Greenfield airports (Table 9)	Private	21,500
4	Non-operational airports (Table 11)	Private	6,000
5	Other airports	Private	1,000
6	Cargo Logistics	Private	4,000
II	**Public Investment**		**14,500**
1	Metro airports (Table 12)	AAI	1,500
2	Non-metro airports (Table 12)	AAI	1,500
3	Greenfield airports (Table 12)	AAI	1,200
4	Others (Table 12)	AAI	8,300
5	Greenfield airports	State Govt.	2,000
	Total		**71,000**

6.2.2 The Task Force noted that if the above recommendations are accepted, the projections for investment during the Twelfth Plan from the public and private sectors will be as given in Table 14.

Table 14: Investment in airports during the 12th Plan

(Rs. in crore)

Source	Investment
AAI/Central Government	12,500
State Governments	2,000
Private sector	56,500
Total	**71,000**

6.2.3 The Task Force noted that the above order of investment was necessary in order to accelerate the growth of the airport sector in keeping with the growth projections of the economy. The Task Force emphasised that the projected investments can fructify only if the PPP approach was adopted extensively. This would not only help attract the requisite volumes of investment, it would also ensure generation of significant volumes of non-aeronautical revenues that would help reduce the passenger charges to affordable levels.

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