

STRATEGIC PLAN

MINISTRY OF CIVIL AVIATION



2010-15

SECTION 1

INTRODUCTION

Transport is a major driver of economy. The linkage between civil aviation sector and economic activity and its catalytic impact on general development is now well recognized. The ICAO estimated that \$100 spent on air transport produce benefits worth \$325 for the economy and 100 additional jobs in air transport result in 610 new economy wide jobs. The ICAO study attributes over 4.5% of global GDP to the air transport component of civil aviation. An efficient aviation sector is essential to support tourism, an industry with immense employment opportunity. During the last one decade the civil aviation sector has grown at a phenomenal pace and India has emerged as the 9th largest civil aviation market in the world. To illustrate this, Indian aviation currently has:

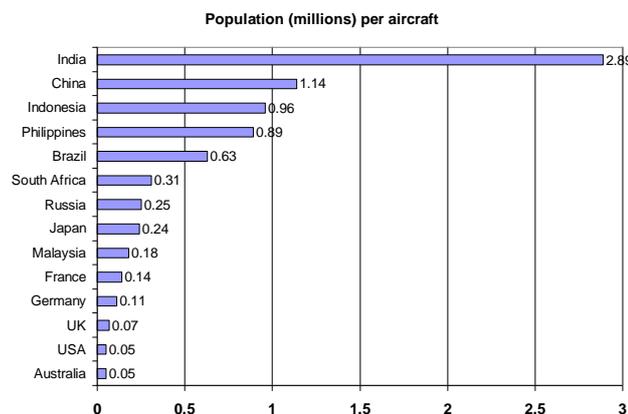
- Scheduled air services available to/from 82 airports (only 50 in early 2000).
- Enhanced national and international connectivity - 72 foreign airlines are operating to/from various destinations.
- Bilaterals with 104 countries.
- 1356 International flights utilizing 3,26,705 seats per week.
- 3 Indian carriers are operating 990 flights to 35 destinations in 25 countries.
- North East Connectivity: 87 flt/wk to 286 flt/wk in 5 years (230% increase).

Between 2000 and 2010 air operations Air India have expanded by 160% in terms of domestic passenger volume India now ranks 4th

after US, China and Japan. It is expected to grow at a rate of 9-10% annually to reach the level of 150 to 180 million passengers by 2020. Today India has 14 scheduled airlines operating exclusive of cargo airlines. In 1990, there were only 2 airlines in operation. In 1990 there were only 100 aircrafts operating in the country which have now risen to 413. As against 39 non scheduled operators in 2000, the figure has now swollen to 123. The total number of aircrafts in the country too have shown a rapid rise from 225 in 2000 to 735 in 2010.

Similar expansion has been witnessed in airport infrastructure where the number of operational airports has increased from 50 in 2000 to 82 in 2010. The passenger handling capacity has increased from 66 million to 235 million during the same period. The growth in air cargo has been from 3 million tons in 2002 to 4.5 million tons in 2010. This is a remarkable growth story and it could have been even more remarkable but for the downturn in global economy in 2008-09. They have been occasional dips due to economic recessions, epidemics, natural disasters and political upheavals which reflect the extreme sensitivity of the sector to external global factors.

Aircraft Penetration



In spite of the above said growth, India continues to be a small player in the international arena. The trips per capita in India still remain very low (0.04) even by the standards' of other emerging markets, such as China (0.15), Brazil (0.25) and Malaysia (0.54). China's domestic traffic is 5 times the size of India's despite having a population just 15% larger. The upside potential therefore, remains huge, driven by strong economic and demographic fundamentals. India has 1 aircraft for every 2.89 million population which is miniscule in comparison to 1.14 million in china, 0.96 of Indonesia, 0.89 in Philippines and 0.63 in Brazil. Out of the 32,000 helicopters in the world India has merely 210 while out of 15,750 freighter carriers globally, India has just 12.

India's civil aviation story has just begun.

1.1 VISION:

Enable people to have access to safe, secure, sustainable and affordable air services in world class civil aviation.

1.2 MISSION:

- To create World Class infrastructural facilities
- To establish Regulatory Framework in consonance with international standards.
- Connect presently unserved or underserved areas.
- Develop skilled manpower according to the needs of the industry.
- Deploy advanced technologies for the optimal growth of the sector.

1.3 OBJECTIVES:

- Develop world class aviation infrastructure with passenger comfort in focus along with efficient facilities for cargo handling and Maintenance and Repair Operations (MRO).
- Operationalisation of Airports Economic Regulations Authority.
- Modernisation of Air Traffic Control, Automation of Air Traffic Services and Air Navigation Systems through GPS Aided Geo Augmentation (GAGAN) Project aiming at efficiency and optimum utilisation of the air space.
- Creation of world class human resource through Indira Gandhi Rashtriya Udaan Academy (IGRUA), National Institution of Aviation Management and Research (NIAMAR) and Helicopter Training Academy Hadapsar, Pune.
- To establish an adequately resourced and effective State Safety oversight system operating above the international standards set by ICAO for safe, orderly and sustainable air transport with acceptable level of safety (ALOS) for Scheduled, Non Scheduled, General Aviation and Helicopter Operations.
- Protection of passenger Rights in case of delays/cancellations and overbooking.
- Enforcement of Security Regulations in terms of internationally accepted standards.
- Better domestic and international connectivity.
- Enhancement in competitiveness of NACIL.
- Rapid development of helicopter operations.
- Use of advanced Information Technologies for enhanced efficiency and transparency.

1.4 ASPIRATION

- ✓ Given the fact that India is among the leading aviation markets in the world and is likely to strengthen that position, it is incumbent upon us to assume a greater international role in this arena. The country has already been recognised as a role model by FAA and shall strive to play a greater role in the governance of international bodies and their regional chapters
- ✓ To develop as one of the five largest aviation markets in the world.
- ✓ Develop an indigenous Indian Civil Aviation aircraft.
- ✓ Maintain India's safety performance levels and achieve globally best standards (as defined by ICAO standards).
- ✓ Domestic Traffic to rise @ of 9-10% annually.
- ✓ Achieve 0.10 trip per capita as against the present 0.04.
- ✓ 1 aircraft per 1.5 million population as against 2.89 m at present.
- ✓ Include 500 more aircrafts in the Indian Fleet.
- ✓ Include 300 more helicopters
- ✓ Reach cargo movement of 7 million.
- ✓ The national carrier Air India to recapture its leadership role by acquiring 28-30% market share in the sector.
- ✓ Establish Heliports in all the four Regions of the country.
- ✓ One Helipad at every 100 km of National Highways.
- ✓ Roof Top helipads on all new hospitals with more than 500 wards and 5 Star Hotels.
- ✓ Develop Delhi as an International Aviation Hub.
- ✓ Introduce Sea Plane operations in the island and coastal areas for promotion of tourism and domestic transport.

- ✓ Implement a GPS based Air Navigation System (GAGAN) by 2013.
- ✓ Graduate to a Flexi Operation System by 2015.
- ✓ Provide effective connectivity to North East, Jammu and Kashmir and the Islands of Lakshdweep, Andaman and Nicobar.

SECTION 2

ASSESSMENT OF THE SITUATION

2.1 EXTERNAL FACTORS:

1. International prices of ATF, is the single most important factor that affects the cost of air operations.
2. Marketing and pricing policies of Indian Oil Companies too have a snowballing effect on costs.
3. Domestic taxation goes a long way to determine the operational cost of airlines.
4. Global and National economies have a deep impact on the passenger traffic as well as financials of airlines and other aviation related private agencies.
5. Global health issues like epidemics. In the past, scares like SARS and Bird Flu have seriously affected international travelling.
6. Natural Disasters like volcanic eruption in Iceland caused complete cessation of flights for a prolonged period in May 2010.
7. As environmental factors assume global importance, laws and policies related to environment protection would play an increasing role in Civil Aviation operations affecting both airlines as well as airports.
8. Growth of alternative modes of transport also affects the overall health of the sector. Short haul flights are affected by development of good quality highways and fast speed trains.

9. Development of new technologies has a tremendous effect on Aviation specially in the field of Air Traffic Management, Meteorology, Ticketing etc.
10. The performance of the sector also depends upon tax policies of the Government like service tax etc on passengers and flying schools and imposition/exemption of customs duty on import of aircrafts and spares.
11. International and National political situations have a great effect on Aviation operations in case of wars and terrorism. Mumbai terrorist attack on 26-11-2008 caused a severe setback to Indian aviation industry. The effects of 11/9 and Christmas Bombing are still continuing. Political developments in oil producing areas of the world immediately affect the aviation sector.
12. FDI Policy of the Government is a major determinant in the growth of the sector.
13. Land Acquisition and Rehabilitation Policies of the Government of India as well as State Governments radically affects the growth of infrastructure facilities specially airports.
14. Policies of the Ministry of Defence in sharing Air Space and Aerodromes are a critical factor in Indian Aviation.
15. Promotion of India as a tourist destination will impact the international passenger traffic to India.

2.2 INTERNAL FACTORS

1. The manifesto of the government and the strategic priorities at the time
2. Availability of budgets in line with the strategic plans

3. Organisational culture and availability of skilled personnel
4. Rigid and slow recruitment processes
5. Acceptance and deployment of automation is lower than desired
6. Organisational procedures have not been reviewed for a long period of time

2.3 STAKE HOLDERS AND THEIR INTERESTS

- ❖ Aviation as an activity encompasses a wide variety of stakeholders ranging from passengers to vendors of high and strategic technologies. The most important stake holder in the sector is the **common passenger** whose aspiration and need to travel is to deepen with time. He needs affordable, comfortable and safe travel with a decent quality of customer services.
- ❖ **Pilots, crew members and technicians** constitute the backbone of civil aviation. Individually and collectively they are the essential stake holders of the industry. We need to ensure continued training and adoption of high standards of safety in operations in order to support this group.
- ❖ **Airline Operators, both SOP as well as NSOP**, are the basic service providers and hence the growth and performance of the sector is substantially dependent upon them. Their expectation is to operate in a liberal laissez-faire environment where fair competition is allowed to thrive with minimal Govt. Controls.
- ❖ **Airport operators** and managers of aviation infrastructure are critical in the growth of the sector. As such the Airport Authority of India which manages most of the aerodromes in the country and the emerging class of private entrepreneurs

associated with creation of airport infrastructure are important partners in the performance of the sector. Their interest is in ensuring the safety, security and commercial viability of the airports that they operate.

- ❖ **Defence Ministry** is an important stake holder as it manages a large number of airports in the country which are also used for civilian operations. The Ministry also shares a large part of the Indian air space and hence determines the scale of civil operations. We are required to maintain the primacy and priority of military needs in terms of use of airspace, infrastructure and operating procedures followed.
- ❖ **Ministry of Environment** is an important player because Civil Aviation has a significant effect on environment through noise and effluents. The policies and pollution norms prescribed by the ministry significantly impact aviation activities. NGOs and Social Activists too form a part of this ecosystem and often influence policy direction.
- ❖ **Regulators** like the Director General Civil Aviation (DGCA), Bureau of Civil Aviation Security (BCAS) and Airport Economic Regulation Authority (AERA) are a major component of the aviation system. International regulators like EU, FAA and ICAO regulate international operations and prescribe standards that significantly determine Indian aviation as well.
- ❖ **Regulatory Service Providers** like the CISF are important stake holders of the system. They contribute to making the aviation environment secure for the passengers and operators. They also provide critical security to civil aviation installations.
- ❖ The **Ministry of Home** has a vital role to play in civil aviation due to security reasons. They also provide vital intelligence inputs to handle security issues. They also require the Ministry

of Civil Aviation to be a partner in disaster management, rescue operations and policing activities.

- ❖ As **MRO** is likely to assume a greater importance in the civil aviation picture with the passage of time agencies related to this activity are likely to emerge as an important ingredient of the system. Their needs relate to R&D, easy import of technology and availability of trained human resource.
- ❖ **Training Schools** both for pilots as well as engineering technicians have a major contribution to make in the growth of civil aviation sector. To compete with international flying schools who operate in a comparatively different environment, these institutions require similar global environment to perform optimally. They expect a dynamic regulatory regime which responds rapidly to changing training and technology needs of the industry.
- ❖ Civil aviation operations depend heavily on efficient ground handling. The **ground handling agencies** thus are a significant player in the system.
- ❖ **Oil Marketing Companies** provide the basic input of civil aviation through supply of fuel. They are an important link in the operations supply chain of the industry.
- ❖ **Ministries of Finance** and revenue decide the tax regime and financial dispensations in which the industry operates hence they too contribute heavily to the growth and expansion of civil aviation.
- ❖ **Ministry of Urban Development and Municipal Agencies** provide the approach infrastructure to airports. They control the access to the services and hence are a major contributory factor in the growth of the sector. They also control the growth of

habitations near airports and the implementation of building regulations which effect air movements.

- ❖ The **Air Traffic Controllers** who manage the air traffic are important both for optimal utilisation of air space as well as safety of operations. They constitute the life blood of the entire civil aviation sector. They have ongoing training requirements caused by the constant change in technology and procedures.
- ❖ The **Ministry of Science and Technology** is in the process of developing a 70-90 seater civilian aircraft capable of 1000-2000 km flying. This is going to change the entire shape of Indian civil aviation sector once the proposed aircraft materialises and goes into commercial production. They presently also provide meteorological inputs to air controllers which are critical for safe operations.
- ❖ **Ministry of Communication** who conduct wireless examinations for Indian pilots are an important stake holder, they also provide wireless connectivity which is critical to air traffic management.
- ❖ **Manufacturers of Aircrafts and engines** provide the basic hardware of the industry. They provide direction and pace through their marketing strategies and development of technology. They are impacted by taxation issues prevalent at the time.

2.4 SWOT ANALYSIS

STRENGTHS:

1. Pace of growth of the National economy.
2. Growing middle class.
3. Large population
4. Dispersed tourist attractions
5. Long 100 year old history of Civil Aviation - established standards / credibility with international vendors.
6. Indigenous entrepreneurship and availability of capital to support private participation and PPP models.
7. Good record of safety.
8. Proven efficacy of the PPP model of airport development

WEAKNESSES:

1. Limited infrastructure – especially in the Tier II/III cities – which limits the growth of the market.
2. High Costs of operation.
3. Regional economic and infrastructural disparities.
4. Lack of R&D; high dependence on foreign suppliers
5. Inadequate trained manpower. Training infrastructure may not be adequate to support the sector's growth
6. Slow growth of cargo.

7. Absence of MRO facilities – causing operators to send their aircraft overseas for long periods and incur high costs. MRO facilities also considered critical to the development of India as an aviation hub.
8. Lack of IT based system for planning, operations and crew scheduling
9. Underdeveloped Air Traffic Management and Air Navigation System.
10. Poor organisational culture in the National carrier.
11. Coordination between Government agencies.

THREATS:

1. Global terrorism
2. Cyclical economic downturns.
3. Development of substitutes in form of high speed railways and superior road transport which can replace short haul flights.
4. Operational inefficiencies leading to poor travelling experience for passengers – which may cause them to migrate to alternative modes of transport.
5. Congestion of Air Space.
6. International factors like natural disasters, political upheavals and epidemics.
7. Low Cost Carriers of foreign countries.

OPPORTUNITIES:

1. Growing desire and need amongst Indians to travel in India and abroad for leisure and work.
2. Development of India as a prime tourism and medical services destination.
3. Increased integration with the global economy and strong growth of inbound business travellers
4. Cross country travel by students.
5. Need for an aviation hub between Dubai and Singapore.
6. Disaster relief and Medical Evacuation is another window of opportunity gradually opening in the Indian market.
7. Helicopters, due to their sheer versatility offer a tremendous opportunity for growth.

The overall situation is summarised below:

<p><u>Strengths</u></p> <ul style="list-style-type: none"> • Rapidly growing economy • Growing population and middle class • Dispersed tourist attractions • Long history of Civil Aviation • Indigenous entrepreneurship • Good safety record 	<p><u>Opportunities</u></p> <ul style="list-style-type: none"> • Growth of inbound and outbound traffic • Development of India as a prime tourism and medical services destination • Increased integration with the global economy • Cross country travel by students • Need for an aviation hub between Dubai and Singapore • Disaster relief and medical evacuation • Helicopter' sector has significant growth opportunities
<p><u>Weaknesses</u></p> <ul style="list-style-type: none"> • Limited infrastructure • High costs of operation • Lack of R&D; foreign dependence • Inadequate trained manpower • Slow cargo growth • Absence of MRO facilities • Lack of comprehensive IT based systems • Underdeveloped ATM and ANS • Poor organisational culture in National carrier 	<p><u>Threats</u></p> <ul style="list-style-type: none"> • Global terrorism • Cyclical economic downturns • Development of substitutes • Congestion of air space • International factors • LCCs of foreign countries

After examining and prioritizing the issues identified through the current state assessment, there are 5 broad themes that are emerging for the current strategy plan

S. No.	Theme	Sub-Elements (where relevant)
1	Connectivity	<ul style="list-style-type: none"> • Helicopter operations • Regional airlines • General aviation
2	Infrastructure creation	<ul style="list-style-type: none"> • Airports • ANS and ATM • Cargo • MRO
3	Safety and security	
4	Revitalisation of Air India	
5	Efficiency improvement	<ul style="list-style-type: none"> • E-governance • Technology upgradation
6	HR capacity development	

The strategy for each of these themes is described in the sections to follow.

SECTION 3

OUTLINE OF THE STRATEGIC PLAN

3.1: CONNECTIVITY

In order to improve connectivity of people by air services, we intend to pursue six strategies:

- Connecting un-served and under-served areas – through increase of airport infrastructure in such areas using the appropriate development model
- The ministry shall work with other government agencies to identify opportunities of reducing risks and hurdles for the aviation sector and address issues of taxation, duties and other economic constraints that may impact the economic health of the sector.
- Helicopters – which provide immense flexibility of operations and can also be deployed quickly for strategic requirements and to deal with emergency situations
- Last mile connectivity – by creating a mechanism to integrate the larger airports with smaller airports in the region
- Review the policy framework for regional airlines
- Develop an approach towards the growth of general aviation in the country: A study shall be conducted through experts to develop a vision and roadmap for the vibrant growth of general aviation in the country, putting it at par with benchmark nations

3.1.1 Improved airport infrastructure

India would ensure better connectivity for hitherto un-served and underserved areas of the country specially the North-Eastern regions of the country, Jammu and Kashmir and the Islands of Lakshdweep, Andaman and Nicobar.

- For this Airports and Airstrips which provide landing facilities to ATRs and smaller aircrafts would be developed across these regions.
- The airport at Agatti would be upgraded.
- Seaplanes would be introduced in the islands and coastal areas to improve inter-island connectivity.
- The airports in NE would be resuscitated and upgraded to facilitate greater connectivity.
- States would be encouraged to introduce subsidies on the pattern of Manipur and Madhya Pradesh to improve passenger load factor which would make operations on these routes commercially viable.
- Mechanisms would be developed for seamless dovetailing of SOPs and NSOPs between major airports and centres of lower passengerload/infrastructure so that the hub and spoke principle of connectivity can be actually realised.
- Cost of travel being a critical factor in the full development of civil aviation on India, the Government would develop suitable regulatory mechanisms to prevent predatory/excessive charging and oligopolistic practices. A balance

would be struck between the interests of the travelers and commercial viability of Airline Operators.

3.1.2 Helicopter Operations

Helicopters have a tremendous future in India. Given the ability of helicopters to fly in varied environments and also due to the fact that infrastructure for fixed wing aircrafts can expand only incrementally, it is but natural for helicopters to grow at an unprecedented pace. At present, India has only 210 helicopters in operation, which is minuscule in comparison to the international figure of 15,750. In order to achieve this objective the Government shall:-

- * Create the right infrastructure for the rapid growth of helicopter operations. Heliports shall be set up in the four regions in the country – Delhi in North, Mumbai in the West, Kolkata in the East and Chennai/Bangaluru in the South in the first phase.
- * These heliports shall be developed both in the public, private and joint sector. The responsibility of developing heliports shall primarily rest with the Airports Authority of India. However, this critical function can also be performed by the Pawan Hans Helicopters Ltd. and also by the private sector.
- * The Greenfield Airports Policy shall be suitably modified wherever necessary to adapt to helicopter operations' needs.

- * States would be encouraged to develop helipads and heliports through subsidy schemes like the Infrastructure Development Scheme of Tourism Department.
- * The Government shall periodically review the need for helicopter corridors and update them according to changing needs of the industry. Air Space Management shall be done in a way to enable optimal growth of helicopters along-with fixed wings.
- * Tourism and Medical evacuation are going to be major drivers of helicopter growth in India in the years to come. Medical Evacuation would be triggered by the Government through the National Disaster Management Agency and NHAI.
- * Since medical evacuation for private people still continues to be an expensive proposition medical insurance companies would be encouraged to formulate appropriate packages to include the cost of such evacuation. In the case of Government Servants CGHS would act as a facilitating vehicle.
- * Coordinate with line Ministries to develop helipads in major and prestigious government and private hospitals.
- * In order to facilitate growth of helicopter operations in India a separate wing for helicopters shall be developed in the DGCA and AAI. The Regulatory regime for helicopters

would be continuously upgraded to enable blossoming of the sector.

3.2: AVIATION INFRASTRUCTURE

3.2.1 AIRPORTS

Development of Airports would be guided by the following principles –

- District level airport with population less than 2 lacs should have the facility to cater for aircraft having seating capacity of 30 seats, Aerodrome reference code – “2B”.
- Tourist/pilgrimage centres should have the facility to cater for aircraft having seating capacity 30 to 80 seats, Aerodrome reference code – “3C”.
- State Capital Airport should have the facility to cater for aircraft having seating capacity 80 to 200 passengers, Aerodrome reference code – “4C”.
- Commercial centres or towns should have the facility to cater for aircraft having seating capacity 200 to 250 passengers, Aerodrome reference code – “4D”.
- Non-metro international airports should have the facility to cater for aircraft having seating capacity 250 & above, Aerodrome reference code – “4E”.

- Special requirement of air connectivity to NE region, J&K, A&N islands, Lakshadweep islands as socio-economic commitment.
- Development of heliports for air connectivity through helicopter services in remote areas in J&K, M.P, Chattisgarh, Orissa, A.P, Gujarat etc.



Airports would continue to be developed under three models:

- i) By AAI
- ii) By Central Government/ State Government/ NEC
- iii) By Public Private Partnership (PPP) model
 - The project should meet IRR norms of 12%. However in some cases Development cost may have to be met by Central/ State Government/ NEC, keeping in view the socio-economic and connectivity considerations (for remote areas etc). In some cases, project may be economically viable with provision that security, electricity and water will be provided free of cost by State Government. An MOU can be signed by AAI

with State Government spelling out role and responsibilities.

- To bridge the viability gap AAI/ Operator to be permitted to utilize the land on city side, to earn revenue as well as to permit levy of ADF/ UDF.
- All Non operational AAI or state Govt airports and All Greenfield airports can be developed through PPP model and BOOT scheme.
- The development includes terminal building, airside as well as city side.
- To bridge the viability gap, private consortium/ investor be permitted to utilize the excess land on city side to earn revenue as well as to levy UDF/ADF.
- CNS/ ATM facilities to be provided by AAI.

We shall also continue to develop newer models of project financing under each of these models.

3.2.1.1 Constraints Faced

Development of airport infrastructure requires us to address several challenges through the life cycle of the project. Some of the key issues are highlighted below:

Project stage	Challenges	Description
Planning	Financial Attractiveness of airports in Tier II/III towns	<ul style="list-style-type: none"> • Airport projects are capital intensive with long gestation periods • There is much higher certainty of returns from airports in metros/large cities, than from smaller cities/towns – even though the capital cost is extremely different • It is therefore easier to attract

		private sector players and also secure financial closure for the larger projects – but the country’s need is now shifting towards smaller airports
	Land acquisition	<ul style="list-style-type: none"> • Airports require significant land; which is complex and time consuming to acquire – despite the presence of many attractive compensation schemes which exist today
	Environmental issues	<ul style="list-style-type: none"> • There is an overall increase in concern about environmental issues. However, compliance can be a time consuming process
Post commissioning	Financial feasibility	<ul style="list-style-type: none"> • Several of the airports in the country are making operational loss, putting a drain on resources • We need to find ways of addressing this issue
	Encroachment and building violations	<ul style="list-style-type: none"> • Despite a clear legal framework, operations continue to suffer due to encroachment and violation of building codes. This reduces the efficiency and effectiveness of the airports

3.2.1.2 Addressing the Constraints

- **Corporatisation of AAI:** Given the increasing complexity of the AAI’s role and the need to enhance organisational capabilities, create flexible decision making, enhance financial viability and thereby respond more efficaciously to emerging market challenges, it is desirable that AAI move towards a corporate structure in the near future.

- **Strengthen marketing capabilities of AAI:** There are several opportunities for improvement in the financial performance of smaller airports (existing and planned). For instance:
 - Improved development and use of retail opportunities at the airports – as witnessed in several of India’s newer airports. This could act as an attraction for the airport and add another revenue stream to them
 - Joint initiatives with tourism players (government and private) to create packages and promote a destination
 - Increasing the attractiveness of an airport for an operator by factoring that into the development plan, creating incentives for usage
 - Identifying alternate airport pricing opportunities
 - Working with the state governments and other local stakeholders to create schemes and enhance usage of the airport

Addressing these issues will require us to strengthen our marketing capabilities at AAI. The capabilities may be built afresh, or developed through private partnerships. Outsourcing options may also be assessed as needed.

- **Develop alternate funding options:** This may include different combinations of equity, soft loans and grants
- **Assess the feasibility of developing low cost airports:** By reducing the capital cost and ongoing operating costs, one can improve the IRR of airport investments
- **Involvement of local administration in airport master plans:** This will help identify land related issues at early stages, and enable solutions to be developed
- **City-side airport development:** Which helps address the issue of land availability within the city
- **Ensure that airports have the option to expand:** New airports should be planned in such a way that there is an opportunity to expand in the future; preventing land issues from re-surfacing when further infrastructure is required

3.2.1.3 Road map for implementation

Category – A

Airports with more than 10 mppa

- * To be developed to aerodrome code 4E/ 4F
- * Two parallel runways for independent operations.
- * Parallel taxiways with both runways.
- * Cat 1 for all four ends (of runways).
- * CNS facility – ASR/MSSR/SMR/ASMGS.

Airports expected to come under this category:-

Chennai, Kolkata, Ahmedabad, Trivandrum

Category - B

Airports with handling capacity of 5 – 10 mppa

- * To be developed for aerodrome code 4D/ 4E
- * Parallel taxiway with runway
- * CAT 1 at both ends
- * CNS facility – ASR/MSSR

Airports expected to come under this category:-

Coimbatore, Lucknow, Trichy, Varanasi, Amritsar, Jaipur, Calicut, Guwahati, Indore, Chandigarh.

Category - C

Airports with handling capacity of 1– 5 mppa

- * To be developed for aerodrome code 4C/ 4D
- * Parallel taxiway with runway
- * CAT 1 operation at both ends
- * CNS – at least ILS

Airports expected to come under this category:-

Mangalore, Gaya, Patna, Pune, Bagdogra, Srinagar, Bhubaneswar, Vizag, Madurai, Bhopal, Tirupati, Goa, Portblair.

Category - D

Airports with handling capacity of < 1 mppa

- * To be developed for aerodrome code 4C/ 3C
- * CAT 1 (optional)
- * CNS – ILS depending on the terrain and weather conditions

Airports expected to come under this category:-

All other domestic airports not covered Category–A, Category–B, Category–C, above.

Note: - Categorization has been suggested in view the traffic potential and other factors like airport ownership with Defence, land terrain constraints.

Non-operational Airports

- i. AAI has 24 non-operational airports.
- ii. Based on techno-economic feasibility study, following airports will be considered for development for commercial operations.

Areas other than NE Region

- | | |
|--------------------------|------------------------|
| 1. Akola, Maharashtra | 7. Bhatinda, Punjab |
| 2. Jalagaon, Maharashtra | 8. Jharusguda, Orrisa |
| 3. Vellore, Tamil Nadu | 9. Gondia, Maharashtra |

- | | |
|-----------------------------|---------------------------|
| 4. Warangal, Andhra Pradesh | 10 Pantnagar, Uttarakhand |
| 5. Cuddapah, Andhra Pradesh | 11. Keshod, Gujarat |
| 6. Kishangarh, Rajasthan | |

NE Region

1. Tezu, Arunachal Pradesh
2. Daparizo, Arunachal Pradesh
(State Govt.)
3. Pakyong (new), Sikkim
4. Itanagar (new)
5. Chaitu (new)

New Greenfield Airports

Pune, Sriperumbudur (Chennai), Chandigarh (Mohali) are the new Greenfield airports, proposed to be developed as JV model, with AAI playing a leading role in the venture.

Development Plan: Non-operational Airports

A list of airports with suggested mode of development is illustrated below:-

- i) Entirely by AAI

Airports: Jalagaon, Akola, Cuddapah, Gondia

- ii) Funding by Central Government/ State Government/ NEC

*Airports: Pakyong (new), Tezu, Daparizo, Itanagar (new),
Chaitu (new), Kishangarh (new)*

iii) By Public Private Partnership (PPP) model

Airports: Pantnagar, Jharsuguda, Keshod, Vellore, Warrangal, Bhatinda

Airports in the middle of urban areas

Some airports like Kota and Rajkot are located right next or in the middle of urban townships. There is no possibility to acquire additional land in their vicinity for their up-gradation for any worthwhile aviation activities. It will be prudent for AAI to offer those airports which have useful land parcels to State Government for their further use and obtain land away from the city for another Greenfield airport, in form of barter exchange deal. Amendments to Aircraft Rules etc, as necessary may have to be worked out in consultation with State Government and Law Ministry.

City side development

In the first phase, 10 airports will be taken up for City Side Development. The City Side Development process has already been initiated for which RFQ/ RFP/ Model Concession Agreements are being finalized. The process will involve development either through PPP or by leasing for a period of 30 years extendable by another 30 years.

City Side Development at Chennai, Kolkata, Hyderabad and Ahmadabad shall also be undertaken during the period.

3.2.2 AIR NAVIGATION SERVICES:

Guiding Principles – The Air Navigation Services shall be guided by the following principles:

- Enhanced safety
- Increased system capacity
- Optimised use of airport capacity
- Reduced delays
- Reduced flight operating costs
- Reduced fuel consumption and emissions
- More efficient use of airspace; more flexibility; reduced separations
- More dynamic flight planning; better accommodation of optimum flight profiles
- Reduced controller workload/increased productivity

The primary objective of Air Traffic Management would be to develop an ATM system that ensure optimum safety to the aviation industry and provide the airspace users the desired level of operational efficiency to achieve cost effective operations through Gate-to-Gate operational strategy of airlines to ensure Safe, Efficient and cost effective operations, minimise delays and enhance capacity.

The strategy would consist of the following components –

- **Increased utilisation of existing capacity**
 - **Flexible use of Airspace for ensuring smooth flow of traffic without undue restrictions:** Historically, airspace management has been considered a rigid subject – with defined spaces for different players. However, the introduction of flexible air space management system allows us to work along a continuum. This helps reduce flight times, which results in fuel savings, improved plane utilisation, passenger comfort and reduced emissions

- **Improved use of ground infrastructure**
- **Load sharing among nearby airports**
- **Implementation of GAGAN**
- **Move towards a 4 centre concept for airspace control**

3.2.2.1 Implementation Requirements

- Identification of potential conflicts and application of solutions for conflict management and enhance safety.
- ATM system to support user preferred trajectories to save flying time and fuel, enhancing capacity.
- Central Air-traffic Flow Management Unit to be established to optimize airspace / airport capacity with demand.
- Implementation of Performance Based Navigation (PBN) based procedures for Approach and Landing at all airports.
- Reduction of separation standards for capacity enhancement.
- Measures to control / minimize the impact due to aviation emission and noise on environment.
- CNS/ATM infrastructure to be developed :
 - Covering high density areas by multiple radar
 - ADS-B / Multi-lattration to supplement enroute MSSRs for any other areas.

3.2.2.2 Challenges and Constraints to be Addressed

- Need to create consensus with multiple stakeholders for the effective deployment of a flexible air space management system
- Shortage of trained Air Traffic Controllers
- Aviation Meteorology operates as a separate department; leading to several coordination issues
- Significant changes required to existing technology

3.2.3 CARGO

- (i) **Creation of Cargo Terminal Infrastructure:** AAI will consider the development of Cargo Terminals at Pune, Sri Nagar, Guwahati, Chandigarh, Surat, Mangalore and Trichy in next 5 to 10 years. Recently, Cargo Terminal was operationalised at Port Blair for Domestic cargo operation with the assistance of Andaman and Nicobar Administration. When International flights start at Port Blair, AAI will start International Cargo operation departmentally.
- (ii) **Automation and governance:** On the initiatives of the Ministry of Civil Aviation and Commerce and Industry, AAI will upgrade the EDI from ICES 1.0 to ICES 1.5 version in coordination with customs and airlines in Cargo operation at AAI managed Airports to move towards paperless transaction. Continuing with EDI and automation, AAI will actively work with Banks for e-payment transactions for the customers to pay custodian charges.
 - AAI shall upgrade the cargo infrastructure at Chennai by automation and installing Automated Storage and Retrieval System (ASRS).
- (v) **Integrated Facilities:** AAI shall develop Cargo Villages
- (vi) Shall look to set up customs free zone within airport premises with permission of Customs Authorities.
- (vii) Faster processing of non courier express shipment by providing separate area in cargo terminal.

3.2.4 MAINTENANCE AND REPAIR ORGANISATION (MRO)

An MRO is a critical element of aviation infrastructure. Currently, airlines in the country are being required to send their crafts overseas for several maintenance activities. This leads to loss of fleet time and potentially higher costs. In order to aid the development of the sector, it is highly desirable that an MRO be created within the country. This will also strengthen the case of India as a global aviation hub, since an MRO in the country could also be used by airlines in several other countries. In the next 5 years, we are targeting the creation of one such world-class MRO in India – which has much of the required infrastructure for such a facility. Prior to establishing this facility, we shall be looking to conduct an extensive business and technical study to establish the commercial viability, operating model and scope of work for the facility. At this stage, we envisage that the key success factors for this enterprise will be:

- **Plan with the global market in mind:** The MRO business is global in nature and we should look to capture a share of that market. Currently, Indian planes go to other countries for services; we aim to reverse that trend. This will also help build scale for the project by enhancing the user base
- **Ensuring a world-class facility:** This is critical to create acceptance among the airlines and build the volumes required. It may, therefore, be desirable to bring in a technical partner for the venture.
- **Ensure price competitiveness:** Airlines in the country must also see a direct economic benefit from shifting to a domestic MRO. This is critical to enabling growth for the sector.
- **Develop HR capabilities as required**

3.3: SAFETY AND SECURITY

3.3.1 SAFETY:

There are four major thrust areas identified to improve the safety levels within the sector. These are outlined below:

1. Establishment of a **Civil Aviation Authority**
 - a. The prevailing regulatory regime would be transformed through establishment of a comprehensive civil aviation authority.
 - b. An independent agency for aviation related accidents would be established in consonance with ICAO recommendations.
2. Creation of a **State Safety Programme (SSP)** along with a corresponding **Safety Management System (SMS)**
 - a. Employing ICAO standards and Recommended Practices, as minimum international standards and recommended practices, DGCA will ensure the highest level of safety in the Indian aviation system
 - b. India will develop a State Safety Programme (SSP) and an integrated set of regulations and activities aimed at enhancing aviation safety.
 - c. Will develop and embed a safety culture across all aviation industries that recognises the importance and value of effective aviation safety management and acknowledges at all times that safety is paramount.

- d. Provide support and adopt management of safety in India through an effective safety reporting and communication system.
- e. Develop general rule making and specific operational policies that build upon safety management principles.
- f. Ensure that the DGCA financial and human resources are sufficient for establishment, implementation and maintenance of SSP and that personnel have the proper skills and a trained for discharging their responsibilities that these personnel are specialists in their functional areas and competent in safety regulation of operators and service providers.
- g. Ensure that acceptable levels of safety for aviation operations within the state are being set, measured and achieved, and expressed in terms of safety performance indicators and targets.
- h. Ensure that operators and service providers effectively establish and maintain the safety management system (SMS) in their operation.
- i. India would setup an internal audit and quality assurance division in the DGCA to audit aviation safety regulations in relation to ICAO's eight critical elements of a safety oversight system. The division would carry out regular internal quality assurance audits and internal technical audits to provide assurance on corporate governance to the DGCA.
- j. DGCA would develop a comprehensive safety information system to consolidate all the safety

information received. The ability to analyse the data will be improved to identify key safety risks and to develop mitigating action, including targeted inspections, audits and surveillance for individual approved organizations. Data so analysed would be used to prioritise actions and resources on areas of higher risk.

- k. The Accident Incident Reporting System (AIRS) will be further improved. The system would also provide for generation and online transmission of reports to ICAO and other contracting states.
- l. DGCA would provide training, awareness and two way communication of safety relevant information to support a positive organizational culture that fosters the development of an effective and efficient state safety program.
- 3. A comprehensive **Flight Duty Time Limitation** program would be adopted to reduce accident occurrences.
- 4. Strengthen the **Civil Aviation Security Advisory Council (CASAC)** to engage experts in the field to advise the Government on critical issues of safety.
 - a. The Aviation activities of the federating States would be brought under the effective oversight program of the National Regulator.

3.3.2 SECURITY:

- 1. India will develop an appropriate legal framework for effective implementation of its commitments under Annex 17 of Chicago convention.

2. Will review the National Security Programme to respond constantly to emerging security requirements.
3. Deploy advanced imaging technologies for reduction of threats arising out of unlawful interferences in a phased manner fully taking into consideration social and cultural sensitivities.
4. Establish a highly trained, dedicated and specialised aviation security force for better security of airports and other aviation properties/installations.
5. Achieve 100% screening of outbound cargo to eliminate threats arising from sophisticated IEDs.
6. Install technologies at airports and cargo terminals for detection of radiological substances.
7. Assume leadership in Asia Pacific Region in issues of security.
8. Adopt global best practices for significant reduction and elimination of threats arising out of unlawful interferences.
9. Restructure of the existing regulatory framework (BCAS).
10. Establish an Aviation Security Advisory Council in the Ministry with experts and user groups on issues of security.

3.4 REVITALISATION OF AIR INDIA

Being the National Carrier, Air India has historically been the symbol of Indian Civil Aviation. After ruling the skies for nearly half a century, it has suffered an erosion of market share, image and prestige with the advent of new players in mid-90s. Today it has accumulated a loss of 11,000 crores and enjoys a market share of only

18%. It is in difficult financial health because of adverse debt equity ratio, mounting debts, operational losses, increasing interest burden, massive working capital requirements to fund large interest payments, scarcity of skilled manpower and over staffing of non-skilled manpower, delay in delivery of wide bodied aircrafts, National and international compulsions of operating loss making routes etc.

Some initiatives have been taken in the recent past like merger of erstwhile Air India and Indian Airlines and infusion of a young fleet. Their salutary effects are likely to be visible only after some time. The Airlines is trying to rediscover itself through new initiatives, skill up-gradation, financial restructuring and operational efficiencies. The strategy of the Airlines for the next five years would be to:

- (i) Wipe out the current losses amounting to more than Rs.11,000 crores and make it a genuinely profit making company both operationally and financially by 2014.
- (ii) Passenger revenue to achieve a target of Rs.35,000 cr. from present level of Rs.11,500 cr.
- (iii) Non-passenger revenue targeted at Rs.6,500 cr. from present level of Rs.1350
- (iv) Target to carry 35 million passengers from present level of 12 million.
- (v) Development of International hub at Delhi and in future at Europe to expand the reach of Air India by non-stop/one-stop connectivity.

- (vi) Integrate itself efficiently and fully within Star Alliance and tap the International market through efficient code sharing with leading international airlines.
- (vii) To reach every nook and corner of the domestic market by embarking on an ambitious 4 tier growth model in the next 5 years. Tier-I will cater to smaller places with fleet carrying capacity of 15-20 seats. Tier-II will carry from slightly bigger places with ATR carrying 48-60 seats. Tier-III will cater to places with bigger fleet capacity upto 250 seaters. And finally wide body aircrafts will cater to international and select national destinations.
- (viii) Establishing Strategic Business Units (SBUs) to capture market in the MRO, Ground handling and Cargo business, in Joint Ventures for the whole or part of the business, as the need arises. During next 5 years it is expected to increase its revenue from MRO business to Rs 5000 cr from the present level of Rs.1000Cr. Revenue from Ground handling is likely to touch Rs1050 cr. from Rs.250 cr. at present. Revenue from Cargo operation shall be increased to Rs.5000 crore from the present level of Rs.1000 crores.
- (ix) Air India has charted out a comprehensive plan to increase its revenue from non-aviation activities by making optimum use of its vast assets and currently a proper

survey and evaluation is on. It is expected that non-aviation revenue would be doubled in the next 5 years.

(x) On operational front:

- (a) Air India strives to achieve On Time performance of more than 93 % from the present level of 75%.
- (b) Fleet utilization is expected to reach International standard of 11-12 hours from the present level of 9-9.5 hours.
- (c) Passenger load factors to be increased to 80% from present level of 61 %
- (d) Introduction of PSS (Passenger Services System) to have a single code and SAP ERP based Solutions throughout the Organization which would substantially benefit the Organization in terms of increase in revenue and decrease in cost;

3.5 EFFICIENCY IMPROVEMENT

3.5.1 E-GOVERNANCE

1. The Ministry, DGCA and BCAS would develop a bilingual interactive website in order to provide maximum information to users and in order to create a transparent work culture.

2. Since DGCA also interacts with a large number of stake holders who seek different types of services, it is proposed to provide most of these services online. An ambitious and comprehensive e-Governance project would be implemented on BOOT basis to cover all aspects of regulatory and licensing activities. This, besides facilitating the stake holders would also lead to substantial savings in transaction time and costs. The project would provide end to end process automation with cross functional integration with DGCA's medical and examination centres, flying institutes and clubs, airlines and other stake holders.
3. All airlines/operators would be provided an online interface to submit their time-tables and receive approvals.
4. Online examination would be implemented to facilitate aspiring pilots. This would also lead to reduction in total training period of pilots in India and bringing it at par with international courses.
5. An Automated Airport Entry Pass Issue System would be implemented to reduce discretion and introduce transparency in the system.
6. The operations of Air India would be progressively automated. Crew detailing too would be computerised.

3.6 HUMAN RESOURCE

The growth of the aviation industry in India will not happen without the availability of qualified personnel across every discipline, including pilots, cabin crew, engineers, air traffic controllers, ground

staff and handlers, administration and management. Each one of these roles requires education and training. This impacts not only the airlines and airports, but every supplier across the value chain, as well as government regulators. Trained Indian personnel would also migrate to other countries where training facilities are yet undeveloped and this would lead to constant attrition and requirement for quick replacement. Centre for Asia Pacific Aviation foresees that the demand for pilots, engineers and cabin crew (operational staff) is likely to grow from the current nearly 32,000 to 90,000 by 2020. It can be safely deduced that nearly half this demand is likely to mature by 2015. This figure does not include airport employees, air traffic controllers, ground handlers, catering companies, retailers, security personnel etc. The direct and indirect impact of the aviation sector in India could be employment for over 2.6 million people by 2020.¹

It has to be acknowledged however, that civil aviation Human Resource is largely globalised with training facilities mushrooming all over the globe. A large number of Indian students undergo training in foreign countries too and then acquire an Indian license. There is consequently a glut in the employment market with nearly 3500 pilots remaining unemployed as a result of the recent recession.

¹ IATA and ICAO estimate that there is a multiplier of 5.8 direct and indirect jobs for every aviation industry employee. In the Indian market, this number may be higher

- The Ministry shall develop better tools to assess market demand and calibrate supplies accordingly. This might require annual release of seats to the Training Institutions rather than a blanket freedom available at the moment.
- The Government shall also lay down stricter standards for establishing Flying and Engineering Schools in order to ensure that only the best remain in the field.
- In order to improve standards of performance, quality control measures would be modified, to include system of third party audits. IGRUA and NFTI would be used as a resource to complement the DGCA in the conduct of audits. Similarly the training institute of PHHL shall be used as a central resource for the audit of helicopter training institutions.
- The Course-Curriculum for commercial pilots shall be reviewed periodically in order to match global standards. In the first stage the existing curriculum would be modified on basis of the JAR curriculum. Simulation would be made integral part of training to train the pilots in emergency situations.
- It would be made compulsory for all institutions involved in training to acquire ISO certification by the end of 2013.
- International norms for changeover from fixed wings licenses to rotary wings would be adopted to enable simpler transition from one to other.

- National Institute of Aviation Management and Research (NIAMAR) at Delhi would be developed as a major resource for training of aviation related Managers and Personnel.

SECTION 4

ENVIRONMENT

- The impact of aviation on environment is now gradually being recognised.
- We shall strive to fulfil the country's commitment to UNFCCC

SECTION 5

IMPLEMENTATION PLAN

5.1 STRATEGIC INITIATIVES:

S. No.	Theme	Strategic initiatives
1	Connectivity	<ul style="list-style-type: none">• Create Heliports in 4 regions in the country• Strengthen “last-mile connectivity” between larger and smaller airports
2	Infrastructure creation <ul style="list-style-type: none">• Airports• ANS and ATM• Cargo• MRO• Helicopter operations	<ul style="list-style-type: none">• Introduction of Flexi Operations in Air Navigation Management• Implementation of a GPS based Geo-Physical Air Navigation System (GAGAN)• Develop a Greenfield Airport in Mumbai• City Side development in 10 selected Airports of the country.• Develop a world-class MRO facility in India
3	Safety and security	<ul style="list-style-type: none">• Establish a new Civil Aviation Authority with comprehensive regulatory powers to replace the present DGCA.• Develop a State Safety Programme (SSP) and Safety Management System (SMS)• Restructuring of the Bureau of Civil Aviation Security.• Establishment of a dedicated Aviation Security Force.
4	Efficiency improvement <ul style="list-style-type: none">• E-governance• Technology upgradation	<ul style="list-style-type: none">• Enhanced transparency by upgradation of EDI system in AAI• Implementation of e-governance project
5	HR capacity development	<ul style="list-style-type: none">• Upgrade standards of aviation training; focus on improving quality of existing infrastructure
6	Revitalisation of Air India	<ul style="list-style-type: none">• Financial and operational restructuring of Air India.

5.2 ENGAGEMENT WITH USERS AND STAKEHOLDERS

1. The Government shall continuously engage the industry and all stakeholders in a vibrant and fruitful dialogue to understand the needs of the users and service providers for formulation of progressive policies.
2. Civil Aviation Safety Advisory Council would be the platform for consultation on safety matters. It shall be headed by the DGCA and consist of industry representatives, experts and users. The Hon'ble Minister Civil Aviation GOI shall be a special invitee in the Council.
3. An Aviation Economic Regulatory Advisory Council shall be set up with major Industry Associations, Operators and Users as members to provide inputs and suggestions on issues related to fares, charges and ticketing practices and policies. The Council shall be headed by the Secretary, Civil Aviation with Hon'ble Minister Civil Aviation as a Special Invitee.
4. A Civil Aviation Security Advisory Council would be established for consultation on security matters. The Council shall be headed by the Secretary of Civil Aviation and consist of experts in the field of aviation security, related Government Departments and representatives of Industry as well as Users.
5. The Airlines Facilitation Committee shall continue to interact with the Industry on facilitation issues to constantly monitor hurdles in the growth of the sector and resolve them effectively.
6. The PPP Airports shall be facilitated through the review mechanism of OMDA which shall ensure that contractual obligations of both the parties are being fulfilled.

5.3 LEARNING AGENDA

1. Civil Aviation is a dynamic sector which grows at a pace difficult to keep up with. It shall be the endeavour of the Government to constantly learn from International Agencies and other State's latest developments in the field of Infrastructure, Safety, Security and Passenger Facilitation.

2. This shall be achieved through regular interactions with International Bodies and their Regional formations.
3. The Safety program would be constantly reviewed on basis of Accident and Incident investigations.
4. Public Complaints too are an important source of feedback. They shall be viewed positively as a tool of learning and improvement. The complaints shall be periodically reviewed at senior levels to understand patterns for effective redressal.
5. All National and International security related incidents would be immediately analysed and lessons learnt therefrom for correction.
6. Expert Bodies and Consultants shall be extensively used to study existing systems for identification of shortcomings and improvements.
7. Audits conducted by International Bodies shall be treated as a learning tool for bringing about systemic changes.
8. Best Practices of other countries shall be closely studied and adopted after necessary modifications to suit our socio-cultural needs.
9. Creation of an comprehensive internal benchmarking process for Indian Airports and Airlines that allows for continuous improvement. Where possible, look at best in class international benchmarks. Create forums that enable sharing of best practices across airports

5.4 MEASUREMENT MECHANISM

The success of the Strategic Plan shall be measured by the following indicators and outcomes:

1. Market growth
 - ✓ Position of India in the International Aviation Market.
 - ✓ Increase in domestic and international passengers.
 - ✓ Increase in passenger handling capacity.
 - ✓ Improvement in per capita flights.
 - ✓ Increase in cargo movement and freighters.

2. Capacity creation

- ✓ Increase in number of helicopters.
- ✓ Development of MRO facilities.
- ✓ Creation of new airports
- ✓ Creation of Heliports

3. Sector viability

- ✓ Safety parameters (as defined by HUL)
- ✓ Increase in capacity utilization of Airports.
- ✓ Increase in profitability of AAI managed Airports
- ✓ Increase in passenger load factor which will directly impact commercial health of Airlines

4. Governance

- ✓ Number of services provided online
- ✓ Completion of organizational redesign

5.5 FUNDING

The Civil Aviation Sector of India would require huge investments in the years to come. It is anticipated that by 2020 a total of \$80 billion would be required to fund the fleet requirements of the commercial airlines. Similarly, the airport system would require an investment of \$30 billion. In addition up-gradation of Air Navigation Systems would require another 600 crores. The Air India would require huge amounts of money to turn around.

Fortunately, the Ministry has forged powerful models of PPP and Full Private participation to fulfill these funding needs. The Sector is largely dependent on private capital for funding its activities. It is only the Airport Sector and Air Controller System which needs Government support. The Public Airport Sector too is on way to commercial self-sustainability with movement towards city side development and adoption of profitable financial practices duly regulated by AERA. The ambitious GAGAN Project however, due to

its strategic importance would be partly funded by the Government. Only strategically important airports and infrastructure that caters to the underserved areas like North East would be provided budgetary support.

The transformation of DGCA into CAA too would provide self sustainability to the Regulatory system as well with powers of levying user charges.

The equity base of Air India is being gradually expanded. However, this would be performance based to match improvements in the financial and operational performance of the National Carrier. It shall be incumbent for Air India to develop its own financially sustainable models to restore its health.

Government budgetary support to the sector would generally be limited to funding of socially necessary activities, skill development of personnel and strategic functions.

Annual budgets of all the entities under the Ministry shall largely conform to the priorities set out in the Strategic Plan.

SECTION 6

LINKAGE BETWEEN STRATEGIC PLAN AND RFD

The annual RFDs of the Ministry would reflect the priorities outlined in the Strategic Plan and shall be monitored accordingly. We shall be further detailing out the five year milestones and translating them into annual targets, that shall find mention in subsequent RFDs.

SECTION 7

CROSS DEPARTMENTAL AND CROSS FUNCTIONAL ISSUES

The implementation of the Strategic Plan would involve approval and interaction with a number of Departments and Ministries of the Government. These approvals would be obtained as per the Rules of Business. Wherever there are disagreements, they would be sought to be resolved through the intervention of Cabinet Secretariat or the Cabinet itself. The platform of Group of Ministers, CCEA and Committee of Secretaries would be utilized to bring about inter-ministerial/departmental consensus.

SECTION 8

MONITORING AND REVIEWING ARRANGEMENTS

- The regular monitoring and reviewing arrangements of the Ministry would be actively utilized to ensure achievement of targets and objectives.
- Weekly meeting of Secretary CA shall be the primary forum of review.
- Board Meetings of AAI, Air India and PHHL would also oversee and monitor the progress of strategic objectives.
- The various Consultative Committees, Advisory Committees and Facilitation Committees of the Ministry would be a regular platform for receiving feedback regarding the pace, direction and quality of Plan implementation.
- Third Party evaluations too would be commissioned from time to time to determine the quality of output and customer satisfaction.
- The Website of the Ministry and subordinate organizations would be made interactive to receive inputs and feedback from users and stakeholders.