Policy on Airport Infrastructure

1. Preamble

2. Role of Airport Infrastructure in National Economy

3. Objectives of Policy

4. Existing Position

5. Future Trends

6. Proposed Classification of Airports

7. Modernisation and Upgradation of Airport Infrastructure

8. Greenfield Airports

9. Air Traffic Services

10. Ground Facilities

11. Cargo Handling

12. Commercial Activities

13. Airport Security

14. Financing of Airport Infrastructure

15. Ownership and Management

16. Private Sector Participation

17. Role of the Central and State Governments

18. Civil-Military Cooperation

19. Human Resource Development

20. Environmental Issues

21. Regulatory Mechanisms

22. User and Community Participation

23. Legal Framework

Preamble

In our journey towards the twenty-first century when the Indian economy is all set to integrate itself into the global economy, the upgradation and modernisation of infrastructure and its efficient use have assumed critical importance. It is now increasingly recognised that aviation, far from being a mere mode of transportation for an elite group, is crucial for sustainable development of trade and tourism. In this context, it is vital that airport infrastructure grows in anticipation of the escalating needs of the air transport industry. As this is a capital-intensive sector, there is an obvious need for perspective planning with a vision for the next twenty years and to muster the combined resources of the public and private sectors, both domestic and foreign.

Role of Airport Infrastructure in National Economy

Airports being nuclei of economic activity assume a significant role in the national economy. The quality of airport infrastructure, which is a vital component of the overall transportation network, contributes directly to a country's international competitiveness and the flow of foreign investment. While cargo carried by air in India weighs less than 1% of the total cargo exported, it accounts for 35% of the total value of exports. Better cargo handling facilities lead to enhanced levels of importation, especially of capital goods and high-value items. Likewise, 97% of the country's foreign tourists arrive by air and tourism is the nation's second largest foreign exchange earner.
Airports also represent a country's window on the world. Passengers form their first impressions about a nation from the state of its airports. They can be effectively used as symbols of national pride, if we pay sufficient attention to their quality and maintenance.

In many remote, hilly and inaccessible areas of the country, air transport is the quickest and sometimes the only mode of travel available. This is especially true of sensitive regions on the borders with our neighbours in the west, north and north-east.

Airports need to be integrated with other modes of transport like Railways and Highways, enabling seamless transportation to all parts of the country.

Objectives of Policy

While the Government is separately developing a policy framework for the entire civil aviation sector, this policy relates to use and development of airport infrastructure. The Policy on Airport Infrastructure should always be read along with the National Policy on Civil Aviation.

The objectives of the policy are :-

to provide a boost to international trade and tourism and enhance the country's image in the comity of nations;

to provide airport capacity ahead of demand, in order to handle an increasing volume of air traffic and to garner the maximum share of traffic in the region;

to enhance airport facilities to make the airport user friendly and achieve higher level of customer satisfaction.

to ensure total safety and security of aircraft operations by the introduction of state-of-art air traffic, security and related services;

to provide multi-modal linkages;

to provide a market orientation to the present structure, bridge the resource gap and encourage greater efficiency and enterprise in the operation of airports, through the introduction of private capital and management skills;

to foster the development of a strong airport infrastructure, maintaining a balance between the need for economic viability and the objective of equitable regional dispersal of infrastructural facilities;

in the achievement of the above objective, to lay special emphasis on the development of infrastructure for remote and inaccessible areas, especially the North East, the hilly and island regions; and

to encourage transparency and clarity in the decision-making processes of Government and its public sector units.

Policy has necessarily to change in response to a rapidly transforming global scenario, although the process of transformation has to be progressive, orderly and safeguarded. Looking at what has been achieved in other countries, there is a wide gap which needs to be bridged first.

Existing Position

There are 449 airports/airstrips in the country. Among these, the AAI owns and manages 92 airports and 28 civil enclaves at defence airfields and provides air traffic services over the entire Indian airspace and adjoining oceanic areas.

In 1996-97, these 120 airports/civil enclaves handled 3.96 lakh aircraft movements involving 243 lakh domestic and 122 lakh international passengers, and 2.0 lakh metric tonnes of domestic and 4.8 lakh metric tonnes of international cargo. 52% of traffic was handled at the international airports at Mumbai and Delhi. Presently, the various airlines are operating only through 61 airports. The remaining are lying unutilised, at best handling occasional aircraft operations.

Historically, air traffic at Indian airports has broadly followed a particular distribution pattern, except that some airports have changed their inter-se positions vis--vis volume of traffic. The airport-wise percentage share of total passenger traffic in the descending order of magnitude is currently as under:-

Sr No.	Name of Operations	Type of Operations	%age of total traffic	Cumulative total %age
1	Mumbai		I	
2	Delhi		I	
3	Chennai		I	
4	Calcutta		I	
5	Bangalore		I	
6	Hyderabad		LI	
7	Thiruvananthapuram		I	
8	Ahmedabad		LI	
9	Goa		LI	
10	Calicut		LI	
11	Cochin		D	
12	Guwahati		D	
13	Coimbatore		D	
14	Mangalore		D	
15	Varanasi		LI	
16	Pune		LI	
17	Vadodara		LI	
18	Nagpur		D	
19	Srinagar		D	
20	Lucknow		D	
21	Jammu		D	
22	Agartala		D	
23	Udaipur		D	
24	Juhu		D	
25	Patna		LI	
26	Indore		D	
27	Bhubaneswar		D	
28	Imphal		D	
29	Aurangabad		D	
30	Bagdogra		D	
31	Madurai		D	
32	Vishakapatnam		D	
33	Silchar		D	
34	Rajkot		D	
35	Dibrugarh		D	
36	Bhavnagar		D	
37	Khajuraho		D	
38	Leh		D	
39	Port Blair		D	
40	Ranchi		D	
41	Bhopal		D	
42	Jodhpur		D	

43	Bhuj		D	
44	Agra		D	
45-120	Other		D	
	Amritsar		LI	
	Tiruchirapalli		LI	

Legends:

I = International
LI = Limited International
D = Domestic

The aircraft handling capabilities of the airports in terms of handling maximum size of aircraft, are as under :

Type of Aircraft	No. of Airports(120)	Being Developed/Planned(22)
B-747	Calcutta, Chennai, Delhi, Mumbai, Thiruvanthapuram, Bangalore* (6)	Ahmedabad, Jaipur, Guwahati (3)
AB-300	Ahmedabad, Amritsar*, Goa (CE), Guwahati, Hyderabad, Nagpur*, Srinagar (CE) (7)	Aurangabad, Banaras, Bhubaneshwar, Calicut, Cochin (New) (Pvt.), Coimbatore, Jaipur, Lucknow (8)
AB-320	Agra (CE), Agartala*, Aurangabad, Bagdogra (CE), Bhubaneshwar, Bhuj (CE), Bhopal, Bhavnagar*, Calicut, Coimbatore, Chandigarh (CE), Dibrugarh*, Dimapur, Gwalior (CE), Imphal, Jaipur, Jamnagar (CE), Jorhat (CE), Lucknow, Patna*, Pune (CE), Raipur*, Ranchi, Trichi*, Tirupati, Tezpur (CE), Udaipur, Varanasi, Vadodara, Leh (CE) (30)	Indore, Jammu (CE), Lilabari, Mangalore, Madurai, Port Blair (CE) (6)
B-737	Allahabad (CE), Bikaner (CE), Cochin (CE), Gorakhpur (CE), Indore, Jaisalmer (CE), Jamnagar (CE), Jammu (CE), Jodhpur (CE), Kanpur (Chakeri) (CE), Khajuraho, Madurai, Mangalore, Port Blair (CE), Rajkot*, Salem, Silchar (CE), Vizag (CE) (18)	Jabalpur, Lengpui-New Airport Vijayawada (3)
F-27	Barapani, Belgaum Gaya, Hubli, Jharsuguda, Jabalpur, Kamalpur, Kolhapur, Kandla, Lalitpur, Keshod, Lilabari, Ludhiana, Porbander, Pondicherry, Rajamundry, Rupsi, Sholapur, Tuticorin, Tezu, Vijayawada, Warangal (22)	
Dornier	Aizwal, Akola, Along (CE), Balurghat, Bilaspur, Cooch-Behar, Cuddapah, Deparizo (CE), Dehradun, Deesa, Gaggal, Jhansi, Kota, Kailashhar, Kanpur, Kulu, Malda, Muzzaffarpur, Mysore, Passighat, Pantnagar, Satna, Shimla, Zero (24)	Kargil, Tura-New Airport (2)
Pushpak Type	Behala, Juhu, Safdarjung, Nagigal, Donakonda (5)	
Not available for operation	Jogbani (DC-3), Khandwa (DC-3), Khowai (DC-3), Vellore (DC-3), Chakulai (F-27), Panna (DC-3),Raxaul (DC-3), Shella (DC-3), (8)	

Legends:

CE = Indicates Civil Enclaves
* = Restricted/load penalty operation

An analysis of the existing scenario brings forth the following problem areas :

There is need to declare some additional airports as international airports. These include Hyderabad, Ahmedabad, Guwahati, Bangalore and Amritsar. Consequently, the facilities have to be created and augmented.
There is congestion in the international airports at Mumbai, Delhi, Chennai and Thiruvananthapuram and also the domestic airports at Delhi, Chennai, Bangalore, Goa, Ahmedabad, Cochin and Mangalore. The reasons are limited terminal and apron capacity, bunching of flights, delay in passenger clearances, etc.
At many airports, passenger amentias need to be upgraded for which steps are under way or have not yet been initiated due to resource constrains.
There are also deficiencies in respect of ground handling facilities, night landing systems, cargo handling, etc., at some airports.

Future Trends

Considering the forecasts made by different organisation and taking a reasonably pragmatic view, the expected traffic scenario upto the year 2010-11 has been projected by the Foundation for Aviation and Sustainable Tourism. These projects have been extended upto the year 2016-17 by AAI.

Projected Domestic Traffic Upto 2016-2017* :

Year	Domestic Passengers (In lakhs)	Percent increase	International Passengers (In lakhs)	Percent increase
1996-97 (Actual)	120.00	*10.5%	108.90	*7.0%
1997-1998	132.60		116.52	
1998-1999	146.52		124.68	
1999-2000	161.97		133.41	
2000-2001	175.67		141.41	
2001-2002	190.60	*8.5%	149.90	*6.0%
2002-2003	206.80		158.89	
2003-2004	224.38		168.42	
2004-2005	243.45		178.53	
2005-2006	250.50	*7.0%	188.35	*5.5%
2006-2007	278.73		198.71	
2007-2008	298.24		209.64	
2008-2009	319.12		221.64	
2009-2010	341.46		233.33	
2010-2011	365.36		246.16	
2011-2012	390.93		259.70	
2012-2013	414.39	*6.0%	272.43	**4.9%
2013-2014	439.25		285.78	
2014-2015	465.61		299.78	
2015-2016	493.54		314.47	
2016-2017	523.16		329.88	

(Forecast upto 2010-11 based on study by "Foundation for Aviation and Sustainable Tourism - April 1996".)
Forecast from 2012-2017 is taken at the rate of 6% based on a report of AAI.

NB :

Projections have been made on a liberal scale for the purpose of future planning of aircraft and airport infrastructure capacity in the country.

During the next twenty years, there is a quantum jump in the projected traffic - four times in passenger and six times in cargo traffic. It will, therefore, be necessary to take a host of measures so that the ground infrastructure keeps pace with the growth of traffic.

ICAO forecasts predict worldwide growth in air traffic at 5% a year or doubling in the volume of traffic once in 14 years. The Asia Pacific region is set for higher than average growth. According to an AUTC study, it might account for more than 50% of the world air traffic by the year 2010. It is imperative that our procedures improve and facilities grow to match the increase in volume of traffic.

It is expected that adequate capacity will be deployed by the operators to meet the growth cargo traffic requirements in the years to come. Capacity induction in this sector is expected to be determined by market forces. The only aspect which needs to be planned and developed is the infrastructural facilities at the airports to handle various types of cargo traffic with efficiency and speed.

Proposed Classification of Airports

To develop the capacity of airports in accordance with the future projections, it is proposed to reclassify the airports as follows :

International Hubs:

This category will be that of 'International Hubs' which may cover airports currently classified at 'international airports' and those eminently qualified to be upgraded as such. These would at present cover Delhi, Mumbai, Chennai, Calcutta and Thiruvananthapuram. Airports at Bangalore, Hyderabad, Ahmedabad, Amritsar and Guwahati can be added to the list as and when the facilities are upgraded to the desired level. International hubs would be used for dispersal of international traffic to the hinterland. In these airports, the facilities shall be of world class standards, including convenient connections to international and domestic passengers, airport-related infrastructure like hotels, shopping areas, conferencing and entertainment facilities, aircraft-maintenance bases, etc.

Regional Hubs:

Government is keen to encourage development of regional airlines based on small aircraft to provide air-linkages in the interior areas of the country. Regional hubs will have to act as operational bases for regional airlines and also have all the facilities currently postulated for model airports, including the capability to handle limited international traffic. The identification of Regional Hubs will be made on the basis of origin-destination surveys, traffic demand and the requirements of the airlines. State Govt. will be closely associated as co-promoters of regional airlines.

Other operational airports

These will be developed so as to be cost-effective on the basis of individual needs to meet the requirements of traffic handled by them. Airports serving State Capitals will be given priority.

The status of individual airports may be reviewed at five-yearly intervals, on the recommendation of a Committee of Experts. Grant of status as International hubs will be with prior Cabinet approval. It is clarified that international hubs shall have the status of 'international airport' for purposes of bilateral agreements.

Modernisation and Upgradation of Airport Infrastructure

In keeping with the ICAO standards and recommended practices and the requirements of upgrading airports to the level of international and regional hubs, detailed master plans for the development of all selected airports will be prepared or revised by the operating agency. Such master plans should be conceived of and executed by the best expert advice available and taking futuristic requirements into account. All future upgradation and modernisation will have to be normally done in accordance with the master plans. If there is a deviation from the master plan, it will be approved by the Board of Directors of the operating agency and the statutory Government agency designated for the purpose.
Priority will be accorded to safety, passenger facilities, aircraft and cargo handling, while deciding the allotment of funds among different upgradation and modernisation schemes.
Air transport serves a time-sensitive market. The surface access to airports should, therefore, be efficient and city planners should keep the airport-linked requirements constantly in view while designing surface transport development plans. There is a special need to emphasise the aspect of rail links with airports, in view of its near absence in India as contrasted with other countries.
The helicopter provides a direct and rapid means of transport over short-haul routes and is, therefore, particularly attractive for businessmen. There is also a great potential for helicopter operations in off-shore oil exploration and production, movement of food grains and essential commodities in remote, hilly and inaccessible areas, traffic management in metropolitan cities and so on. A planned programme for building of heliports will be taken up to give a boost to the helicopter industry.

Greenfield Airports

In view of the fact that there are already a sufficient number of airports, many of which are not viable, greenfield airports will normally not

be taken up either in the public or private sector without the prior approval of the Government. In the case of the Other Airport category run by private operators, the approval of the DGCA would suffice as at present.
A Greenfield airport may be permitted where an existing airport is unable to meet the projected requirements of traffic or a new focal point of traffic emerges with sufficient viability. It can be allowed both as a replacement for an existing airport or for simultaneous operation. This aspect will have to be clearly spelt out in the notice inviting tenders.
No Greenfield airport will normally be allowed within an aerial distance of 150 kilometers of an existing airport. Where it is allowed as a second airport in the same city or close vicinity, the parameters for distribution of traffic between the two airports will be clearly spelt out.
The Government may, while permitting a Greenfield airport, decide whether it will be in the public or private sectors or be taken up as a joint venture.
Where the Government decides to set up a Greenfield airport throughout the AAI on social considerations even though the same is not economically viable, suitable grant-in-aid will be provided to AAI to cover both the initial capital cost as well as the recurring losses.

Air Traffic Services

The AAI will provide the Air Traffic Services over the Indian airspace and adjoining oceanic areas in accordance with the ICAO Standards and Recommended Practices.
New CNS/ATM systems will be introduced on a priority basis in terms of the AAI's plan as well as the ICAO's Regional Plan. These will ensure a total coverage of the airspace in India.
There will be greater civil-military liaison for joint surveillance of Indian airspace. Integration of Civil/Military Air Traffic Services will be developed to ensure uniformity in air-traffic control services at civilian and Defence airports. To achieve air safety of the highest order, unidirectional air corridor concept shall be introduced, wherever traffic so justifies, in close liaison with the Defence authorities. Maximum use will be made of radars and other navigational aids available with civil and Defence airport authorities thus enhancing the overall route navigation and surveillance facilities.
A Central Control Unit will be established in order to monitor all flights in the country from the security point of view.
In airports now owned or operated by AAI, air traffic control equipment may be installed either by AAI or the concerned airport operator. Air traffic control services will normally be provided by AAI, except for approach and aerodrome control services, which may be provided by licensed ATCs engaged by the airport operators.

Ground Facilities

Speed is the essence of air transport. The AAI will set standards of performance in various areas of passenger and cargo handling, so that both ICAO standards as well as comparable standards at similar airports around the world, are achieved. For this purpose, procedures will be simplified, regulations which delay or restrict movement of traffic reviewed and efforts made to reduce ground delays to a minimum.
Dwell time of passengers and cargo will be drastically reduced, thus enhancing capacity at existing airports. The short-term objective will be to clear incoming international passengers within 45 minutes of arrival and clear departing passengers in 60 minutes including check-in-time. Similar targets of 30 and 45 minutes respectively, will be laid down for domestic flights.
Technological and other improvements will be made by introduction of automation and computerisation, mobile check-in counters, improvement in emigration/immigration and security checks, mechanisation of baggage and ground handling services, provision of aero-bridges, introduction of better systems of passenger transfer between terminals, improvement in cargo terminals, reduction in bunching of flights and contracting out of operating and maintenance facilities. New approaches in airport design will be required to accommodate technological innovations like the New Large Aircraft. Construction technology and architectural inputs will also need to be updated to standards applicable globally.
Efforts will be made to upgrade the facilities, manpower, equipment, etc., by concerned departments and institutions like customs, immigration, meteorology, oil companies, etc., so that these keep pace with the upgradation of airports, enabling the users to experience the optimum benefits of airports as 'cohesive' transit points.
Apart from the AAI and the national carriers, private agencies will also be encouraged for providing ground handling services.

Cargo Facilities

Special attention needs to be given to the speedy handling of cargo and reducing its dwell time. The objective will be to reduce dwell time of exports from the present level of 4 days to 12 hours, and of imports for the present level of 4 weeks to 24 hours to bring us in line with internationally achieved norms. Cargo clearance will be on 24-hour basis.
Infrastructure relating to cargo handling like satellite freight cities with multi-modal transport, cargo terminals, cold storage, automatic storage and retrieval systems, mechanised transportation of cargo, computerisation and automation, etc., will be set up on top priority basis. Such facilities have to come up at smaller places too.
The Electronic Data Interchange systems will be developed and linked amongst all stake-holders in the trade.

Commercial Activities

Across the world, the trend is towards a very high percentage, ranging from 60 to 70%, of the total revenue of airport operators being generated from non-aeronautical sources at major airports. In India, although these services are even now provided by private agencies, the comparable figure for AAI at international airports is just 22%. There will be a major thrust towards increasing the share of commercial revenue emerging from non-aeronautical sources. This will help in optimal exploitation of the full commercial potential of airports and make many airports not only viable but capable of generating surpluses for further expansion and development.
In order to maximize the revenue while at the same time maintain transparency, there will be a master plan for development of commercial activities and facilities, as part of the overall master plan approved by the management, for the airport as a whole. The space-use patterns will normally not be deviated from.
In the allocation of space among concessionaires, there will be a strict adherence to stipulated procedures, while maintaining sufficient flexibility in order to ensure quality products and services and attract the holders of reputed brand-names. For this purpose, innovative

tendering procedures involving limited tenders, two-bid system, use of net present value of bids spread over several years, grant of management contracts, bunching of similar facilities etc. will be devised.
Except for user developmental fees, there will be total freedom for airport operators in the matter of raising revenue through non-aeronautical charges and there will not be any Government control over the same.

Airport Security

The objective of airport security will be to safeguard the passengers, crew, ground personnel, the general public and the airport infrastructure against unlawful acts as per ICAO Standards and Recommended Practices laid down in Annexure-17 to the Chicago Convention. The level of security will be calibrated by the BCAS according to the threat perception at any point of time. Security will have to be cost-effective when compared to internationally accepted norms. New staffing patterns, different from the normal police stations, will have to be innovated for airports. There will be greater accent on modern technology and mechanization, so as to reduce the need for manpower and increase the effectiveness of the force deployed.
Airport security will be looked after by specialized police agencies, state police and airport security organizations, depending on the internal security conditions prevalent in a particular area. BCAS will continue to coordinate the working of the various agencies to ensure that all security norms are followed by them.
Govt. recognises the urgent need to develop an airport security organization, in order to have a quietly efficient, specialized, commercially conscious, passenger-friendly force, at the international airports to begin with. Private security agencies will also be allowed at certain airports, if the threat assessment so permits.
There will be constant training of security personnel posted at airports in order to improve their effectiveness and passenger-friendliness. The present training centre at BCAS Headquarters will be upgraded and strengthened for this purpose.

Financing of Airport Infrastructure

It has to be appreciated at the outset that financing of airport infrastructure has some inherent problems. These projects have a large element of sunk cost, a very long gestation period and highly uncertain returns on investment based on several assumptions of traffic growth that may fail to materialize.
The current pattern of financing is predominantly based on internally generated resources of the AAI. Funding through external assistance, external commercial borrowings, loans and equity has been negligible. The allocation of budgetary grants is limited to certain airports in remote and inaccessible areas. Considering the astronomical sums which seem to be required for modernization and upgradation of existing airports and for the new airports at Mumbai (Rs.10, 000 crores), Bangalore (Rs.1,600 crores) etc., there has to be a clear privatisation of projects so as to utilize state resources in the most optimal manner. Further, the financing strategies will have to be looked at from a thoroughly novel standpoint.
Taking the internal resources first, the following steps will be initiated:

- Optimization of revenue from aeronautical charges, through negotiation with IATA and keeping Government approvals in view.
- A revolutionary thrust towards raising of revenue from non-aeronautical commercial sources.
- Rationalisation and optimisation of various charges like passenger service fee, user development charges, aerobridge charges, etc. and imposition of new levies like security charges, fuel throughput charges etc.
- Massive economy in expenditure by manpower optimization, cost reduction, elimination of duplication, increased productivity, contracting out of services, etc.
- Greater resource to additional sources like external assistance, public bonds, external commercial borrowings, public issues, loans from Government/financial institutions etc.

Currently, the revenue from the taxes imposed in the aviation sector in the shape of IATT and FTT is credited to the Consolidated Fund of India, with only 10% of FTT being given to the AAI. Even this 10% IS NOW SOUGHT TO BE TAKEN BACK. Taking into account the vast sums required for infrastructural development, there is a strong case for conversion of these taxes into a common Civil Aviation Cess, the proceeds of which should be credited to a National Civil Aviation Fund to be operated by the Ministry of Civil Aviation.
There has to be a general appreciation about the needs of the airport infrastructure sector and the plan allocations to the AAI need a hefty increase.
There is, at present, some money flowing to the AAI for construction of airports in remote and inaccessible areas. This money, which was available, till recently as grant, is now sought to be converted into a loan. It should continue to be given as grant-in-aid.
A general policy decision needs to be taken that the AAI will only invest in projects with demonstrated economic viability and positive rate of return . Wherever Government compels AAI to invest in non-viable projects for the fulfillment of social objectives, the initial capital cost of the project and the recurring annual loss sustained by the AAI on this account will be reimbursed.
There will also be need for commercialization of marginal or loss-making airports by transferring them to private companies, State Governments, urban local bodies etc. for operation and management under negotiated terms and conditions. Some of the guidelines may need to be modified in order to make the operations cost-effective. Facilities could be allowed to be commercially exploited even outside operational hours, meeting minimum security requirements.
In the final analysis, looking at the quantum of investment required, the answer to all the problems lies in the infusion of private (including foreign), investment in this sector. This needs to be encouraged by adopting a flexible and positive attitude towards such proposed ventures. The possibility of international aid and cooperation for building of new airports or for modernization and upgradation of existing ones will be seriously explored.
The truth of the matter is that public funds for development of airports are getting more and more scarce and private sector involvement has, therefore, got to grow. There is a definite worldwide movement from monopoly state ownership of airports to corporatization, in the first phase, with the final aim of privatization of ownership and management. India has to be a apart of this global transition.

Ownership and Management

The Constitution of India refers to civil aviation as a subject in the Central List. Resultantly, the subject falls within the legislative competence of Parliament. The Aircraft Rules, 1937 permit airports other than Government airports to be owned by citizens of India or companies or corporations registered and having their principal place of business in India. Thus the legislative framework for privatization of airports already exists. In fact, some airports are already owned by State Governments, private companies and even individuals.
What is needed now, in view of the worldwide thrust towards corporatization and privatization of airports, is a strategy that permits utmost latitude in the patterns of ownership and management of airports in the country. Thus, airports may be owned by the Central Government, PSUs, State Governments, Urban local bodies, private companies and individuals, as also by joint ventures involving one or more of the above. Similarly, it would be best to keep all the options open in respect of the management of airports or parts of airports. These could be on Build-Own-Transfer (BOT), Build-Own-Lease-Transfer (BOLT), Build-Own-Operate (BOO), Lease-Develop-Operate (LDO), Joint venture, Management Contract or Wrap-around Addition basis. In each individual case, the exact pattern could be negotiated, depending on the circumstances.
In the case of high-cost projects involving international hubs, Government may seek international or bilateral cooperation with countries having the requisite expertise and financial strength. The actual implementation of the projects would be entrusted to consortia interested in turnkey execution on a joint venture basis.
Foreign equity participation in such ventures may be permitted upto 74% with automatic approvals, and upto 100% with special permission. Such participation could also be by foreign airport authorities.
It may be clarified that the normal procedures of licensing of airports by the DGCA would continue to apply in accordance with the laid down regulations.

Private Sector Participation

Both the reasons of bridging the yawning gap in resources as also to bring in greater efficiency in management of airports, the participation of private parties (including foreign ones) is a must. Government will take all possible steps to encourage such participation.
An Airport Restructuring Committee in the Ministry of Civil Aviation will identify existing airports, in respect of which private sector involvement for development and upgradation of infrastructure is desired. It will also prepare a shelf of projects in respect of Greenfield airports. The pre-feasibility reports will be made available to private investors.
The AAI will create separate profit centers for all individual airports and hive them off as subsidiary companies on a case to case basis, for the purpose of entering into commercial arrangements or joint ventures with private parties.
Where airport operators desire private participation in their existing airports, all patterns of ownership and management would be open to them as elucidated in the preceding section. No Government approval would, however, be required.
In case of Greenfield projects, the Central Government, the AAI, a State Government private company or a group of individuals can act as the promoter. The promoter will be required to prepare a pre-feasibility study and submit the formal proposal to the concerned State Government. The State Government will add its comments to the proposal in respect of acquisition of land, supply of water and power, construction of access roads, etc. and forward the proposal to the Central Government.
The Central Government will set up an independent statutory body called the Airport Approval Commission, having adequate technical and financial expertise to examine such proposals quickly and submit its recommendations on three aspects:

- Whether there is need for a Greenfield airport at the suggested place, taking into account the existing airports in the vicinity and projected increase in traffic;
- Which is the best site, which is technically feasible and economically viable;
- In case there is need for a Greenfield airport and it is found to be prima facie, feasible and viable, whether it should be executed in the public or private sector or be taken up as a joint venture.

On the receipt of the report of the Airport Approval Commission, the matter will be examined by the Central Government at the appropriate level for a decision. A decision once taken will normally not be subject to modification at a later stage.
Once the Central Government has cleared the project, the promoter, if it is a Government body, will follow the prescribed procedure for floating global tenders in order to select the best party capable of executing the project as also to obtain the best possible terms. The tendering procedure will be transparent. The selected party would then prepare a detailed feasibility report, which would be sent to the Central Government for final acceptance. Approvals once accorded would not normally be revoked.
Fiscal incentives would be provided to those involved in infrastructure projects, as maybe decided by Government for time-to-time. Currently, the following incentives are available:

- Hundred per cent deduction in profits for purposes of Income Tax for the first five years.
- Thirty per cent deduction in profits for the same purpose for the next five years.
- Full deduction to run for continuous ten out of twenty fiscal years of the assessees choice.
- Forty per cent of the profit from infrastructure is also deductible for financial institutions providing long-term finance for infrastructure projects.

Such incentives should be made available not only to new companies investing in airport infrastructure but also to AAI and the existing agencies investing in upgradation of existing airport infrastructure.
AAI may provide air traffic control services in private airports on terms and conditions mutually agreed upon. Alternatively, it may provide ATC staff on deputation and give advice on the specifications of the equipment to be compulsorily installed for communication, navigation and surveillance.

Role of the Central and State Governments

The role and functions of the Central Government as contained in the various statutes and the preceding sections extend to the following matters;

- investment in airport infrastructure
- Clearance of Greenfield airport projects
- Airspace management, safety and security of airports
- Bilateral air services agreements, including those involving international cooperation for modernisation and upgradation of airports
- Licensing of airports and ATC personnel
- Environmental aspects and removal of obstructions around airports
- Approval of aeronautical charges

The Ministry of Civil Aviation will try to facilitate the speedy clearance of projects from different Ministries.
The State Governments will deal with the following aspects:

- acquisition of private land and allotment of government land
- supply of water and power, and provision of sanitation and sewage services
- provision of surface access through multi-modal linkages
- prevention of environmental pollution
- maintenance of law and order
- protection of airports from encroachments and vandalism.

In case Government land is allotted by a State Government for an airport owned by a private party, it may be made available at the same rate as is charged from other industrial ventures in the State.
Government will ensure that legislative and administrative mechanisms for speedy acquisition of land are devised.
The Ministry of Civil Aviation will liaise with the State Governments in order to ensure provision of all these essential services and basic facilities. The State Civil Aviation Secretaries will act as coordinating officers for single-point liaison with all the State-level departments and authorities.

Civil-Military Cooperation

There are numerous areas of interaction between the civilian departments and the Defence authorities. Action is required as under to sort out the various issues:

- In order to meet the expanding requirements of civil air traffic there is an urgent need to widen the existing air corridors, provide them Uni-directional air corridors, to provide smooth flow of air traffic and thus enhance air safety.
- We have to optimise the utilisation of restricted air space, by networking of radar and data systems, which should be acquired on the basis of mutual compatibility.
- Additional land is to be provided at civilian enclaves in military airports. Revenue from aeronautical charges at these airports deserves to be shared with the AAI, in order to compensate it for the capital investment it has made.
- Additional slots should be made available for civilian flights at military airports.

In order to ensure civil-military cooperation, coordination committee at the level of respective Ministries as well as at operational level will be energised.

Human Resource Development

Airport management, air safety, airport security, navigation and communication and fire prevention are critical areas of human resource development, especially in the context of privatisation of these functions. Stress needs to be laid on developing an overall environment of courteous behaviour by all associated with airport operations besides inculcating safety and security as a habit. It is thus of utmost importance that private institutions are set up for training of airport managers, air traffic controllers, navigation and communication engineers, airport security and fire-fighting personnel and they are licensed by the Government. Appropriate syllabi and course contents should be laid down and there should be legal provision for licensing of these personnel.
Simultaneously, the training facilities in the public sector have to be upgraded and refurbished so as to cater to the growing demands for trained personnel as also to counter the phenomenon of technological obsolescence.
The National Institute of Aviation Management and Research should be strengthened so as to act as the lead institution for human resource development. It should develop academic linkages with ICAO, IIT, IIMs and Universities. Chairs on Civil Aviation research will be created in the institutions of learning.
In certain areas of human resources, there may be need for introduction of innovative systems of deployment like the flexible complementing scheme prevalent in the scientific community, so that the benefits of specialization are not frittered away at the time of

promotion.
Contingency and back-up plans will be drawn up to meet emergencies arising out of industrial unrest among airport staff.
Airport management needs expertise in diverse fields and cannot survive except by sub-contracting of specialised activities to a host of private organisations. Legal hurdles to engagement of contract labour or contractual agencies will have to be dismantled through legislative intervention.

Environmental Issues

The operation of airports has to be in full accord with the provisions relating to prevention of air, water and noise pollution. All effluents would require to be treated before these are allowed to leave the airports. There will be close liaison with state governments and municipal authorities to maintain cleanliness and remove encroachments in airports and surrounding areas, so as to obviate the menace of bird hits.
Large scale plantations and other eco-friendly activities like construction of golf courses would be encouraged around airports, both for environmental purposes as also to provide relaxation to transit passengers. Such environmental issues would need close interaction with regional planning bodies.
The airports would be set up after the requisite environmental clearances and a time-frame of 90 days would be prescribed by Ministry of Environment and Forests for completing the processing of applications for such clearances.
Improved connectivity between airports and adjacent population centers should form an integral part of each airport infrastructure development projects and not be left to evolve by itself.

Regulatory Mechanisms

In the context of a multiplicity of operators (including private areas) and the possibility of oligo-polistic practices, there is a need for an appellate authority which could look into grievances with regard to fixation of tariff rates, allotment of slots, working of air traffic controllers, allocation of space in the airports etc. To this end, Government will create a fair and independent Airport Regulatory Board comprising representatives of the Ministry of Civil Aviation, DGCA, airport and airline operators etc. This grievance re-dressal mechanism would help in speedy and effective resolution of disputes among the various stakeholders.
There will also be a legislation for conversion of the DGCA into a Civil Aviation Authority with full powers of regulation overall aspects of the aviation industry.

User and Community Participation

An airport is a living entity and it should co-exist with all members of the community, especially the users of its various facilities. The Airport Advisory Committees should be more broad-based and meet frequently so as to serve as an effective means for grievance redressal and achieving better facilitation for airport users. Special representation should be given to associations of passengers and cargo handling agents.

Legal Framework

All changes necessitated by this policy in the existing Acts, Rules, Regulations and other provisions should be carried out expeditiously, so as to facilitate its implementation.
Presently property tax is being levied on the properties of AAI, thus putting a further strain on the viability of the airports. This anomaly needs to be rectified, because airport land is owned by the Central Government and AAI is only a trustee.