General Aviation Unfolding Horizons



Foreword

India is poised to experience a rapid upswing in the business aviation sector due to its strategic geographic location, favourable demographics and robust economic growth. Located strategically between the Middle East and Europe on one side and the East Asian economies on the other, India's geography offers a lucrative opportunity for growth of general and non-scheduled aviation due to the rising demand from the ever-growing volume of high net-worth individuals and business houses in the country.

The country has witnessed a significant growth in the number of non-scheduled airline operators with the total number of operators having crossed 200 in 2011 from a mere 36 in 2000. The Directorate General of Civil Aviation (DGCA) estimates that the general aviation fleet in India comprises around 800 small aircraft and 300 helicopters. Around 20% of this fleet size is expected to be more than 25 years old and may not be operational. The fleet of business jets has expanded from around 55 in 2007 to around 120 in 2010. Industry estimates indicate that revenues of the general aviation industry in India are expected to grow to more than 11 billion INR by the end of the 11th Plan.

Given the vital importance of this industry, we are happy to be knowledge partners to the annual Indian Business Aviation Expo (IBAE) 2012. This report is PwC's contribution to the event and we hope that it will provide new insights to the forthcoming discussions.

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General and non-Scheduled aviation market



MRO: An opportunity in the wings









Executive Summary

By 2017, the Indian aviation market is projected to be among the three largest markets globally. The General Aviation (GA) market, which includes business jets, is expected to grow at 10% per annum to cross 16 billion INR as nearly 300 business jets, 300 small aircraft and 250 helicopters are expected to be added to the present fleet by then.

The civil aviation industry is strongly dependent on the general economy. Hence, the past and projected future growth of general business aviation in India has been driven by the strong economic growth the country has witnessed in the last five years. Air travel was once considered a luxury for both business and private needs. This perception has now changed as savings in travel time, comfort and convenience and higher reliability compared to other modes of travel have outweighed the cost differential. The poor connectivity between the metros and smaller cities is why more and more companies and individuals are realising the benefits of using private jets and helicopters. Finally, the surge of tourist traffic into India has been a key driver of the growth of the general aviation sector in the country. Alongside, as support to the aviation industry, the opportunity to provide maintenance, repair and operations (MRO) activities will grow with the industry. India's MRO segment is estimated to grow at 10% and reach USD 2.6 billion by 2020. Establishing MRO facilities in India will enable operators to achieve faster turnaround times, savings in operating costs and a decline in foreign exchange outflows.

There are 150 airports in the country capable of handling business aviation aircraft. However, there is significant variation in the level of infrastructure and facilities available at these airports. Aviation infrastructure capable of handling big commercial jets is not readily available in most of Tier II and Tier III cities in our country.

100% foreign direct investment (FDI) is permitted under the automatic route for MRO, flying training institutes and technical training institutions. The government has also undertaken a major programme to develop and improve the ecosystem for the civil aviation sector. However, the focus of these efforts is scheduled commercial aviation. Due attention therefore is required to be paid to general aviation. This market is small and under-developed as compared to its global peers. In particular, procedures relating to the import of an aircraft and the development of infrastructure for general aviation need greater focus and rationalisation.

India's tax framework needs sector-specific incentives. Focused benefits similar to those that have been extended to other service sectors, such as IT and IT-enabled services (ITeS), should also be extended to the MRO sector. These include service tax exemption and custom duty rationalisation, both within and outside an SEZ environment.

In these tough times for the airline industry, buying an aircraft may not always be a preferable option considering the huge cash outlays, delivery time involved and rapid technological improvements. Leasing an aircraft therefore has emerged as a viable solution. Leasing of aircraft allows operational efficiency as lease rentals can be funded with the revenue generated from the operation of the aircraft. It also helps deal with other issues attached in a buy option.

While the decision to lease an aircraft is purely commercial, leasing one from a foreign jurisdiction needs to consider the tax cost attached. An unplanned transaction can result in increasing the tax cost.

Industry bodies in general play a crucial role in the creation and sustainability of an environment conducive to industry growth. Their role as mediators between the industry, the government and other stakeholders become even more important. These bodies need to make integrated and focused efforts in order to develop a strong foundation for development.

India's aspirations and potential for sitting on the high table of global economies necessitate a robust civil (including general) aviation sector. The development of airport infrastructure and reforms in order to create a favourable operating environment needs to be the key ingredients of the reforms agenda. With the current traffic load of scheduled flights at metro airports, GA aircraft inevitably get lower priority as compared to scheduled operators. Delays in take-off and landing clearances may defeat the purpose of investments in GA aircraft. A joint review committee needs to be formed by the Ministry of Civil Aviation (MoCA) and the DGCA with representation from non-scheduled and GA operators to review the existing regulatory and operational framework.

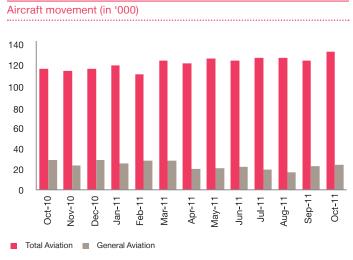
General and non-scheduled aviation market

The Indian aerospace industry is on the threshold of catapulting itself into the global arena. Due to the high involvement of the government as well as spiraling demand, the industry has set itself on a firm path towards a transformational change. If one were to compare the air traffic numbers, the market is projected to be among the three largest markets globally by 2017.

Ranking	Country	Passengers (million) 2012E	Ranking	Country	Passengers (million) 2012E
1	USA	1522	1	USA	1790
2	China	497	2	China	792
3	UK	282	3	India	327
4	Spain	251	4	UK	324
5	Japan	228	5	Spain	294
6	Germany	218	6	Japan	259
7	India	176	7	Germany	252
8	France	168	8	Brazil	224
9	Brazil	165	9	France	192
10	Italy	154	10	Italy	180

Source: CAPA, Airports Council International

The general aviation (GA) market in India is expected to grow at 10%* per annum to cross 16 billion INR by FY-17. Industry estimates show that around 300 business jets, 300 small aircrafts and 250 helicopters are expected to be added in the current GA fleet by FY-17. As per the report by the Working Group of the 12th Five Year Plan, a total investment of more than 200 billion INR in GA is expected during the Plan period. This underlines the fact that today business jets are no longer seen as a luxury but as a tool for enhancing productivity. The helicopter market in India is equally promising, with growing requirements in tourism, mining, corporate travel, air ambulance, homeland security, etc. In view of the sustained growth witnessed in the Indian and Chinese markets, India's market holds enormous potential for non-scheduled aviation. However, at present, the Indian GA market is small and under-developed as compared to its global peers. The US with around 5110 active airports, the largest in the world, also has the largest number of GA aircraft approximating more than 25,5000. On the other hand, India has been a laggard in the global GA market with approximately **680 aircraft and only around 150 active airports.** Also, as in October 2011, aircraft movement for GA comprised only around 15% of the total aircraft movement in our country.



Source: AAI

Due to the fears of double-dip recession, the traditional markets of North America and Europe offer little prospects for GA as well as non-scheduled aviation. Also, the market for business aircraft has been hit harder by the economic downturn than other aerospace markets around the world. The peculiar aspect of the global business aviation market has been that the top end of the market has in fact grown consistently over the last few years whereas the bottom end has witnessed a disturbing and strong decline. As the economies of China and India offer huge economic potential, most business jet manufacturers have become active here.

 $^{^{*}}$ Source: Report of working group on civil aviation for the formulation of the 12 $^{\rm th}$ Five Year Plan



In India, GA and non-scheduled services have picked up steadily, primarily driven by a booming economy and facilitated by business needs to invest in more productive hours every day. One of the major reasons for growth in the business and GA markets in India is the rising revenues of Indian corporates and the increasing number of high-net-worth individuals. Another crucial factor which has spurred the growth of non-scheduled aviation is that commercial flights are mostly limited to metropolitan areas and large cities and not to the smaller cities in the hinterland. Most business jet and helicopter manufacturers are optimistic regarding the lucrative potential of the Indian GA market. Manufacturers such as Cessna, Gulfstream, Hawker Beechcraft are either setting up offices in the country or expanding their existing businesses.

Tier II and Tier III cities in India have shown huge potential for the development of GA. Home to between two million and four million people each, these cities are local and regional centres for manufacturing, trading and logistics. There is also a growing demand for travel to such towns for which some may opt for business aviation. As a result, airlines are increasingly looking at these cities as viable options to expand their route networks.

Developing the ecosystem

A significant impediment in the growth of the GA market in the country is the absence of full-service fixed base operators (FBOs) considered essential for services in business aviation. However, a start has been made with the introduction of an FBO by Delhi's Indira Gandhi International Airport (IGIA). The FBO, Shaurya Aeronautics Ltd, offers services such as ground-handling, passenger services, maintenance support, lease and purchase of aircraft and helicopters and spare parts for various fixed-wing business jets and helicopters. The IGIA also plans to further develop suitable GA infrastructure like building an enhanced GA apron and further upgrading its aircraft maintenance activities. Mumbai's Chhatrapati Shivaji International Airport (CSIA) recently became the first airport in the country to start dedicated international operations from its GA terminal. The new GA terminal at the CSIA offers exclusive services and facilities for travellers and houses world-class facilities like meeting rooms, conference rooms, crew rest rooms, F&B outlets, bars and lounges. Another positive development has been the creation of the Business Aircraft Operators Association (BAOA) which promises to encourage and oversee strong growth of the business aviation sector and also highlight the needs and problems of GA operators.

The development of greenfield airports at Bengaluru and Hyderabad along with a new airport planned at Navi Mumbai is expected to further encourage GA in the country. Moreover, the planned upgradation of the Chennai and Kolkata airports and improvement of technology at all its existing facilities by the Airport Authority of India (AAI) are also likely to encourage both commercial and general aviation. The MoCA is also envisioning 'merchant airports' to be independently developed and run by private companies. The government's Vision 2020 envisions creating infrastructure to handle 280 million passengers by 2020. Investment opportunities of USD 110 billion are anticipated through 2020, consisting of USD 80 billion in new aircraft and USD 30 billion in airport infrastructure. Also, the AAI has undertaken a feasibility study to determine the commercial viability of developing currently non-operational airports across India for commercial use.

The Maharashtra government along with the central government, is developing a multi-modal passenger and cargo hub airport at Nagpur (MIHAN). Major aeronautical companies like Boeing have already been allotted land in the SEZ beside Nagpur airport for setting up an MRO facility. Bravia has also acquired around 35 acres of land in Nagpur for building hangars while Mumbai-based Max Aerospace is building a smaller MRO facility on 15 acres of area in Nagpur. Another promising centre for the development of GA facilities is Bengaluru which has witnessed growing demand in India's aviation and defence industries.

A favourable regulatory environment

In addition to upgrading and installing new infrastructure for general and non-scheduled aviation, efforts need to be undertaken to create a favourable regulatory environment to promote GA. A majority of the regulatory framework in India is targeted towards scheduled commercial aviation. GA does not receive due attention. Activities related to GA like obtaining an operator's permit or purchasing a corporate jet are timeconsuming because of the large number of permissions required. Another reason is that private aviation compliances are usually treated at par with those of scheduled commercial airlines. The high rates of customs duty, service taxes and cess on fuel further compound the problem.

Development of airport infrastructure

Globally, the US has the highest airport density with one airport for every 60,000 persons. Even in absolute terms, the presence of more than 5000 airports in the US is unparalleled worldwide. India, on the other hand, has only **one airport for every 4.6 million people**, a density even lower than that of China (in spite of China's higher population).

S.No	Country	No. of Airports	Population (mn)	Population covered per Airport
1	USA	5146	300	60,000
2	Brazil	734	190	2,61,000
3	Russia	596	140	2,38,000
4	China	413	1330	32,25,000
5	India	251	1160	46,48,000
6	Germany	218	80	3,76,000
7	UK	198	60	8,11,000
8	Japan	144	12	8,86,000

Source: Secondary Research

Although the AAI has initiated plans to upgrade existing airports and establish new ones in various parts of the country, it has failed to keep pace with the growing demand for air connectivity to Tier II and Tier III cities.

With smaller cities set to lead the air traffic growth in the country, the government is planning to build nearly 200 low-cost airports in the next 20 years to meet the demand for air travel. This could immensely benefit general aviation in India Presently, several airports are not operational. There are plans to develop and operationalise some of these such as Akola, Solapur (Maharashtra), Vellore (Tamil Nadu), Mysore (Karnataka), Warangal, Cuddupah (Andhra Pradesh), Chakulia (Jharkhand), Malda (West Bengal), Jharsuguda (Orissa), Tezu, Passighat (Arunachal Pradesh), Rupsi (Assam), Kamalpur (Tripura), etc. Mysore airport has already been operationalised for ATR-72 aircraft since May 2010. Work for the operationalisation of Cuddapah airport and Tezu airport for ATR-72s is scheduled for completion shortly. The AAI has already presented additional land requirements as per the master plan for the development of Warangal, Malda, Jharsuguda, Kamalpur and Vellore airports, to the respective state governments. Other than these, several new greenfield airports are in the offing.

List of upcoming greenfield airports in India					
Mopa in Goa	Shimoga airport in Karnataka				
Navi Mumbai in Maharashtra	Gulbarga in Karnataka				
Kannur in Kerala	Dabra, Gwalior/ Datia in Madhya Pradesh				
Pakyong in Sikkim	Andal–Faridpur blocks of Barddhaman district in West Bengal				
Sindhudurg in Maharashtra	Paladi-Ramsinghpur tehsil near Jaipur in Rajasthan				
Bijapur airport in Karnataka	Kushinagar International Airport in Uttar Pradesh				
Hassan airport in Karnataka	Karaikal airport in Pudduchery				

Source: CAPA and industry discussions

Around 150 airports across the country are capable of handling business aviation aircraft. But the facilities at these airports hardly meet the requisite standards. Business jet owners have to deal with the delays and other challenges that affect India's commercial aviation terminals due to the absence of dedicated GA terminals in the country. The absence of quality ground-handling facilities further compounds the problems faced by the nonscheduled aviation segment. This has resulted in some charters willing to undertake ground-handling activities themselves.

Airport infrastructure challenges

Within the 150 airports open to business aviation in the country, facilities are substandard when compared with those of other countries. Parking space is limited so is customs and excise availability. Ground-handling options are limited as well as expensive and a large number of infrastructure related challenges are faced:

- Most GA aircrafts are based out of metros where space is at a premium
- Few airports are oriented to service GA. Only Delhi and Mumbai airports have specialised lounges for GA
- The small regional airports lack basic facilities like that of hangars. This causes aircraft and helicopters to be stationed out in the open, not preferred by owners. Most small airports also do not have adequate night-landing capabilities. This seriously constricts the timings available for GA aircraft
- A large section of airspace is controlled by the military and business aircraft. Their schedules are not pre-determined, they have to fight for slots and are sometimes also required to give at least seven days' prior notice of landing. This can extend if they have to land at airports like Vishakhapatnam, Pune, etc

- India's airport infrastructure is not fully developed to cater to the demands of non-scheduled and business aviation. The overall infrastructure has to be technologically and physically upgraded so as to support such aviation. Major airports like Delhi and Mumbai can cater to them but others still need to be developed to service GA
- Small airports are difficult business propositions. In developed countries, non-aviation-derived income accounts for 70 to 80% of total revenue generated by large airports. Due to limited passenger flows, smaller airports must depend almost entirely on income from landing slots and handling fees, making losses almost inevitable. At the same time, maintaining mandatory infrastructure and services such as ATC, security, meteorology, etc. keeps the airport operational expenses high
- As per the government's policy on greenfield airports announced in 2008, any airport proposed within 150 km of existing facility will be examined on a case-to-case basis by a steering committee. Several proposals such as constructing an international airport at Greater Noida in the National Capital Region (NCR) and in Jhajjar have been stuck due to these proposed facilities being within an aerial distance of 150 km from the capital's IGI airport



MRO: An opportunity in the wings

The business jet MRO market drivers

Vivek Gour, managing director and major shareholder in India's second-oldest MRO firm, Air Works Indian Engineering, believes there's much profit to be made from high-flying executive jet-owners. "In India, as far as the MRO business is concerned, the biggest returns in the next five years will be from the GA business. Today, India has 182 executive jets, plus an additional 167 executive jets on order for delivery in the next four years. This is slightly less than double the executive jet fleet with very little in the way of serious maintenance infrastructure available in the country. The owners of executive jets don't haggle over price. They would rather push you for the right level of service and quality than bargain down under the table," said Gour. "The GA business is won and lost only on quality. I don't know any billionaire in India who transferred his/her executive jet from one MRO to another because he/she got a USD 5,000 discount." Gour believes that the commercial MRO side of the business, on the other hand, while interesting and maybe a little more sophisticated, is won and lost only on price.

The growth is there to be captured and the fact that India has very poor aviation maintenance infrastructure at this point provides an attractive opportunity. Nick White, Air Works vice-president, business and general aviation, believes there is a 'massive opportunity' in India and that even with major players entering the market, there will be sufficient work for everyone.

"India tends to go boom, surge and bust. Over time, people started expanding fleets quickly around the same time. These fleets will now be coming up for maintenance at around the same time. So we will see big peaks in the maintenance cycle of Indian-based aircraft, particularly with regard to heavy checks and also landing gear removals, replacements and all of those types of functions," he said. "I don't doubt for one moment, even with the massive expansion plans we have for this business, that we are going to be struggling to meet the requirements within India because they are going to be significant."

India has been poorly served when it comes to MRO services, but big foreign players now have joint-venture projects in the pipeline. As support to the aviation industry, the opportunity to provide MRO activities will grow with the industry. India's MRO segment is estimated to grow at 10%* and reach USD 2.6 billion by 2020. Establishing MRO facilities in India will enable operators to achieve faster turnaround times, savings in operating costs and a decline of foreign exchange outflows.

MRO service providers gearing up

Air Works has three major facilities in India with hangars at its base in Mumbai and Delhi dedicated to GA. A third facility at Hosur, near Bengaluru, handles commercial airline MRO, carrying out C-checks on B737s, A320s and ATR turboprops. The company also has line maintenance centres at nine other locations around the country. Air Works plans to acquire at least two more hangars in India for GA and may look at an opportunity to gain a toehold in the Middle East. Along with this strategy, Air Works is likely to continue to pursue commercial aviation through its narrow body hangars and a wide body hangar currently being built at Hosur. Last year, the company also took over the British firm, Air Livery, Europe's largest aircraft painting business. A new wide body paint shop is being built at Hosur. It will be the only such facility in the Asia-Pacific outside of China.

With the potential arrival of several major MRO operators in India, mostly joint ventures (JVs) involving big foreign companies, the competition is heating up. US manufacturer Boeing is setting up a multi-million-dollar MRO facility at the upcoming SEZ near Nagpur in a JV with Air India. It is uncertain when the project will be completed. An architect has been appointed and the project design is expected to be submitted to authorities in the near future. The USD 100 million MRO, spread over an area of 50 acres, is a part of the industrial offset agreement between Air India and Boeing following the placement of a massive USD 11 billion order for 68 Boeing aircraft, including 27 B787 Dreamliners, in January 2006.

Another big project is the JV between Malaysia Airlines, GMR Hyderabad International Airport and local carrier, Jet Airways. MAS-GMR Aerospace, as it is known, has already signed a 10-year deal with Jet to provide heavy maintenance for the carrier's entire fleet. The facility initially will offer C- and D-checks for A320s and B737s before moving onto long-haul types.

Dassault Aviation, a part of French aerospace company Groupe Dassault, has drawn up an ambitious map for expansion in the Indian market. The company, with a majority share in the Indian business jet market, is looking at setting up an MRO centre next year. Its business jets are sold under the 'Falcon' brand name.

* Source: PwC report Karnataka -Aerospace Hub of India

"We have a 60% share in the business jet market in India (around 120 private jets in operation so far), which is growing rapidly. We now plan to set up an MRO centre in Hyderabad for their quality service and spares," said Thierry de Poncins, international sales director, Falcon Business Jets.

There are, however, other challenges in the way of MROs in India. Imported spare parts attract customs duty and there are various service taxes that add to costs.

Additional incentives: The need of the hour

The Indian government needs to develop aviation and the MRO sector in a strategic and comprehensive manner, including investing more money into training. Skilled Indian workers often leave to work in the Middle East, Malaysia and Singapore at higher salaries.

Leased aircraft (nearly 60% aircraft are leased or vendor financed in some form) require Federal Aviation Administration (FAA) facilities for MRO to satisfy the lease covenants, leasers typically being western financial companies. FAA-approved MRO facilities in India are currently not available.



Policy and regulations

Regulatory agencies involved

Ministry of Civil Aviation (MoCA)

MoCA is the nodal ministry responsible for the formulation of national policies and programmes for the development and regulation of civil aviation and for the devising and implementation of schemes for the orderly growth and expansion of civil air transport. Its functions also extend to overseeing airport facilities, air traffic services and carriage of passengers and goods by air.

Directorate General of Civil Aviation (DGCA)

The Directorate General of Civil Aviation (DGCA) is the regulatory body under the ministry and governs the rules and regulations pertaining to the functioning of the civil aviation sector in India. It is the apex body responsible for regulation of air transport services to, from and within India for the enforcement of civil air regulations, air safety and airworthiness standards. Its functions include registration of civil aircraft, formation of standards of airworthiness, licensing of pilots, aircraft maintenance enterprises, air traffic controllers and conducting examinations for pilots.

Directorate General of Foreign Trade (DGFT)

DGFT is the apex agency of the Ministry of Commerce and Industry of the government of India, responsible for administering laws regarding foreign trade and foreign investment in India. DGFT is responsible for the execution of the import and export policies of India and the regulations associated with them. An important function of DGFT is to issue licences for the import of specified restricted items, including aircraft.

Process for importing an aircraft*

Obtaining a non-scheduled operator's permit

The aviation rules stipulate that permission of the central government is required for the operation of non-scheduled air transport services. Non-scheduled air transport service means an air transport service, operated for the carriage of passengers, mail and goods, and includes charter operations other than a scheduled air transport service such as air transport service undertaken between the same two or more places and operated according to a published time table or with flights so regular or frequent that they constitute a recognisably systematic series, each flight being open to use by members of the public. The DGCA is responsible for issuing a non-scheduled operator's permit (NSOP).

Obtaining NOC from MoCA

The initial no-objection certificate (NOC) to operate non-scheduled air transport services in the country is issued by the MoCA. The ministry carries out a preliminary examination of the proposal and satisfies itself about the requirements to be met by the company with regard to the minimum paid-up capital, the composition of the board of directors, etc. of the applicant's company. The ministry also obtains security clearance of the directors of the applicant company from the Ministry of Home Affairs (MHA).

Obtaining import licence from DGFT

An import licence is required for goods not allowed to be freely imported. To obtain an import licence, the applicant must have an import export code (IEC) number obtained from the DGFT office in whose jurisdiction the company, firm, unit is situated. Only one IEC will be issued against a single PAN number. As per Civil Aviation Requirements (CAR), all importers of business aircraft in India are required to obtain an import licence from DGFT, except the following:

- Air India
- Indian Airlines
- Pawan Hans Limited
- Airports Authority of India
- Indira Gandhi Rashtriya Uran Academy (IGRUA) and such other flying clubs and academies recognised by the MoCA Any person who has been granted permission by the MoCA for

Any person who has been granted permission by the MoCA for operating scheduled or non-scheduled air transport services (including air taxi services) for the import of aircraft, subject to the condition that the import of the aircraft and their use is in accordance with such permission.

Obtaining NOC from DGCA for import of aircraft

A meeting for ascertaining the preparedness is held at DGCA, after which the applicant is issued the final NOC for import of aircraft with a validity of one year.

Requirements post import of aircraft*

Certificate of registration

The Aircraft Rules of India states that no person is permitted to fly or assist in flying any aircraft unless it has been registered by the relevant authority, which is the central government.

The applicant can apply for registration of the aircraft in the prescribed format given in CAR and furnish the completed documents at least five working days before the expected date of issue of certificate of registration.

An aircraft may be registered in India when the aircraft is wholly owned by citizens of India, or by a company registered in India, or by the central or state government, or by a company registered outside India who has leased the aircraft to any person in India, or by persons conducting business in India, who are not citizens of India, or by a company registered elsewhere outside India but conducting business in India.

No aircraft, which does not qualify in the above categories, or which is already validly registered in another country, can be registered in India.

Certificate of airworthiness

The aviation rules in India require that all aircraft registered in India possess a current and valid certificate of airworthiness (C of A) before it is flown. Each aircraft either manufactured in India or imported into the country for which a certificate of airworthiness is to be issued or validated, shall conform to the design standards and be in a condition for safe operation.

The aircraft may be imported under export certificate of airworthiness from the regulatory authority of the country of export. After the aircraft has received its certificate of registration, the applicant may apply to DGCA for the certificate of airworthiness.

The application for the C of A requires the submission of the export C of A from the regulatory authority of the country of export and technical literature of the aircraft.



FDI in aviation

Foreign airlines are not permitted to participate directly or indirectly in the equity of an air transport undertaking engaged in operating scheduled and non-scheduled air transport services. Recently, the government announced a 'broad consensus' in allowing foreign airlines to pick up equity up to 49% in scheduled airlines. However the cabinet approval for this is still awaited.

Foreign airlines are however, allowed to participate in the equity of companies operating cargo airlines, helicopter and seaplane services.

Services	FDI cap	Entry Route
Scheduled Air Transport Services / Domestic Scheduled Passenger Airline	49% 100% for NRI investments	Automatic
Non-Scheduled Air Transport Service / Non- Scheduled airlines, Chartered airlines, and Cargo airlines	74% 100% for NRI investments	Automatic
Helicopter Services / Seaplane services requiring DGCA approval	100%	Automatic

Defence offsets in civil aerospace

The government of India introduced the offset policy through the Defence Procurement Procedure (DPP) in 2005. The Ministry of Defence (MoD) through the introduction of DPP mandated that any capital acquisition valued at more than 3 billion INR (USD58 million approximately) would be eligible for an offset obligation of 30% of the total value of contract.

To claim offsets, an international company selling its products or services to the MoD must plough back a certain amount of the contract value into the domestic industry through direct or indirect purchases of goods and services, to claim offsets. An offset arrangement possesses inherent contractual obligations and the negotiated package consists of the primary contract and the compensatory offsets contract. India's offset provision apply to all capital acquisitions categorised as 'buy global' and 'buy and make with transfer of technology'.

Mode of discharge

The offset obligations are to be discharged by a vendor supplying capital goods directly or by any combination of the following methods:

- Buying directly or executing orders for defence products and components manufactured by Indian defence industries. This could also involve services provided by these entities These defence industries include, defence public sector undertakings, the ordinance factory board and other private defence industry manufacturing these products or components under an industrial licence granted for such manufacture. For the purpose of defence offset, 'services' mean maintenance, overhaul, upgradation, life extension, engineering, design, testing, defence related software or quality assurance services
- Direct foreign investment in Indian defence industries for industrial infrastructure for services, co-development, joint ventures and co-production of defence products
- Direct foreign investment in Indian organisations engaged in research in defence R&D as certified by Defence Offset Facilitation Agency (DOFA)

Civil aerospace products are now permitted

This policy allows foreign vendors to choose their Indian offset partner. Over the next 20 years, the combined offsets could translate into an opportunity of between USD40 to 50 billion for the Indian market. Though a formal civil offset policy is still being developed, the scope of the defence offset policy has been expanded in DPP-2011. It now allows civil aerospace products to be eligible for discharge of offset obligations. The list now includes:

- The design, development, manufacture and upgrade of all fixed wing and rotary aircraft such as :
 - Airframes
 - Aero engines
 - Aircraft components
 - Avionics
 - Instruments and related components
 - Composites, forgings and castings of products
- Training aids such as simulators and their associated equipment, software and computer based training modules
- Guidance and navigation equipment
- Test facilities and equipment required for testing, certification, qualification and calibration of the above products
- Software specially designed, developed or modified for the above products

Insurance, leasing and tax implications

General aviation insurance

The rapid growth of the aviation sector in the country has increased demand for aviation insurance. In the last few years, aviation insurance has grown by about 20% (year-on-year) and is expected to keep this momentum. Today, general aviation insurance in India comprises nearly 25% of the overall aviation insurance market. The market size for Indian GA is believed to be in the range of USD25-35 million, with capacity for about USD 100 million for hull and USD 300 million for liabilities. Being a specialised line of business, only 6-7 insurers provide support. Nearly 70% of the market has been cornered by New India Assurance, Oriental Insurance and ICICI Lombard together. With respect to sector losses, GA has performed quite well as major losses have been few, barring an incident or two in the last couple of years. Major ones include crashes of former chief ministers of Andhra Pradesh and Arunachal Pradesh and the airambulance crash of Faridabad.

Key benefits

- Low rates: General aviation insurance in India has been offering very low premium rates due to competitive pressures. Practioners estimate the prices to be approximately 30-35% of international rates. On the downside, it signals poor quality of aviation risk in India and prevents international players such as Lloyd's from participating in the Indian market. This is likely to have an adverse fallout, once rate correction take place
- Support from international markets: Though the best reinsurers are staying away from the Indian aviation insurance, there exists active support from the Russian markets and niche players in Bermuda on the re-insurance side
- Losses: Losses have been far and few, though there has been a recent shift towards delayed settlements, but not repudiation

Areas of concern

 Loss trends have demonstrated that the causal factors in majority of the accidents have been associated with pilots. Anecdotal information suggests that in most reported losses, factors attached to pilots have been a key raison-de-tre Key reasons for this have been as follows:

- Shortage of trained pilots or inadequate training
- Urgency to hire pilots at the last minute

- Poor quality of reported information on pilots Due to various operational and business reasons, fleet operators have low focus on training of pilots, hiring of trained pilots and improper information management. It is pertinent for the sector to focus on these challenges and realise that their prices can get impacted by up to 20% on account of these factors

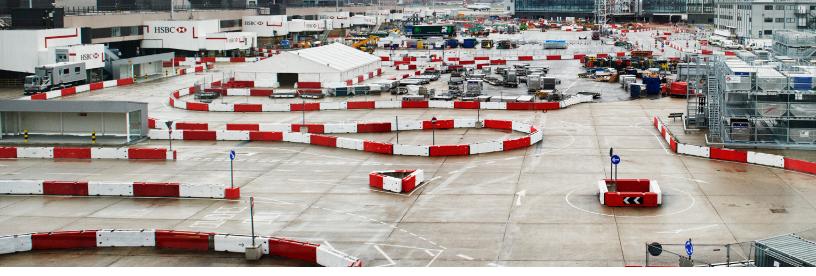
- Risk management practices
 - Maintenance rigour: Indian and international underwriters are increasingly seeking greater details on maintenance practices. There is room for improvement as it has a direct impact on rates attracted
 - Areas of operation or jurisdiction: Proper insurance coverage in terms of geographic usage of the aircraft is important for suitable claims payment. An insurance company is well within its rights to refuse claims if the aircraft has breached its coverage or operational areas

Aircraft leasing and tax implications

With the aviation industry under competitive pressure to increase its fleet sizes to fulfill growing demand, leasing of aircraft is turning out to be a good option. It is less capital intensive as the lease rentals can be funded from the revenue generated from the operation of the aircraft. Further, leasing also helps in avoiding the time involved in delivery of aircraft.

Typically there are two types of leases, dry and wet lease. A wet lease means operating lease of aircraft along with insurance, crew, maintenance, etc. On the other hand, a dry lease entails leasing of aircraft without the attached accompaniments. While a wet lease is primarily an operating lease, a dry lease can be an operating or a finance lease. Finance lease typically involve transfer of aircraft to the lessee after completion of the lease term.

In India, dry lease arrangements are commonly used for leasing of aircraft. The tax considerations vary depending upon the type of leases.



Indirect tax considerations

Post execution of the agreement outside India, there may not be any implication of value added tax (VAT) or central sales tax (CST) provided the aircraft is delivered to the lessee outside the country. However, there may be issues relating to Customs Act, 1962 and Service Tax law.

Implications under Customs Act

Import of aircraft is liable to customs duty at applicable rates in India. Presently, the applicable customs duty rate on import of aircrafts is around 18%. However, this is subject to exemptions under the following specified scenarios:

- Imported by operator or on his behalf for the purpose of carrying schedule flights passenger or cargo
- Imported by approved aero club of India or flying training institutes for the purpose of imparting training
- Imported by approved operator for providing non-schedule (passenger) services or non-schedule (charter) services

Implications under service tax law

In addition, there may be implications under the service tax law on the lease rentals payable in cases where there is no transfer of effective control and possession from lessor to lessee. This is a factual point and should be validated on a case to case basis. Presently, service tax is applicable at the rate of 10.3% on gross considerations.

Further, service tax implications may also arise if the lease transaction qualifies as financial lease. However, in that situation, the central government has provided certain abetments to arrive at the appropriate base for levy of service tax. This would need due consideration.

Additionally, the offset ability of input service tax against output service tax needs to be evaluated based on the business model.

Income tax considerations

With regards to the income tax applicable on leasing transactions, the tax treatment would depend on the nature of the arrangement. If it is a finance leasing arrangement wherein the intention is to transfer the ownership to lessee upon expiry of the lease, the Indian lessee (operator) should be entitled to depreciation under the Income Tax Act, 1961 (Act).

The earlier section 10(15A) of the Act provided for income tax exemption to a foreign company on lease rentals paid by an Indian company acquiring an aircraft, subject to obtaining the approval from the central government. However, this tax exemption was only applicable to agreements entered into on or before 31 March 2007 and in absence of tax exemption under section 10(15A). Under the provisions of the Act, the taxability of lease rentals paid by an Indian company to a foreign company for use of an aircraft would need to be examined with the relevant tax treaty involved. The Act stipulates that income in the nature of interest, royalties, fees for technical services, etc for non residents is chargeable to tax in India

'Royalties' have been defined in the Act to inter alia include consideration payable towards use or right to use industrial, commercial or scientific (ICS) equipment and accordingly, leasing of aircraft is covered under the above definition. The lease rental is subject to tax in India at 10.51% (including surcharge and cess) on gross basis. Further, the finance lease is considered as loan transaction and the interest portion of the lease rental suffers tax withholding applicable on interest at 21.01% (on gross basis under the domestic tax law). However, if the lease arrangement is net of tax (Indian income tax to be borne by the lessee), then income is increased to an amount, which after deduction of tax is equal to net amount payable under the contract. The tax payable on such income would need grossing up and accordingly the effective tax rate would go up.

Section 90(2) of the Act provides that the provisions of domestic tax law applies to the extent these are more beneficial to the assessee. The same has also has been clarified by Central Board of Direct Tax vide its Circular No 333 dated 2-4-1982. Thus, a tax payer has the option of enforcing the provisions of tax treaty, if they are more beneficial.

It is pertinent to note that certain DTAAs provide for exclusions in the definition of 'royalty' for certain types of incomes. In addition, the tax rates specified in the treaties for royalties and interests may vary from country to country. However, if the lease rentals are not considered as 'royalties' under the treaty, tax authorities are likely to examine if the same can be taxed as business income or other income. The taxability under clause pertaining to other income may vary from country to country. With regards to taxation of business profits, the key requirement is the constitution of a permanent establishment (PE) in India. The existence of a PE of the lessor in India would largely depend on the pattern of the activities carried out by foreign companies in India. A typical arrangement of lease of aircraft wherein lessee is responsible for all aspects of operation, maintenance, inspection, etc., should not cause any PE exposure to the foreign lessor companies. However, certain tax treaties that India has entered into provide that the presence of substantial equipment itself can be translated into a PE of the lessor in India. Further, if along with aircraft, lessor also takes responsibility of insurance, crew, maintenance, etc., there may be a potential PE exposure in India for the foreign lessor company, in which case income would be taxed as business income.

Therefore, the provisions of various treaties must be examined to analyse if there is any jurisdiction that provides beneficial treatment on the taxability of lease rentals to be received by the foreign lessor company. While exploring these treaties, the tax laws of the relevant foreign jurisdiction must be analysed to understand the overall tax cost of the leasing arrangement. This assumes more importance as the tax withholding rate under the new direct tax code has been proposed to be increased at 20% on gross basis.

As a word of caution, however, the jurisdictional analysis needs to consider the commercial business reasons and substance in the transaction.

The Act also provides for presumptive tax regime for nonresident entities engaged in the business of operation of aircraft and is applicable to the airlines companies engaged in the carriage of passengers, livestock, mail or goods. Further, the tax treaties provide that profits derived by an entity from the operation of aircraft in international traffic are taxed only in the country of residence. Certain tax treaties that India has entered into with other countries define the term profit from the operation of ship to include the income derived from the rental of aircrafts provided such activity is incidental to the main activity. Accordingly, the above is also worth examination based on the pattern of the case. As per the provisions of the Act, any person responsible to pay a non-resident any sum chargeable to tax under the Act is liable to withhold tax at the rates in force at the time of credit or payment, whichever is earlier. Further, any payment on which tax is deductible attracts a minimum withholding tax at 20%, unless the payee has provided a permanent account number (PAN). The law also provides that in case the complete payment made to the non-resident is not chargeable to tax, the payor or payee may apply to the income tax authorities for determination of the tax withholding rate.

Non-deduction of tax could expose the payor to corporate disallowance of the expense in addition to the risk of recovery of tax along with interest and penalties. Considering this, the payor must be conservative in its approach and deduct tax unless it is very clear that the payment is not chargeable to tax in India. In order to deal with the above situation, the payor or payee could either approach the revenue authorities to obtain a nil tax withholding order or approach the Authority of Advance Ruling (AAR) for determination of the taxability of the leasing transaction. Payor may use a combination of the two as the AAR may take around 12 months to dispose of the application. India has a scheme of AAR in place, which helps non-residents to plan their income tax affairs well in advance and can avoid drawnout and expensive litigation. A non-resident can obtain a ruling from an authority on a question of law or fact arising out of any transaction or proposed transaction which is relevant for the determination of tax liability. It may however be noted that the ruling once obtained is binding on the applicant and that the tax authorities for such transaction typically cannot be appealed (except by exercising writ jurisdiction before the High Court/ Supreme Court).

To summarise, it is important to consider the tax aspects while leasing an aircraft from a foreign jurisdiction as an unplanned transaction could make it tax inefficient.

The way forward

The Business and General Aviation sector for long has operated in the shadow of scheduled commercial aviation. It is a critical infrastructure sector as India cannot aspire to sit on the global high table of economic powers without robust business and general aviation operations that support business, tourism, emergency services and industrial support. The industry is poised for strong growth in the next few years, but few areas need to be looked at

- GA aircraft get a lower priority compared to scheduled operators, because of the current traffic load of scheduled flights at metro airports. Delays in take-off and landing clearances may defeat the purpose of investments in GA aircraft. A joint review committee should be formed by MoCA and DGCA with representation from non-scheduled and GA operators to review the existing regulatory and operational framework
- There is a lack of fixed-base operations to support the business jet operations and inadequate parking space at airports. This is exacerbated by the fact that the government approvals needed to import and register an aircraft take more than a year. This deters entrepreneurs from bringing operations into the country. Instead they prefer charter services from external operators. India's business aircraft operators association (BAOA) is urging the government to abandon plans for new restrictions on flights by foreignowned aircraft. Unfortunately, this comes at a time, when the tax authorities are probing customs duty and tax evasion of 15 Indian companies that they believe have registered corporate aircraft offshore. BAOA is advocating the adoption of clear guidelines on access to Indian airspace and airports for foreign-owned business aircraft. Under current rules, operators face a frustrating maze of bureaucracy resulting in delays and restrictions that negate the case for this mode of transportation

- Heliports can play an important role to support the growth of GA in India and business aviation in particular. This is beneficial in areas that cannot have runways for financial or terrain-related challenges. The option of developing these Heliports on PPP mode can also be considered
- In the GA segment, effective, transparent monitoring and oversight mechanisms will need to be evolved to ensure smooth operations. At present, monitoring over 150 GA operators is proving to be a tough challenge for DGCA and with the GA operators expected to increase, this will only get worse. The option of a separate monitoring and facilitation agency for GA will need to be evaluated.
- Because of the capital-intensive nature of the airports, the initial years are characterised by high levels of depreciation and interest payouts, which reduce profitability. However, the concessions given by the government play an important role in making the project financially viable. Further, as the airports become more established, the interest expenses and levels of deprecation are very low. Thus, as an industry of high capital investment, medium and low profits and high cost of withdrawal from market, the government must be cautious about appraisal of capital investment
- Operators having multiple aircrafts must consider taking single insurance policies for all aircrafts put together. Besides getting cheaper rates, this will also reduce administrative work and ensure effective risk management
- The tax regime needs to change to enable India to position itself as an MRO hub in South Asia



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