

Indian Aviation Industry – The Rising!



SkyTECH Solutions Pvt. Ltd.,
BIPPL Building,
Sector V,
Salt Lake,
Kolkata.

www.skytechsolutions.com

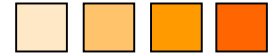
Indian Aviation Industry – The Rising!

P.L.N.Pradeep, Analyst, *Airline Vertical*

with

Subham L. Chakravarty, *Asst. Manager, Airline Vertical*

This paper gives an overview of the Indian Aviation Industry. It analyzes the performance of the airlines, the condition of airports and the growth in future and discusses barriers like fuel prices for the airlines to tap the expected growth.



Indian Aviation Industry

“China and India have the potential to reshape the travel industry.”- IATA, during a recent “state of the industry” address.

India, Asia's fourth-largest economy, has a small air travel market because of steep fares inflated by high taxes on fuel and airport levies. India's share in global aviation stands at just 0.02 % while it accounts for 17 % of the global population. For a long time, air travel in India has been considered a luxury. In fact, it still is out of reach of an average Indian. After remaining dormant for several years, finally, India's aviation industry is expected to grow. The domestic air passenger traffic rose by 12% in '03-'04 and is expected to grow at 25% in '04-'05 touching 20 million. The greater affordability of air travel and the improving economic condition of the Indian population will drive this growth. Other reasons, which can be attributed to the growth, are increase in overseas trade, Indian economic policies, and e-commerce development. Aviation experts say that passenger numbers could rise to 50 million over the next five years, helped by a booming economy and growing affluence among India's middle classes.

The Center for Asia Pacific Aviation (CAPA) estimates that

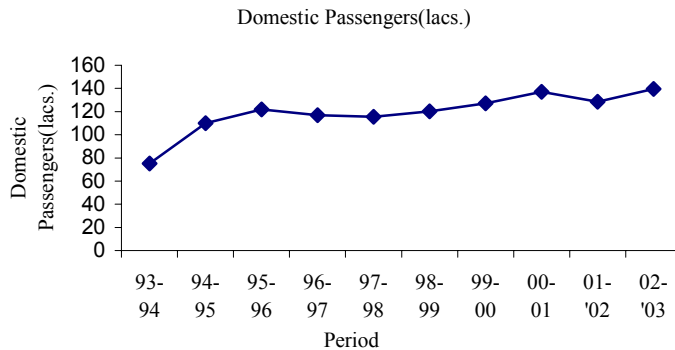
- India's air traffic will rise by five million passengers annually for the next 10 years
- Indian passenger numbers will increase from 24 million passengers a year currently to 45-70 million by 2010
- One-sixth of the 200 million households in India will be able to fly by 2010.

The Ministry of Civil Aviation estimated that by the year 2010, there would be

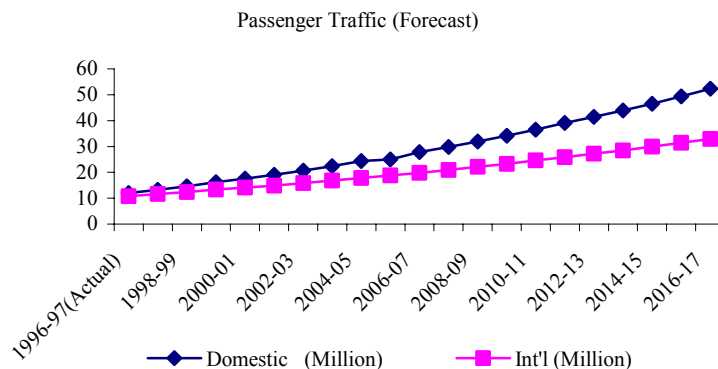
- 25-40 Million international passengers and 1.3 Million tonnes of international cargo
- 45-70 Million passengers and about 0.5 Million tonnes of cargo in the domestic market.

Domestic Passenger Traffic in India – Statistics and Forecasts

Airbus forecasts, “ Indian carriers will have to buy 222 airliners with 100 seats or more worth about USD 7.5 billion in the next 20 years, and fleet sizes will more than double from 112 aircraft at the end of 1999 to 236 by 2019.”

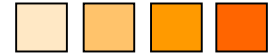


Boeing's research indicated demand for 380 additional new aircraft with 100 seats or more in the next 20 years, worth USD 24 billion. Factoring in retirements, this would mean a fleet of 428 aircraft in 2019.



Source: DGCA, AAI, Foundation for Aviation and Sustainable Tourism





Governing Bodies

Air transportation in India is under the purview of the Department of Civil Aviation, a division of the India's Ministry of Civil Aviation and Tourism. Although a number of sectors were opened up in 1991, the aerospace sector is still under the control of the GoI, under the remit of the Ministry of Civil Aviation (MOCA). This Ministry is responsible for the formulation of national policies and programmes for development and regulation of Civil Aviation and for devising and implementing schemes for orderly growth and expansion of civil air transport. It also oversees the provision of airport facilities, air traffic services and the carriage of passengers and freight. Both Air India and Indian Airlines come under the wing of the MOCA.

Two important organizations within the MOCA are:

- Airports Authority of India (AAI), which owns and manages over 60 operational airports in India. (The AAI operates most aspects of the airport including air traffic control and procure most of their equipment directly.)
- Directorate General of Civil Aviation, which is responsible for regulation of air services to/from/within India and for the formulation and enforcement of air safety and airworthiness standards.

In order to meet the increased demand, the Government has turned to the **private sector** to invest and develop the sector.

- Firm plans are in hand to lease out the four main Metro Airports to private investors for a period of 30 years.
- The Indian government has offered a 26 % share of Indian Airlines for sale in its partial privatization process, and there are currently two bids from domestic groupings on the table. Foreign airlines were barred from the bidding process.
- The government is also offering a 26 % share of Air India for bids by foreign airlines as part of a 40% strategic shareholding, and a further 20% to the airline's employees and domestic investors. Two bids have been received - one from the Hinduja Group, and another from a partnership between Singapore Airlines and the Indian Tata Group.
- The Union cabinet has recently hiked the FDI limit (Foreign Direct Investment) in Domestic Airlines from the existing 40% to 49%.

The planned partial privatization of government-owned airlines is expected to provide greater impetus to future growth. Also, the Indian Government is expected to announce wide-ranging changes in civil aviation policy in February. A number of issues have already been flagged, notably, private airlines' access to international routes. The Government is also expected to abandon its policy of forcing airlines to deploy a certain percentage of their domestic capacity in areas where operations are uneconomical or have inadequate service, so-called "social sectors". Instead there would be official subsidies, as is the practice in Europe and North America.

Airports

There are 449 airports/airstrips in the country. Among these, the Airports Authority of India (AAI) owns and manages 5 international airports, 87 domestic airports and 28 civil enclaves at Defense airfields and provides air traffic services over the entire Indian airspace and adjoining oceanic areas.

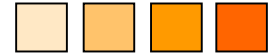
There are major international airports at Bombay, Delhi, Calcutta, Madras, and Thiruvananthapuram (Trivandrum), under the management of the International Airport Authority of India. A sixth airport with an international status has been designated at Kochi (Cochin). International service also operates from Marmagao, Bangalore, and Hyderabad. Major regional airports are located at Ahmadabad, Allahabad, Pune, Srinagar, Chandigarh, Kochi, and Nagpur.

Despite the huge growth potential, the crumbling Airport infrastructure might make things worse as passenger and air traffic surge. Airport modernization has been given a time frame of 3-5 years, but as experts say, it will be some time before results are felt. India needs to be tied in to the rest of the world to progress like in IT and for that, needs decent international airports as bare minimum.

Recently, the government sanctioned massive funds for modernizing the major international airports whose management is proposed to be turned over to the private

"The Indian market is on a high growth path which will gather momentum with the additional capital strength provided by the privatizations of the two government operators." - a recent CAPA report on the Indian market.





An NRIOL opinion poll, recently, asked, "Are you happy with the service at Indian international airports?" and staggering 89% responses said that they were not happy.

"This promise of so much unconditional private risk capital invested by potential new entrants is simply too great an opportunity to be ignored. It offers a remarkable possibility to stimulate economic activity all across the Indian subcontinent - yet with minimal risk or cost to the government." - Peter Harbison, CAPA.

Bookings from India in March 2004 grew by 40% over the same month previous year. And 70 % of this growth came from West Asia and the Far Eastern market. Bookings in May-June were up by between 15 - 25 % over the last year. - Amadeus.

sector. Of the Rs. 45,000 crore airport modernization budget, more than 75% may come from the Private sector. Construction of world-class international airports in five cities, permitted up to 100% foreign equity investment has been announced. Important private sector aided project is the New airport near Kochi (USD 85.7 million). Cochin is the first joint venture between Kerala state and private enterprises. Work on two more large and state-of-the-art international airports, at Bangalore and Hyderabad, also with private sector participation, is in hand. A similar project has also been approved for Goa. Other private sector aided airports planned include Ahmedabad airport, Amritsar airport upgradation, Chennai cargo complex, new international terminal and second runway for Delhi airport, runway extension and international block for Jaipur airport.

Airlines

While the Indian airline industry is viewed as immature, it has incredible growth potential. In fact, observers say it will boast a growth rate among the highest in the world, and will eventually have the largest domestic market outside the U.S. and China. The spurt in air traffic has been helped by the entry of low-cost airlines and the permission to private Indian airlines (with five years' flying experience) to fly to all global destinations except the Gulf. The trend of downward pricing is likely to continue. With the three to five new low-cost airlines that are going to start, Indian domestic aviation prices will come down by another 15 to 20 %, which will be a major boost.

LCC Wave

Though the concept of LCCs is in its nascent stage, the industry is already registering the change. After western countries, where low cost carriers are becoming the order of the day, it is gradually gaining ground in India too. Following the runaway success of Air Deccan, the pioneer of the no-frill aviation phenomenon in India, a few new players are entering the aviation sector. These new players include Alliance Air, Air-India Express, Kingfisher and Go. Entry of these airlines indicates a new trend and a boom in air travel as well. Besides benefiting from low expectations, no-frills airlines enjoy frills such as the Airports Authority of India offering discounts to aircrafts below 21 tonnes. It helps to slash their landing, navigation and baggage charges by 50%.

Open Skies

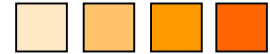
U.S.-India bilateral trade totaled USD 18 billion in 2003, up 13.5% from 2002. Approximately 2 million passengers travel between the two countries every year. The governments of India and the United States are seeking to replace their outdated aviation agreement to accommodate growing travel and trade between the two countries. The current U.S.-India aviation agreement (negotiated in 1956) places restrictions on the number of airlines that can fly between the two countries, cities that can be served, the frequency of service and pricing. Open Skies agreements permit unrestricted service by the airlines of each side to, from and beyond the other's territory, without restrictions on how often carriers fly, the kind of aircraft they use and the prices they charge.

The Government has done an about turn in the recent years on civil aviation and is signing scores of bilateral allowing foreign airlines to fly into India. Private Indian airlines like Jet and Air Sahara have now been given the go ahead by the control tower to fly to neighboring international destinations like Colombo and Dhaka.

In 2000, airlines in West Asia, South East Asia and Sri Lanka were allowed 36,294 seats a week from India. That has almost doubled to 69,257 weekly. Last year also, the Indian government's decision to follow a limited-time open-sky policy (for three months beginning November) resulted in international airlines adding more than 260,000 seats on their flights to and from India. The government followed a similar process this year too. As a result many airlines, big and small, have requested the Civil Aviation Ministry to let an additional 1,639 seats during the open skies period. 65% of the requests are from carriers of Gulf and Southeast Asia. There are reasons for the Foreign Carriers rushing in. They see a large growth in India and the government has liberally dished out bilaterals to city-states and small countries like Singapore and Sri Lanka.

Foreign airlines carrying international passenger traffic to and from India existed long before independence. Their operations are governed by bilateral agreements signed from time to time between the Government of India and the governments of respective countries. The share of those airlines in India's scheduled international traffic has increased from 55.58% in 1971, to 72% in 1996. In 2002-03, foreign carriers carried 69.9% of the total international passengers to and from India.





Major Airlines in India

Air India

Air India is a government owned national carrier intended for international destinations. Air India however offers domestic travel to fill in seats between Indian cities on its international routes. The airline, which had discontinued its loss-making freighter service in the mid-90s, now aims to become a major player with at least 25 % market share in the next couple of years. As of 31st March 2004, the carrier operated 34 Aircraft fleet, out of which it owned 20. The number of B747- 200s, 300s, and 400s were four, two and nine respectively. It owned 8 A310-300s but operated 19. The Air-India Board has approved a fleet acquisition plan, which envisages increasing the fleet size to 74 – a net addition of 40 aircraft – till 2012. The aircraft being considered for induction are (A340-500/B777-200LR), (A340-600/B777-300ER) and (A330-200/B7E7-8). Air-India's proposal for acquisition of ten Long Range and 18 Short Range aircraft during the period up to 2007/08 is presently under consideration of the Government.

Indian Airlines

A government owned and oldest airline operation, Indian Airlines flies to all the operational airports in the country. Indian Airlines offers promotional fares on selected routes and a limited number of seats through online auctions. Business class is offered on most flights. Indian Airlines also flies to a few international destinations in the neighboring countries as well as to the Gulf, Singapore, Malaysia and Thailand. Helicopter services are also available. The carrier (as of 31st March 2004) operated 47 Aircraft fleet, four A300s, thirty A320s, eleven B737-200s and two DO-228s. Indian Airlines, together with its fully owned subsidiary Alliance Air, is one of the largest regional airline systems in Asia with a fleet of 62 aircraft. Its annual turnover, together with that of its subsidiary Alliance Air, is well over Rs.4000 crores and carries a total of over 7.5 million passengers annually.

Jet Airways

Jet is India's large privately owned airline and has the highest market share of Indian domestic traffic. This domestic carrier's market share in Aug '04 was over 43%. It has emerged as India's largest private domestic airline and has been acclaimed by frequent travelers as the most preferred carrier offering the highest quality of comfort, courtesy, standards of in-flight and ground services and reliability of operations. The airline links 44 destinations, including two international cities, Colombo and Kathmandu, with over 1,924 flights weekly. The carrier operates two B747-900s, fourteen B747-800s, twelve B747-700s, six B747-400s and eight ATR 72-500s (42 in total).

Air Sahara

Air Sahara offers flights through all the major Indian cities and some smaller cities in the northern states of Uttar Pradesh and Bihar. Air Sahara offers business class on most flights. It operates 19 fleet out of which 7 are CRJ-200s. It operates two B737-800s, five B737-700s, three B737-400s, and two B737-300s (19 in total).

Air Deccan

India's first and leading discount operator, Air Deccan flies most large Indian cities and a number of small cities in the southern states of Karnataka, Tamil Nadu, Andhra Pradesh and Kerala. Air Deccan is a no-frills operator with free seating on the flights, no drinks or refreshments on board. It has first-come-first-served seating, neither business class nor frequent flier mileage bonuses. Air Deccan connects smaller towns, short-haul routes in the south Indian states of Tamil Nadu, Karnataka and Andhra Pradesh. *Air Deccan passengers can print out their tickets and exchange them for a boarding pass when checking in.* Air Deccan became the first private operator in India to fly Airbus aircraft in July 2004, when it received the first of five leased A320s. It currently flies three leased Airbus A320s on services among Indian cities. Two more leased A320s plus two ordered A320s are due to join its fleet in February and September 2005, respectively. Air Deccan is to grow its fleet by acquiring a further 30 Airbus A320s, following the signature of a contract with Airbus. Deliveries of the aircraft are due to begin in 2007. India's only low-cost carrier (as of now), Air Deccan, has set it itself the target of carrying 1 billion passengers a year.

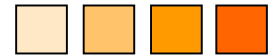
New entrants

Kingfisher Airlines, a budget airline, is to begin in May. It has ordered 10 single-aisle planes worth \$1.8 billion.

Lufthansa and Air-India (AI), in August'04 signed an MoU that would cover strategic areas including the development of the India-US market, code sharing and integration of their respective frequent flyer programmes. Lufthansa feels that the *potential growth offered by the Indian market* makes this MoU unique while it has entered into similar alliances with other airlines across the world. *Indian operations account for 20% of Lufthansa's revenues from Asia.*

The Ministry of Civil Aviation decided to allow Indian Airlines to expand overseas as it continued to lose its domestic market to the privately owned Jet Airways.





Royal Airways Ltd. announced the launch of its new low-fares, no frills brand, SpiceJet. SpiceJet, headquartered in New Delhi, ordered for 10 Boeing 737-800s. There are also options for 10 more aircraft. SpiceJet is to begin services from May. Royal Airways is the reincarnation of Modiluft, which was among the first private companies that stepped into the Indian aviation sector.

Air India Express (a subsidiary of Air India), effective March 2005, will have a fleet of 14 Boeing 737-800s, which will be taken on dry lease in three phases. Within a year of operations, Air-India Express will operate a total of 127 flights with 14 aircraft to destinations in the Gulf and South-east Asia. Eighteen B737-800Ws will be purchased which on induction, will replace the capacity currently being taken on lease by Air India Express for commencing operations effective March-April 2005.

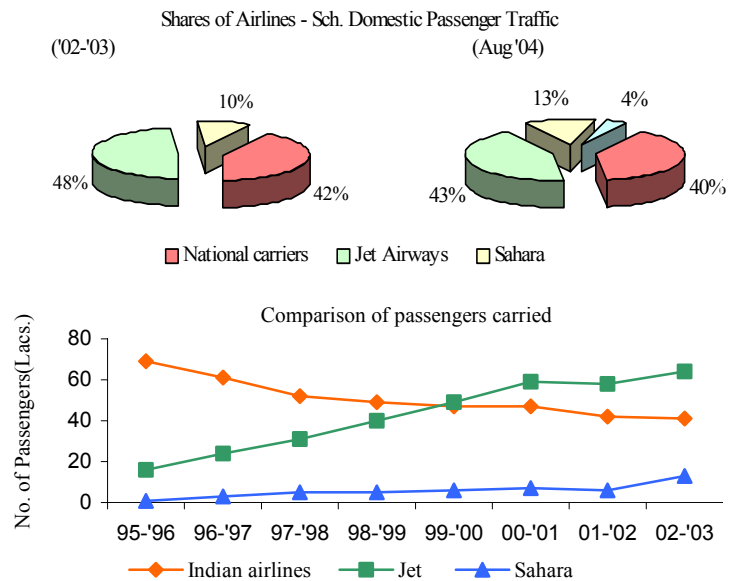
Foreign carriers in India

British Airways, Lufthansa, Gulf Air, Kuwait Airways, Emirates, Thai Airways, Cathay Pacific, China Eastern Airline, Air France, Swiss Int'l Airlines, Malaysian Airline, KLM, Aeroflot, Uzbek, Singapore Airline, Royal Nepal, Royal Jordanian, El Al Airlines, Air Canada, Air Mauritius, Air Seychelles, Alitalia, All Nippon Airways, Asiana Airlines, Austrian Airlines, Biman Bangladesh Airlines, Delta airlines, Egypt Air, Ethiopian, Japan Airlines, Kenya Airways, Korean Air, Northwest, Qantas, Qatar, Royal Brunei, Saudi Arabian, Scandinavian, South African, SriLankan, Syrian Air, United and a few more. The number of foreign carriers was 38 in 2002 and 51 in 2004. It is expected to rise.

Private carriers in the Market

In 1990, the private air taxi-operators carried 15,000 passengers. This number increased 48.9 lakh in 1995, which was 10% of the domestic Air traffic. (At that time, the Indian government owned two airlines and private companies owned six airlines.) The market share of private Airlines increased to 60.1% in 2003-2004 growing from 52.6% in the previous year, as stated by the economic Survey for 2003-04, tabled in Parliament. Jet Airways has been the leader in Indian domestic passenger market since a long time. Indian Airlines, which had been the only domestic carrier until '94-'95, has been losing its market share to Jet and Sahara since their arrival into the market. The charts below show how the trend has been.

Passenger Traffic –Comparison



*The share of other carriers in '02-'03 was negligible. The percentages shown for '02-'03 are the shares of the carriers of the total passengers carried by National carriers, Jet and Sahara.

Source: DGCA, SkyTECH Analysis

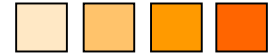
S
K
Y
T
E
C
H

R
E
S
E
A
R
C
H

P
A
P
E
R

S
E
R
I
E
S

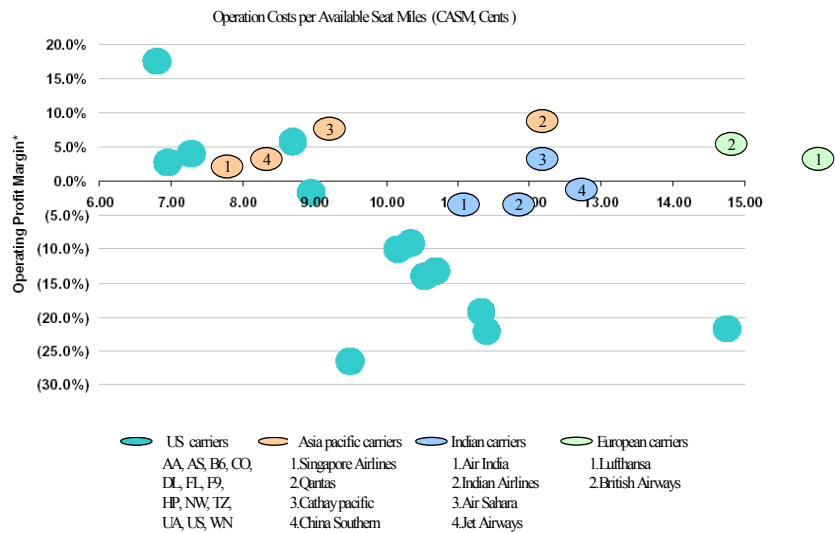




Performance

The performances of Airlines in India are shown in the chart below. It compares the Airlines' operating expenditure per Available Seat Miles (CASM) with their Operating profit margin ('02-'03). This indicator works well in case of the American carriers, showing that the operating profit margin decreases with an increase in the CASM of the carrier. However, this indicator does not fail to clearly depict the performance of each carrier. It can be seen that Indian carriers spent around 12 Cents for each ASM, which was much more than the other carriers in Asia-Pacific. The domestic carriers in India did not expand international operations and so might have had larger CASMs. Being international means longer flights, lesser number of landings and take-offs, and a larger fraction of block hours spent airborne, resulting in lower unit costs. But, it can be seen that Air India, which is an international carrier also lost out. Some American carriers, which had spent less than 12 cents, suffered a loss. However, carriers like Qantas, British Airways and Lufthansa gained profits, despite spending as many as 12- 16 Cents, because of their model, dominance, size and stretch.

Operating Margin Vs CASM



Source: Annual Reports, SkyTECH Analysis

ATF Prices

Air travel in India is far more expensive than in other countries. (In 2000, the fares for domestic airlines were found to be 69% higher than the average of selected world airlines.) The main reason for this is that the Airlines need to spend a huge amount for Aviation Turbine Fuel (ATF). The ATF price in India is reportedly subjected to 8% excise duty (it was 16% previously) and a high sales tax averaging well above 25%, levied by various state governments (Goa charges 21% and Kerala demands an exorbitant 39.1%). This means that airlines in India have to spend 30-35% of their operating costs on ATF while the international average is at 10-15%. It is also pointed out that ATF sold to international flights of foreign carriers is exempt from sales tax, while sales tax is levied on ATF sold to Indian carriers.

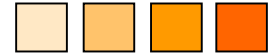
Around 35-40 % of costs of the carriers in India are government imposed. Internationally, this figure is around 15-20 per cent.

According to an estimate, if Jet and IA were incurring expenses on ATF at par with the international average, the operating cost per unit of output would have been lower by about 14%, other factors remaining constant.

The average ATF price in Feb 2003 was Rs 22,380/KL against just Rs 11400/KL in Singapore. It can be easily shown that if the ATF price in India were at the level of Singapore, then, even after the spurt in global oil prices, the ATF price today would have been much lower than what it was.

Also, steep hike in Oil prices does not augur well for the Indian domestic civil aviation industry, where all the three full-service airlines Indian Airlines, Jet Airways and Sahara Air are struggling to make profits. ATF prices, from April to October 2004 increased 42% on account of which Jet Airways has seen that the component of ATF in its cost of operations went up to about 33% from 28% in June 2004 and for Air Sahara, the cost of operations has gone up by about Rs 80 million a month. However, recently (Jan 2005) ATF price in the country has fallen by about 14% raising hopes that airfare in the





"This is the best time to enter the Indian market as the Indian side will explore what it needs to do from a technology perspective to reduce labor costs in the future," - Rajan Nambiar, Unisys. Unisys is a worldwide IT services and solutions company.

domestic market will come down soon. Airlines said that fall in ATF prices will provide a great relief to their financials as they were under pressure due to the fuel price increase.

The Government needs to undertake two important measures that shall not only absorb the increase in global oil prices, but also reduce the ATF price. One, reduce the sales tax and excise duty. Two, allow the airlines to source the ATF requirement through import. This in turn will help in arresting the growth of air travel cost, which is already sky-high.

Meanwhile, the government is evaluating various options including dismantling the monopoly of public sector oil companies in the supply of turbine fuel to rationalize the fuel prices. It has also proposed a uniform sales tax at 4% across the states to bring down the aviation fuel cost in the domestic market.

Indian aviation industry is going to have a better connectivity as many airports are expected to get on the airmap and airlines' plans to become full-fledged international carriers. New LCC startups are likely to dip the airfares. But, the soaring fuel prices and the airports, whose committed expansion projects have no time frame for completion, might go against the growth.

About SkyTECH Solutions

SkyTECH provides IT consultancy and develops niche software solutions and products for the global travel, transport, retail and logistics industry. Backed by strong domain / business process experts, SkyTECH offers tested proven solutions across different functional areas and technology platforms in the transport sphere that directly impact the bottomline of clients.

SkyTECH's global presence is spread across Chicago & New Jersey (USA), London & Amsterdam (Europe), and Kolkata, Mumbai & Bangalore (India). SkyTECH's Global IT Delivery Model combines on-site and offshore project execution to deliver IT services at the lowest possible cost. SkyTECH's offshore development infrastructure, located in India, is certified to ISO 9001:2000 and SEI CMM Level 5.

SkyTECH is developing global technology standards spearheading technical consultancy through industry associations like the OpenTravel Alliance (OTA) and IATA. SkyTECH's Operations Research group adds significant value to airlines by working on core airline functions including scheduling, reservations, revenue management, and supply chain management.

SkyTECH's rapidly increasing client base is spread across different geographies (USA, Europe, China) and diverse travel & transport segments (airline, airports, logistics, product companies, consulting firms, networking firms), and includes one of the world's largest airlines as well as one of the world's largest IT consulting firms.

SkyTECH Solutions
India, USA, Europe

www.skytechsolutions.com
sales@skytechsolutions.co.in
sales@skytechllc.com

