

INDIAN BELLY DANCE - AIRLINES EMBRACE FREIGHT



PREPARED BY

CENTRE FOR ASIA PACIFIC AVIATION

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PERSPECTIVE

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The Indian air passenger market has undergone massive change in recent years, driven by market deregulation and new entry. But big changes are also occurring in the country's domestic and international freight markets, despite the weakness in global cargo markets and constraints on foreign investment in the Indian sector, as we review in this Perspective.

Freight: The next development wave

The Centre believes that the next wave of aviation development in India is likely to include the establishment of a number of domestic and international cargo airlines. India's increasing international trade combined with a strong domestic economy will continue to drive demand for this sector. Meanwhile, the major international express freight operators are all reporting strong growth in the Indian market.

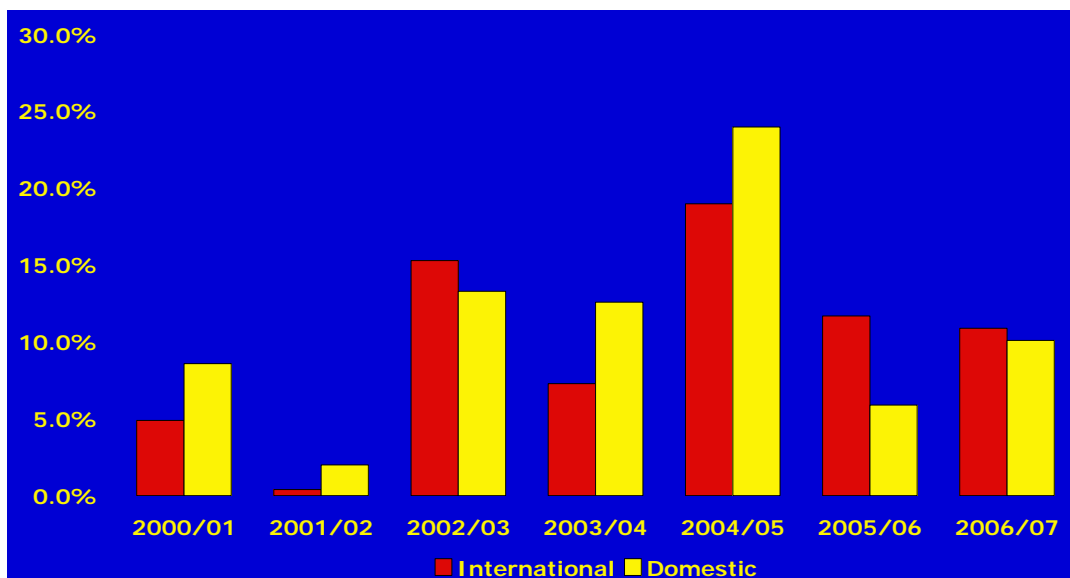
At least six dedicated cargo airline operations (including units of established carriers) will be established in India within the next 18 months.

Furthermore, sophisticated logistics facilities will also be needed. The massive investment plans in the organised retail sector for ventures such as Reliance Retail or the Bharti/Wal Mart joint venture, as well in high value manufacturing, will require extensive support. Reliance Retail for example is reportedly evaluating establishing its own cargo airline to secure the supply chain between the source of products and retail outlets. This may even extend to the development of private, captive airports.

India now ranks in the Top 30 global freight markets, both in terms of total and international operations, after five years of strong growth, peaking in 2004/05.

But despite recent growth, India's total market size (in terms of domestic and international FTKs) is still small on a global scale - roughly 2% that of the US and just 5% the size of China's (including Hong Kong/Macau, or 10% of the volumes carried on the Mainland only).

International & Domestic Annual Cargo Volume Growth: 2000/01-2006/07*



* Years ended 31 March Source: Centre for Asia Pacific Aviation & India DGCA

International market review

The international sector accounts for almost 70% of the Indian freight market. Volumes have been growing strongly, particularly inbound, with the total market breaking through the 800,000 tonne-barrier in 2005/06, up 10.2% year-on-year.

Annual freight traffic to/from India (Tonnes)

Year	Inbound	% change	Outbound	% change	Total	% change
2001-02	174,370	-	323,394	-	497,764	-
2002-03	190,379	9.2%	364,627	12.8%	555,006	11.5%
2003-04	225,936	18.7%	390,810	7.2%	616,746	11.1%
2004-05	282,891	25.2%	456,560	16.8%	739,451	19.9%
2005-06	328,742	16.2%	486,136	6.5%	814,878	10.2%

Source: Centre for Asia Pacific Aviation & DGCA

Currently, export freight dominates. In terms of directional volumes, outbound exceeds inbound by a ratio of 3:2.

Inbound vs Outbound as % of Total

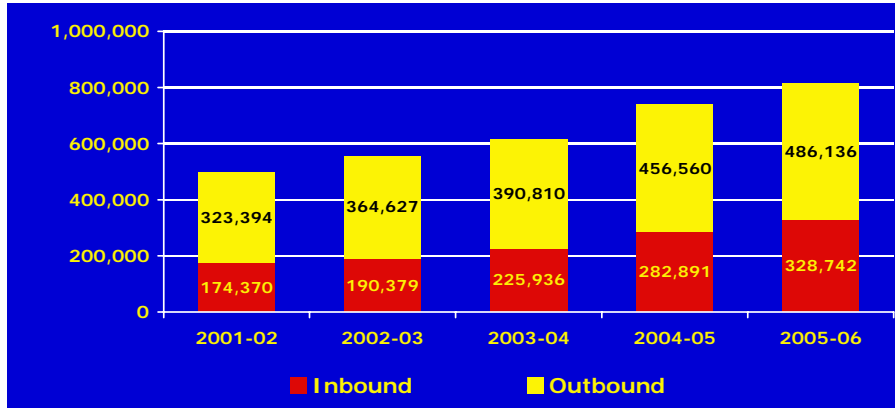
Year	Inbound	Outbound
2001-02	35.0%	65.0%
2002-03	34.3%	65.7%
2003-04	36.6%	63.4%
2004-05	38.3%	61.7%
2005-06	40.3%	59.7%

Source: Centre for Asia Pacific Aviation & DGCA

Growth has been even stronger in 2006/07, thanks to India's impressive international trade expansion, with imports and exports up 29% and 24% respectively in 2006-2007, for a total value of USD306 billion. During the same period, FDI to India almost tripled to

reach USD16 billion.

Annual freight traffic to/from India

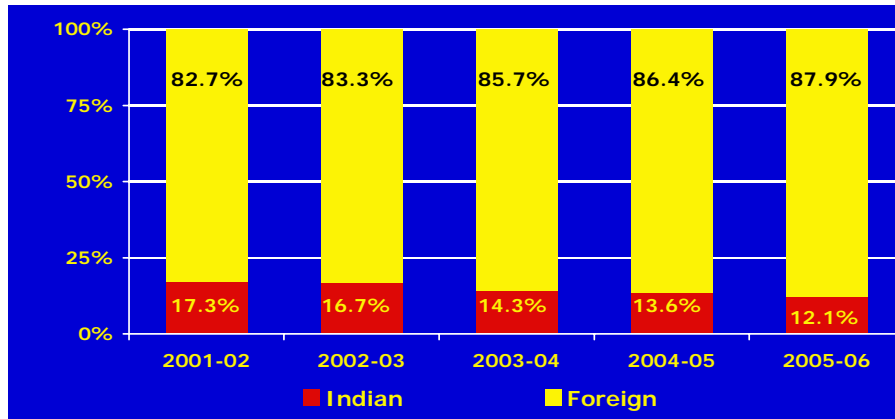


Source: Centre for Asia Pacific Aviation & DGCA

However, following years of under-investment in India's flag carrier, India's freight sector is largely controlled by foreign airlines.

India's airlines handled just 12% of total freight volumes to/from India in 2005/06 (ended 31 March), down from 17% five years earlier. This steady dilution of local carrier share has occurred as foreign airlines expanded their services to the country under the increasingly liberal access policy of the Indian government.

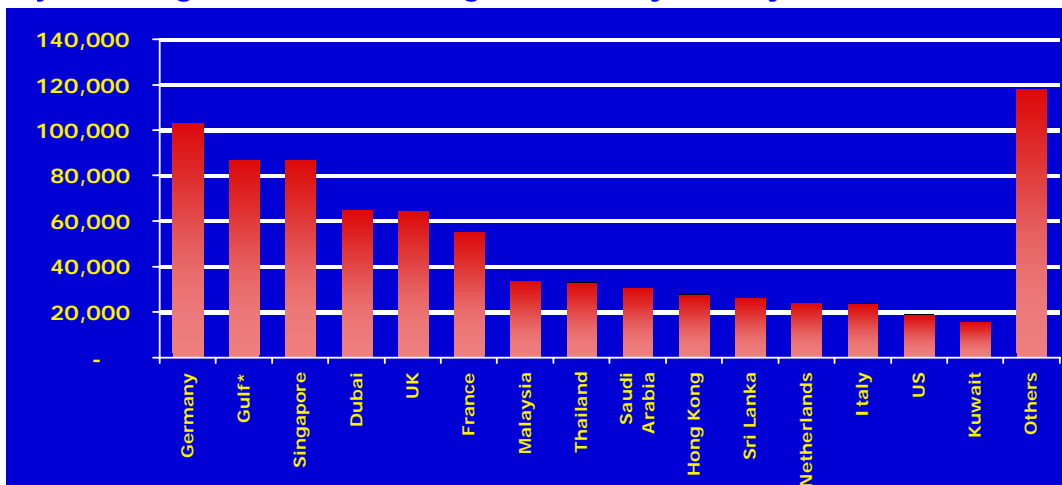
Freight traffic to/from India by Market Share: Indian vs Foreign Carriers



Source: Centre for Asia Pacific Aviation & DGCA

The major freight markets are Germany, the Gulf region (non-Dubai) and Singapore. The German market is 55:45 an outbound: inbound market, while the Gulf is 66:34 outbound. Singapore volumes by contrast are tilted slightly in favour of imports to India.

Major Trading Partners: Total Cargo Volumes by Country: 2005/06



Source: Centre for Asia Pacific Aviation & DGCA * Breakdown of 'Gulf' not available

Germany accounts for 13% of the total international freight market, with a well establish dedicated network operated by Lufthansa Cargo, supplemented by extensive bellyhold space on the parent passenger airline, servicing several points in Germany and India. But the 'Gulf' (11%) and Dubai (8%) combined is the largest and most lucrative market. Adding in Saudi Arabia, Kuwait and other countries in the region and the Middle East accounts for almost a quarter of all international tonnage.

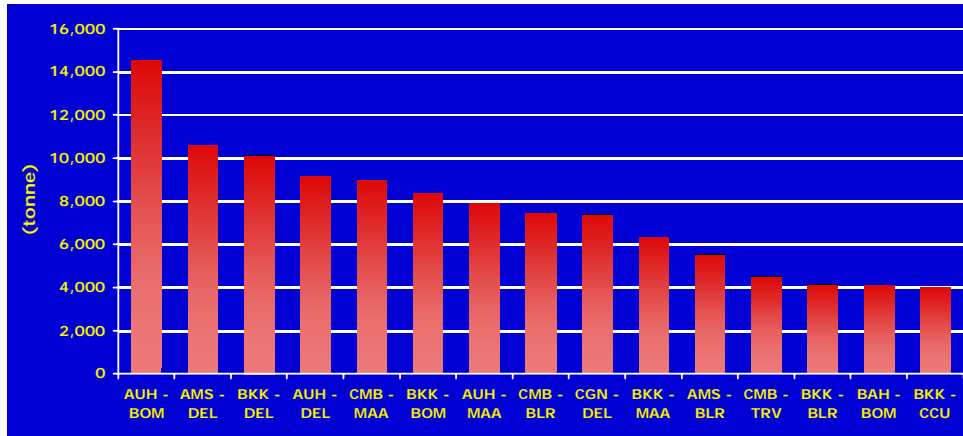
Top 10 Fast Growing Markets: 2005/06

Country	Freight (tonnes)	Year-on-Year Growth Rate (%)
Denmark	1,352	8671.0
Australia	975	139.3
Kazakhstan	202	103.8
Sri Lanka	26,265	71.1
Myanmar	102	66.6
Canada	1,831	52.6
Bhutan	40	52.4
Turkey	2,768	48.4
Austria	11,299	47.5
China	4,651	45.6

Source: Centre for Asia Pacific Aviation & DGCA

The Sri Lankan market, the 11th largest, has been growing strongly, as SriLankan Airlines continues to expand its network (it now has just under 100 frequencies per week to India – the most of any foreign carrier), while other fast-growing markets are doing so off a small base.

Top 15 Freight City-Pairs (Total tonnes): 2005/06



AMS=Amsterdam, AUH=Abu Dhabi, BAH=Bahrain, BKK=Bangkok, BLR=Bangalore, BOM=Mumbai, CCU=Kolkata, CGN=Cologne, CMB=Colomb o, DEL=Delhi, MAA=Chennai, TRV=Trivandrum
Source: Centre for Asia Pacific Aviation & DGCA

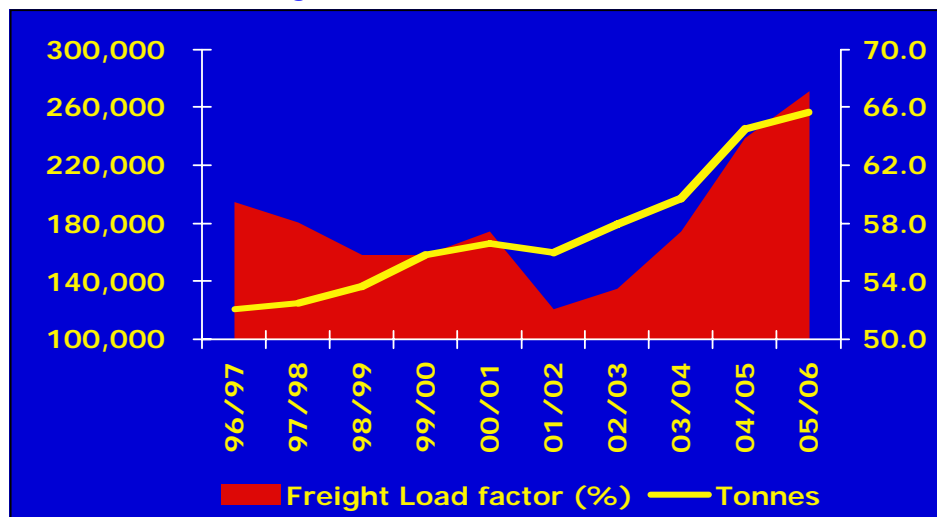
Abu Dhabi-Mumbai is the largest city-pair freight market, while Delhi features in three of the Top 5, including Amsterdam, Bangkok and Abu Dhabi.

Domestic market review

Several major Indian carriers are in the process of establishing dedicated domestic cargo operations. The drivers behind the recent surge in interest in the cargo market include:

- (1) **Attractive recent economic growth rates:** Fanned by the strong Indian economy, and rising international trade, domestic cargo markets and load factors have more than doubled over the past decade.

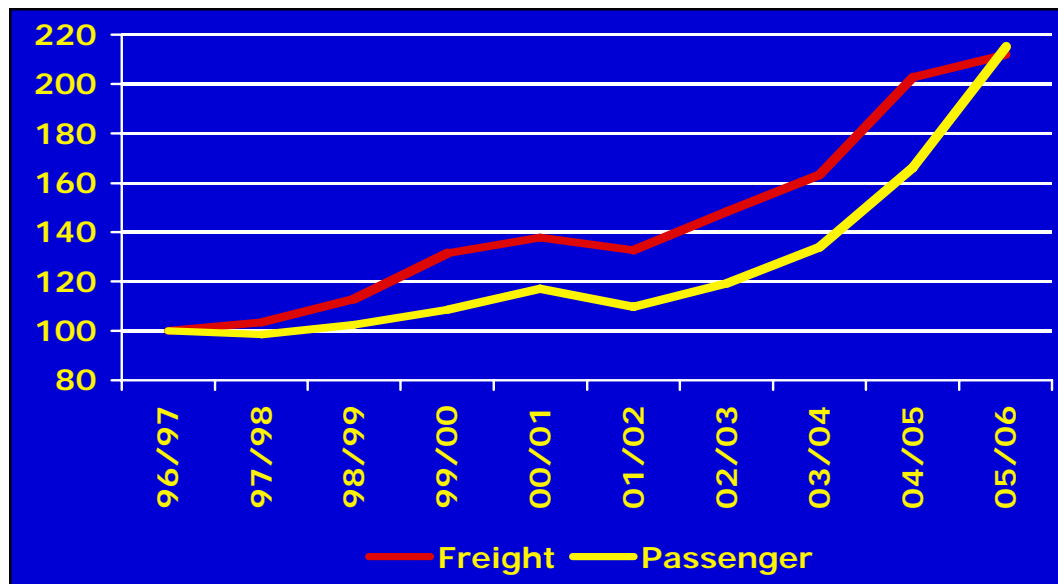
Indian Domestic Freight Volumes & Load Factors: 1996/07 to 2005/06



Source: Centre for Asia Pacific Aviation & DGCA

It is the domestic passenger market that has attracted most of the headlines in recent years after a growth spurt since 2003. But India's domestic freight market has also doubled and has enjoyed a more consistent growth trajectory.

Domestic Freight vs Passenger Growth Index: 1996/07 to 2005/06



Source: Centre for Asia Pacific Aviation & DGCA

As the organised retail sector in India continues to boom, these high growth rates in the domestic air cargo business will continue.

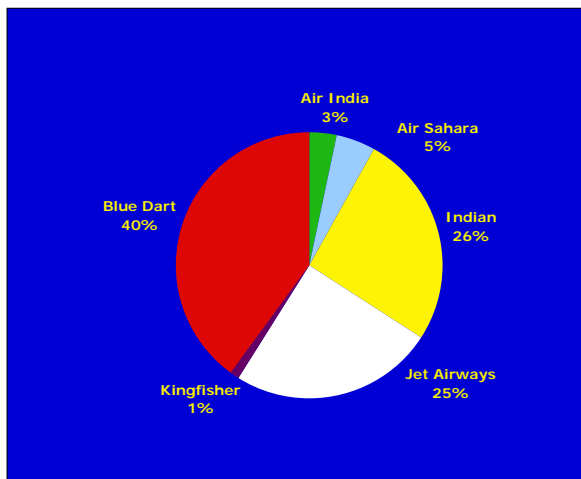
- (2) **Airline models exclude freight:** The passenger LCC model, which now accounts for over 35% of the domestic market, is not conducive to freight operations, with its focus on quick turnarounds. Air India encountered this problem particularly in the Gulf region, where it replaced several widebody (ie cargo friendly) routes with its passenger-focused Air India Express LCC unit, much to the disappointment of the Indian exporting community, which lost considerable cargo capacity (and the prospects for marginally priced consignments);
- (3) **Diversify revenue streams:** In the face of severe competition in the passenger segment, particularly in the domestic market, India's airlines are looking for new ways to earn revenue to bolster their earnings;
- (4) **Boost valuations:** Most Indian LCCs are targeting 2008/09 as the year in which they will start earnings net profits, with several targeting listings thereafter. Air Deccan is taking the view that a freight unit could help it achieve its earnings goals, as well as enhancing the carrier's valuation.

The Players dive in:

Blue Dart Express was the first mover in India's freight market and is the only operation in the market currently with dedicated freight aircraft in its fleet. With over ten years experience, Blue Dart has developed a 40% market share, with six B737Fs and two B757Fs (added in 2006) operating from the major cities in India.

Sensing an opportunity to dominate the fledgling market, global express company **DHL** moved to acquire Blue Dart last year. Following its acquisition by DHL, the company is now focusing on further strengthening its infrastructure and technology, including air and surface fleet, as well as service centres. 45 new service centres are to be added to the existing 217 across the country.

Domestic Freight Market Share: 2005/06



Source: Centre for Asia Pacific Aviation & DGCA

Air India's first dedicated freighter, a converted A310 passenger aircraft that will be deployed on the Kerala-Gulf sector from Jun-07, is the beginning of a strategy to regain India's market share. Over the next three years, Air India plans to have a fleet of 10 to 12 cargo aircraft servicing the Gulf, the US and Asian markets, with additional capacity to be leased in the future. Air India's current market share is 8% of imported cargo and 11% of exported cargo – figures the carrier is keen to grow.

Flyington Freighters plans to launch dedicated international freight services in Jul-07 with two leased A330-200Fs. The carrier will be based at Hyderabad and is the launch customer for the A330-200F, with six on order, scheduled for delivery from 2H09.

Air Deccan confirmed plans in Apr-07 to launch a domestic cargo service, to be operated by a new subsidiary. The new cargo carrier will sell a 1.96% shareholding for USD7.2 million to UK based Investec Bank Ltd, to help fund the project. The carrier appointed Jude Fonseca as CEO of the planned cargo subsidiary, and reportedly plans to launch operations in 4Q07.

Indian, which has a 26% market share, is also considering establishing a dedicated freight unit, with plans to convert five B737-200s from the fleet of domestic unit. Alliance Air.

Jet Airways recently stated it plans to involve Lufthansa in its planned freight unit, although further details have not been disclosed. Jet, with the acquisition of Air Sahara is the second largest player in the domestic market behind Blue Dart, and has the opportunity to strengthen this position. As Germany is currently India's largest freight market, a tie-up with Lufthansa would make sense for both carriers – and would give Jet a dominant position in that market.

Policy and infrastructure: getting the pieces in place

Foreign direct investment (FDI) in the air cargo sector is currently limited to 49% of any single company, but the government is considering raising this to 74% under its 'Vision 2020 civil aviation policy.

It would be a sensible move, providing the policy support that could attract more foreign freight companies to establish joint ventures with local firms to develop their expertise in the sector. There will be no shortage of interest from international players.

The Nagpur Airport example

In the airports sector, foreign expertise will be deployed in the flagship Nagpur Airport cargo hub project. In May-07, Changi Airports International (CAI) and the State Government of Maharashtra signed an agreement to develop the Multi-modal International passenger and cargo Hub Airport at Nagpur (MIHAN).

CAI will assist the Maharashtra Airport Development Company Ltd (MADC), a special purpose vehicle set up by the State Government, to plan and implement the MIHAN Project. (MADC is expected to take over control of the airport from Airports Authority of India in mid-07).

The project intends to transform Nagpur Airport into an international cargo hub with the development of a Special Economic Zone, along with rail and road terminal and other infrastructure facilities. The initial three-month agreement, which covers the airport improvement programme, could be extended for a further nine months.

CAI technical services will essentially aim to assist MADC in meeting the anticipated traffic growth at Nagpur Airport

Nagpur is in an ideal location for a national cargo hub (underscoring its central location). Over 270 international flights daily currently overfly Nagpur city, making Nagpur Air Traffic Control one of the busiest in India. The city is also well-served by a network of rail and road connections.

Conclusion: More uplift required

Expansion is needed elsewhere in the country. India's economic development will require the support of dedicated freight facilities with multi-modal interchanges, state-of-the-art cargo terminals, cold storage facilities, and electronic data interchange systems. Significant investment will be required, with private investment likely to take the lead.

Although freight tends to be the ugly duckling when it comes to investor interest, the prospects of making good returns on investment look considerably higher than in the

currently highly competitive passenger market. Inevitably though, government regulation – at both Central and State level – will be extremely important in assisting (or preventing) rapid expansion. Planning approvals and public-private partnerships are usually vital elements in successful ventures.

Airbus forecasts India's dedicated freighters will grow from the current eight to around 165 aircraft by 2025 – an average of one new freighter delivery every 1.5 months, to service strong expected domestic and international growth.

Within 18 months, at least six carriers will be operating dedicated freighters in India, up from just one at present, which will signal the lift-off of this long-ignored segment.