

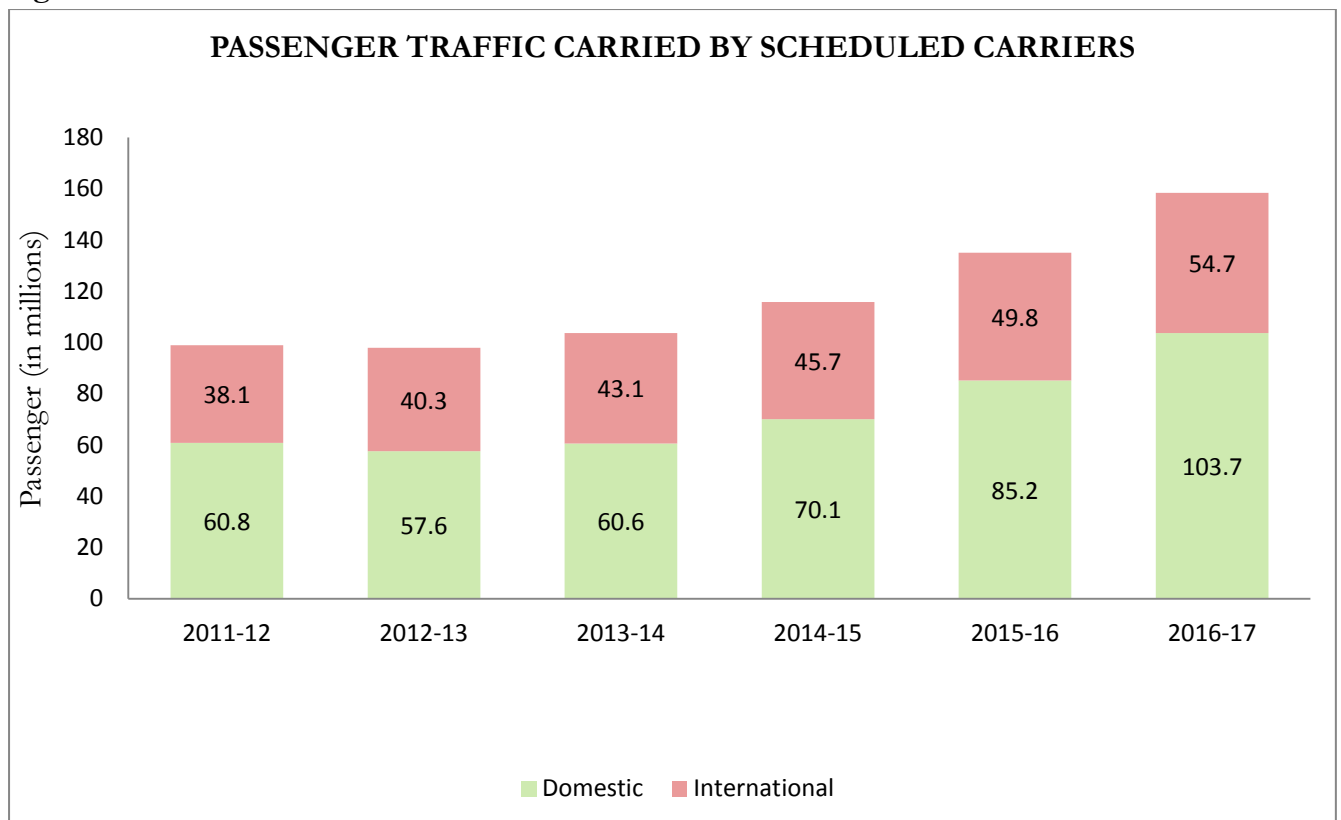
## Air Services Price Index

### BACKGROUND

The Indian civil aviation industry is recognized as the third largest domestic civil aviation market in the world and has emerged as one of the fastest growing industries in the country since 2015. The expansion of Civil Aviation industry can be attributed to factors like - low-cost carriers (LCCs), modern airports, Foreign Direct Investment (FDI) in domestic airlines, advanced information technology (IT) interventions and growing emphasis on regional connectivity. Further air transport service will experience rapid expansion in years to come due to Government's regional connectivity scheme- UDAN (Ude Desh ka Aam Naagrik) – which aims to stimulate regional connectivity with flights covering distances up to 800 km through a market-based mechanism.

Total air passenger traffic(domestic and international) stood at 158.43 million in 2016-17 increasing from 98.9 million in 2011-12.The total air passenger traffic witnessed a compound annual growth rate of 9.88% during the period 2011-12 to 2016-17.

**Figure 1**



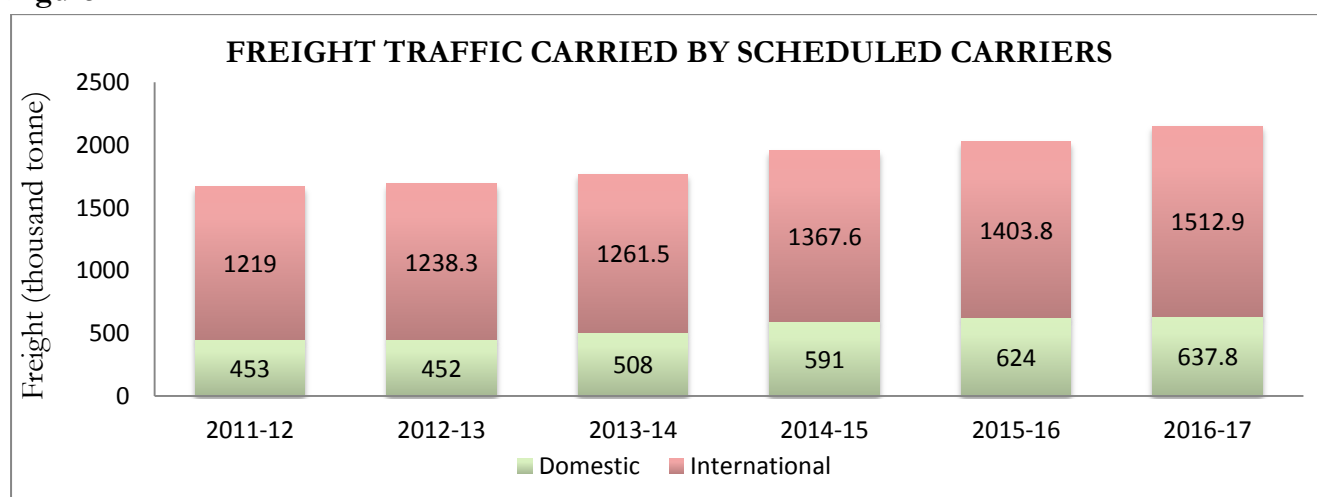
Source-DGCA

**Table 1**

Year	Passengers KM (in million)	Freight tonnes KM (in million)
2011-12	59084	375
2012-13	56739	29724
2013-14	59139	114754
2014-15	67023	114384
2015-16	80966	124416
2016-17	98641	131699

Source-DGCA

Total freight traffic including domestic and international freight traffic stood at 2150.7 thousand tonnes in 2016-17 compared to 1672 thousand tonnes in 2011-12. The total freight traffic registered a compound annual growth rate of 5.16 % during the period 2011-12 to 2016-17. India's air cargo is expected to grow at 9 per cent over the next few years.

**Figure 2**

Source-DGCA

## METHODOLOGY

### SCOPE:

Product basket of Air services has been grouped into two board categories: Passenger Services and Freight Services. Monthly Passenger Services Index and Freight Services Index are developed first and then these two indices are combined for arriving at a composite index for the sector as a whole.

### BASE YEAR:

Initially 2010-11 was selected as base year for the construction of Air Service Price Index (ASPI). Subsequently it has been shifted to new base year of 2015-16 in order to take into account recent structural changes in civil aviation sector.

## PRICES:

For passenger services: Unit prices are calculated for each airline by dividing monthly revenue accruing from passenger services by passenger KM.

For Freight services: Unit prices are calculated for each airline by dividing revenue accruing from freight services by freight tonne KM.

## WEIGHTS AND AGGREGATION:

*Passenger Service Index*- For each airline, price relatives are computed by dividing the monthly unit price by the unit price of base year. Then for each month, the passenger service price index is computed by taking weighted arithmetic mean of the monthly unit price index of each airline, the weights being the proportional share of each airline in total passenger KM.

*Freight Service Index*-For each airline, price relatives are computed by dividing the monthly unit price by the unit price of base year. Then for each month, the freight service price index is computed by taking weighted arithmetic mean of the monthly unit price index of each airline, the weights being the proportional share of each airline in total tonne KM.

*Composite Air Service Price Index* the Composite air service price index is the weighted average of passenger service price index and freight service price index, the weights being the respective share of revenue accruing from passenger services and freight services.

*Formula*-Index is computed on a monthly basis using Laspeyre's Formula.

Comparative weighting diagram for 2015-16 and 2010-11:

Airlines	Base year - 2015-16		Base year - 2010-11	
	Passenger	Freight	Passenger	Freight
	93.57	6.43	90.92	9.08
Go Air	8.92	9.93	16.54	
Air India	16.47	16.06	18.08	12.64
Jet Airways	18.60	14.76	45.42	25.45
Spicejet	12.54	10.74		
Indigo	43.46	28.20		57.49
Blue dart		20.31		
Jetlite			19.95	4.42
Total	100	100	100	100

## DATA SOURCE:

The following data was provided by Directorate General of Civil Aviation on monthly basis for each selected airline:

1. Monthly revenue (Rs.) and Passenger Kms. for each selected airline.
2. Monthly revenue (Rs.) and Tonne Kms. For each selected airline.

**REFERENCES:**

- Directorate General of Civil Aviation
- Press Information Bureau
- Indian Brand Equity Foundation(IBEf)
- Department of Industrial Policy and Promotion(DIPP)