

5. Air Transport



New Bangalore International
Airport, India

5. AIR TRANSPORT

Concepts and Definitions

Aircraft kilometres performed- Aircraft kilometres equal to the sum of products obtained by multiplying the number of flights performed on each flight stage by the stage distance.

Flight Stage- The operation of an aircraft from take off point to its next landing point.

Freight(or mail) tonne-kilometers (performed)- A metric tonne of freight or mail carried one kilometre. Freight tonne-kilometres equal the sum of products obtained by multiplying the number of tonnes of freight, express, diplomatic bags carried on each flight stage by the stage distance. Cargo and freight includes express and diplomatic bags but not passenger's baggage. Mail tonne- kilometers are computed in the same way as freight tonne-kilometres.

Freight(or mail) tonne carried (performed)- The number of tonnes of freight carried is obtained by counting each tonne of freight on a particular flight(with one flight number)once only and not repeatedly on each individual stage of that flight. The only exception to this is for freight flown on both the international and domestic stages of the same flight, which is considered in computation both as a domestic and an international shipment or dispatch. The same principle should be used in calculating mail tonnes carried.

International traffic (of airports): For airport traffic purposes, international traffic means:

- a) Passengers, freight and mail disembarked at an airport located in a country other than of the airport of embarkation, or vice versa; and
- b) Movements on flight of national or foreign aircraft whose origin or destination is located in the territory of a State other than that in which the airport under consideration is located.

Operating expenses per traffic-unit- This is a type of financial measurement, which relates the traffic or capacity applicable to the operating expenses. It is computed by dividing the operating expenses by the tonne-kilometres performed or by the tonne-kilometres available.

Operating revenue per traffic-unit- This is a type of financial measurement, which relates the traffic or capacity applicable to the operating revenues. It is computed by dividing the

operating revenues by the tonne-kilometres performed or by the tonne-kilometres available.

Passengers kilometres performed- A passengers kilometre is performed when a passenger is carried one kilometre. Calculation of passenger-kilometres equals the sum of the products obtained by multiplying the number of revenue passengers carried on each flight stage by the stage distance. The resultant figure is equal to the number of kilometres travelled by all passengers.

Passenger load factor - Passenger-kilometres performed expressed as a percentage of seat-kilometres available.

Passengers carried- The number of passengers carried is obtained by counting each passenger on particular flight (with one flight number) once only and not repeatedly on each individual stage of that flight, with a single exception that a passenger flying on both the international and domestic stages of the same flight should be counted as both a domestic and international passenger.

Passenger revenue per traffic unit- This is a type of financial measurement, which relates the passengers traffic applicable to the passenger revenues. It is computed by dividing the passenger revenue by the passenger kilometres performed/available.

Passenger weight- For converting aircraft passenger load into weight load, the number of passengers is multiplied usually by 90 kilograms, which allows for the weight of the passenger plus both free and excess baggage. However, in reporting the conversion is left to the discretion of the operator and conversion factors other than 90 kilograms may be used.

PAX- Passengers

Revenue passenger- Refers to passengers paying 25% or more of the normal applicable fare.

Scheduled airline/air carrier- An air transport enterprise offering any schedule air service.

Scheduled services- Services provided by flights scheduled and performed for remuneration according to a published timetable, or so regular or frequent as to constitute a recognizably systematic series, which are open to use by members of the public; extra revenue flights occasioned by overflow of traffic on scheduled flights; and preliminary revenue flights on planned new air services.

Seat Kilometres available- Seat kilometer is available when a seat is flown one kilometer. Seat kilometers available are equal to the sum of products obtained by multiplying the number of passenger seats available for sale on each flight stage by the stage distance.

Seats not actually available for the carriage of passengers because of the weight of fuel or other load should be excluded in the calculations.

Speed flown per aircraft- This is an average per aircraft measure computed by dividing the aircraft kilometers flown by the related aircraft hours.

Tonne-kilometres available- A metric tonne of available payload space flown one kilometer. Tonne-kilometres available equals the sum of the products obtained by multiplying the number of tonnes available for the carriage of revenue load (passengers, freight and mail) on each flight stage by the stage distance.

Tonne-kilometres performed- A metric tonne of revenue load carried one kilometer. Tonne-kilometres performed equals the sum of the product obtained by multiplying the number of tonnes of revenue load carried on each flight stage by the stage distance.

Traffic- For air transport purposes, traffic means the carriage of passengers, freight and mail.

Weight load factor- Tonne kilometers performed expressed as a percentage of tonne kilometers available.

5. AIR TRANSPORT

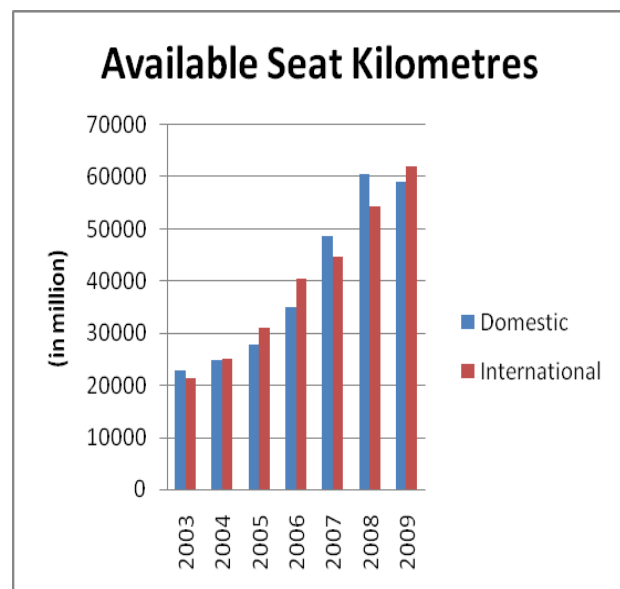
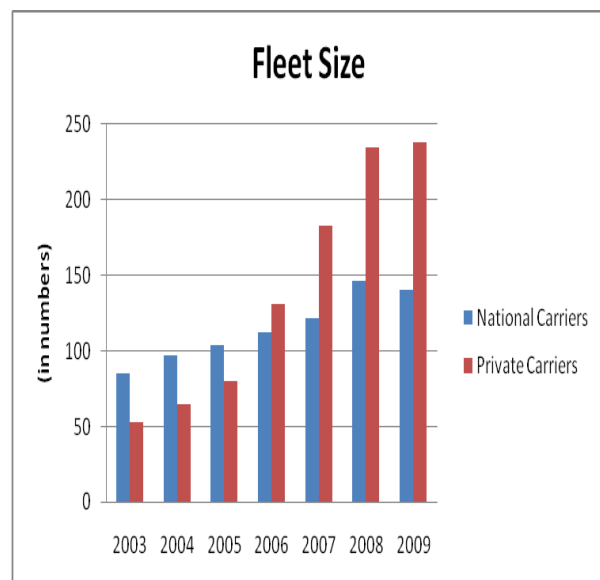
5.1 The chief data source for this sector is Director General of Civil Aviation, in the M/o Civil Aviation. Unless otherwise stated highlights of the sector given below are mainly based on summary Table No. 5.0 on Trends in Important Indicators of the Air Transport Infrastructure.

Accessibility

5.2 Air transport sector has shown a notable increase in accessibility, in terms of fleet size and available seat kilometers. Fleet size of national carriers increased from 85 aircrafts in 2003 to 140 aircrafts in 2009. Fleet size of private carriers increased from 53 aircrafts in 2003 to 238 aircrafts in 2009.

5.3 The available seat kilometers for domestic traffic increased from 23 billion in 2003 to 59 billion in 2009 showing a high CAGR of 17%. The available seat kilometers for international traffic increased from 21 billion in 2003 to 62 billion in 2009 showing a high CAGR of 19%.

5.4 Share of private carriers in available seat kilometers has rapidly increased during 2003 to 2009. The share of private carriers in available seat kilometers for domestic traffic increased from 50% in 2003 to 80% in 2009. Similarly the share of private carriers in available seat kilometers for international traffic increased from zero in 2003 to 36% in 2009.

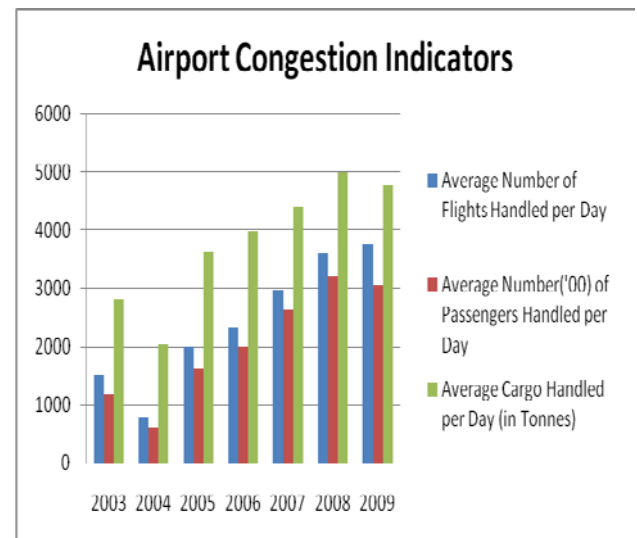
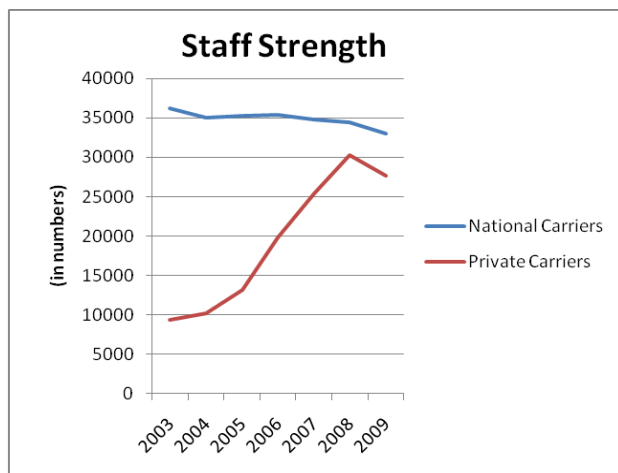


5.5 Number of operational airports increased from 91 to 96 only, during 2005 to 2009, number of international airports increased from 14 to 17 during the same period.

Quality

5.6 Average number of flights and passengers handled per day has more than doubled during 2003-2009 indicating increase in airport congestion. Cargo handled per day has shown a similar growth during the period.

5.7 Total Staff strength of national carriers is showing a declining trend 2003-2009. The reduction



in staff is in the categories of cockpit personnel other than pilot and co-pilot, ticketing and sales personnel and other personnel. But staff has increased in the categories of pilots and co-pilots, maintenance and overhaul personnel.

5.8 Staff strength of private airlines increased from 9355 in 2003 to 30,279 in 2008, but came down in 2009 to 27685.

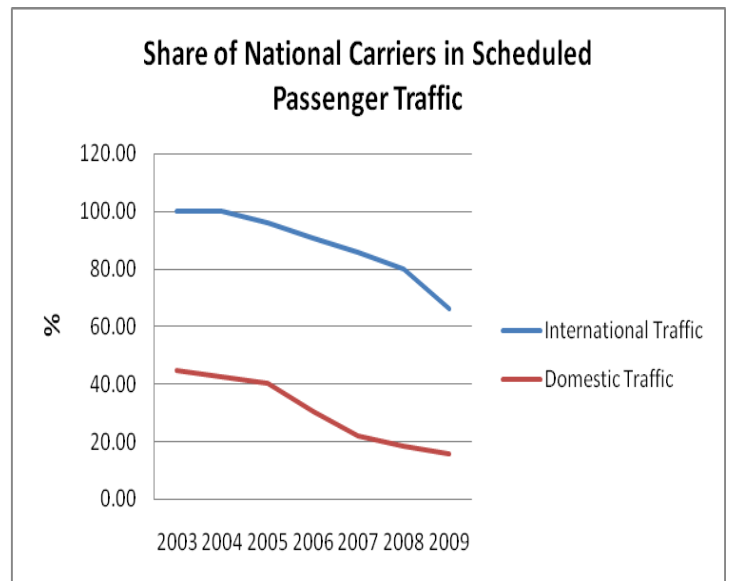
Fiscal cost

5.9 The total capital employed by Airport Authority of India increased from ₹2535 crore in 2003 to ₹4474 crore in 2009. The government participation in capital employed declined from 16% in 2003 to 14% in 2009.

5.10 Operating expenditure of both national and private carriers has grown at a higher rate compared to growth in operating revenue during 2003 to 2009. Operating revenue of all scheduled airlines increased at a CAGR of 18.9%, while operating expenditure increased at a higher CAGR of 22% during 2003 to 2009.

Utilisation

5.11 Both domestic and international passenger transport and passenger kilometers performed show significant increase during 2003-09. But percentage share of national carriers in both domestic as well as international traffic has gradually declined over the years.



5.12 Domestic passenger traffic increased from 14.2 million in 2003 to 40 million in 2009; while international passenger traffic increased from 4.3 million in 2003 to 10.2 million in 2009

5.12 The total cargo carried (Domestic + International) increased from 284 thousand tonnes in 2002-03 to 453 thousand tones in 2008-09. But passenger transport has grown at a higher rate (18.1%) compared to cargo transport (8.1%) during the period.

5.13 Passenger Load Factor and Weight Load Factor are in the range of 50-70 percent, both for private and national carriers, indicating good deal of unutilised capacity.

Affordability

5.14 Operating revenue per passenger kilometer for National Carriers increased from ₹4.53/- to ₹4.78/- during 2003 to 2009 while operating revenue per passenger km for Private Scheduled Domestic Airlines increased from ₹5.55/- to ₹7.48/- during the same period.

Table 5.0 : Trends in Important Indicators of Air Transport Infrastructure

Sl. No.	Description	2003	2004	2005	2006	2007	2008	2009	CAGR %
(Reference Date / Period									
- As on 31st March for Stock Variables									
- Financial Year ending on 31 st March for Flow Variables)									
A ACCESS									
I Domestic Traffic									
1	Available Seat km (in Million)								
	All Indian Carriers	22833	24936	27790	35077	48702	60590	59160	17.20
	National Carriers	11527	11955	12889	12764	12994	13359	11962	0.62
	% Share to Total Available Seat km	50.5	47.9	46.4	36.4	26.7	22.0	20.2	-14.14
	Private Carriers	11306	12981	14901	22314	35708	47231	47197	26.89
	% Share to Total Available Seat km	49.5	52.1	53.6	63.6	73.3	78.0	79.8	8.27
2	Available Tonne km (in Million)								
	All Indian Carriers	2381	2551	2840	3488	4750	5984	5908	16.36
	National Carriers	1215	1245	1347	1320	1338	1396	1297	1.09
	% Share to Total Available Tonne km	51.0	48.8	47.4	37.8	28.2	23.3	22.0	-13.12
	Private Carriers	1166	1306	1493	2168	3412	4587	4612	25.76
	% Share to Total Available Tonne km	49.0	51.2	52.6	62.2	71.8	76.7	78.1	8.08
II International Traffic									
3	Available Seat km (in Million)								
	All Indian Carriers	21406	24972	31126	40452	44624	54465	62172	19.45
	National Carriers	21406	24968	30865	37236	38363	41775	39686	10.84
	% Share to Total Available Seat km	100	100	99.2	92.0	86.0	76.7	63.8	-7.21
	Private Carriers	-	4	261	3217	6261	12690	22487	462.31
	% Share to Total Available Seat km	-	0.02	0.84	7.95	14.03	23.30	36.17	368.54
4	Available Tonne km (in Million)								
	All Indian Carriers	2678	3154	3919	5143	5734	7588	8812	21.96
	National Carriers	2678	3154	3893	4736	4849	5509	5166	11.57
	% Share to Total Available Tonne km	100	100	99.3	92.1	84.6	72.6	58.6	-8.52
	Private Carriers	-	-	26	407	885	2079	3646	244.12
	% Share to Total Available Tonne km	-	-	0.66	7.91	15.43	27.40	41.38	181.02
III Fleet Size (in number)									
	Indian Airlines	43	47	52	55	59	72	72	8.97
	Alliance Air	11	15	15	15	15	20	16	6.44
	Air India	31	35	37	38	35	36	31	0
	Air India Express	-	-	-	4	13	18	21	73.80
5	National Carriers	85	97	104	112	122	146	140	8.67
6	Private Carriers	53	65	80	131	183	235	238	28.44
IV Number of Airports									
7	Total Operational Airports			91	87	92	93	96	1.35
8	International Airports	12	12	12	12	16	17	17	5.98

Table 5.0 (contd.) : Trends in Important Indicators of Air Transport Infrastructure

Sl. No.	Description	2003	2004	2005	2006	2007	2008	2009	CAGR %	
		(Reference Date / Period								
		- As on 31st March for Stock Variables								
		- Financial Year ending on 31 st March for Flow Variables)								
B	QUALITY									
Airport Congestion										
V	Average Number of Flights Handled per Day									
9	Total	1506	796	2000	2324	2976	3606	3758	16.46	
10	Domestic	1193	437	1564	1814	2391	2931	2918	16.08	
11	International	313	359	436	509	586	674	840	17.88	
VI	Average Number of Passengers Handled per Day									
12	Total	118590	62190	162560	200817	263735	319738	305388	17.08	
13	Domestic	78242	16691	109265	139844	193560	238498	211621	18.04	
14	International	40348	45499	53295	60973	70176	81240	93767	15.09	
VII	Average Cargo Handled per Day (in Tonnes)									
15	Total	2811	2036	3631	3971	4395	4990	4772	9.22	
16	Domestic	1010	118	1360	1429	1576	1827	1600	7.97	
17	International	1801	1918	2272	2542	2819	3163	3172	9.89	
VIII	Staff Strength (in number)									
18	Pilots and Co-Pilots									
	All Indian Carriers	1442	1605	1900	2597	3302	3997	4358	20.24	
	National Carriers	903	947	1108	1196	1333	1477	1561	9.55	
	Private Carriers	539	658	792	1401	1969	2520	2797	31.58	
19	Other Cockpit Personnel									
	All Indian Carriers	188	191	268	484	571	504	478	16.83	
	National Carriers	63	61	48	39	35	49	13	-23.13	
	Private Carriers	125	130	220	445	536	455	465	24.48	
20	Cabin Attendants									
	All Indian Carriers	3878	4238	5639	7142	9203	11192	10216	17.52	
	National Carriers	2819	3041	3706	4017	4180	4167	4061	6.27	
	Private Carriers	1059	1197	1933	3125	5023	7025	6155	34.09	
21	Maintenance and Overhaul Personnel									
	All Indian Carriers	9306	10535	11174	11410	13343	13308	13355	6.21	
	National Carriers	8022	9108	9172	8367	8967	8371	8552	1.07	
	Private Carriers	1284	1427	2002	3043	4376	4937	4803	24.59	
22	Ticketing and Sales Personnel									
	All Indian Carriers	9954	9710	10163	9798	9949	10540	8333	-2.92	
	National Carriers	8598	8295	8455	7826	7725	7396	6783	-3.87	
	Private Carriers	1356	1415	1708	1972	2224	3144	1550	2.25	
23	All Other Personnel									
	All Indian Carriers	20791	19056	19300	23872	23813	24957	23989	2.41	
	National Carriers	15799	13633	12808	13987	12553	12759	12074	-4.38	
	Private Carriers	4992	5423	6492	9885	11260	12198	11915	15.60	
24	Total									
	All Indian Carriers	45559	45335	48444	55303	60181	64687	60729	4.91	
	National Carriers	36204	35085	35297	35432	34793	34408	33044	-1.51	
	Private Carriers	9355	10250	13147	19871	25388	30279	27685	19.82	

Table 5.0 (contd.) : Trends in Important Indicators of Air Transport Infrastructure

Sl. No.	Description	2003	2004	2005	2006	2007	2008	2009	CAGR %	
		(Reference Date / Period								
		- As on 31st March for Stock Variables								
		- Financial Year ending on 31st March for Flow Variables)								
C	FISCAL COST									
V	Financial Performance of Airports Authority of India (Rs. in crore)									
25	Revenue	2384.5	2630.6	2997.4	3490.5	3726.2	4289.2	3891.0	8.50	
26	Expenditure	1887.4	2086.6	2312.6	2236.0	2196.9	2549.8	2807.4	6.84	
27	Profit Before Tax	497.1	544.0	684.8	1254.4	1529.3	1739.4	1083.5	13.87	
28	Profit After Tax	215.0	315.0	325.4	717.6	859.9	1081.9	650.1	20.25	
29	Govt Capital	405.6	416.6	431.6	449.6	463.6	501.1	624.0	7.44	
30	Net Worth	2370.9	2618.0	2943.5	3643.9	4543.0	5409.2	6030.1	16.83	
31	Capital Employed	2534.7	2698.3	3015.1	3260.7	3652.3	3606.3	4474.0	9.93	
32	Govt. Capital Participation	16.0	15.4	14.3	13.8	12.7	13.9	13.9	-2.26	
VI	Financial Performance of All Scheduled Airlines (Rs. in crore)									
33	Operating Revenue									
	All Scheduled Airlines	13695.0	16138.7	19894.7	25514.7	29885.7	34487.7	38685.5	18.90	
	National Carriers	9858.8	11291.6	13446.4	15585.4	15584.8	16721.2	15184.4	7.46	
	Private Scheduled Domestic Airlines	3836.2	4847.0	6448.3	9929.3	14300.9	17766.6	23501.0	35.27	
34	Operating Expenses									
	All Scheduled Airlines	14121.3	15686.4	19140.2	26079.0	34592.9	40691.2	47131.6	22.25	
	National Carriers	10264.0	11279.6	13586.7	15948.2	18265.3	19251.0	20845.1	12.53	
	Private Scheduled Domestic Airlines	3857.3	4406.8	5553.5	10130.8	16327.6	21440.2	26286.4	37.69	
D	UTILISATION									
VII	Domestic Traffic									
35	Passenger Traffic (in thousand numbers)									
		Scheduled								
36	All Indian Carriers	13951	15677	19445	25205	35793	44384	39467	18.92	
	(% to Total Passenger Traffic)	98.0	98.5	98.5	98.5	98.8	98.9	98.6	0.09	
37	National Carriers	6247	6707	7845	7763	7913	8165	6292	0.12	
	(% to Total Scheduled Passenger Traffic)	44.8	42.8	40.3	30.8	22.1	18.4	15.9	-15.81	
38	Private Carriers	7704	8970	11600	17442	27880	36220	33175	27.55	
	(% to Total Scheduled Passenger Traffic)	55.2	57.2	59.7	69.2	77.9	81.6	84.1	7.25	
		Non-Scheduled[#]								
39	All Indian Carriers	282	241	300	374	444	484	576	12.60	
	(% to Total Passenger Traffic)	2	1.5	1.5	1.5	1.2	1.1	1.4	-5.77	
40	Total Passenger Traffic (in thousand numbers)	14233	15918	19745	25579	36237	44868	40043	18.81	
41	Passenger Load Factor (%)									
	All Indian Carriers	56.3	58.4	64.9	67.6	68.8	68.9	63.7	2.08	
	National Carriers	51.5	53.5	57.8	59.4	59.9	59.3	52.4	0.29	
	Private Carriers	61.1	62.9	71.0	72.3	72.1	71.6	66.6	1.45	
42	Passenger km Performed (in Million)									
	All Indian Carriers	12848	14566	18030	23709	33519	41718	37704	19.65	
	National Carriers	5938	6396	7449	7587	7789	7921	6271	0.91	
	Private Carriers	6910	8170	10581	16122	25730	33796	31433	28.72	

Table 5.0 (contd.) : Trends in Important Indicators of Air Transport Infrastructure

Sl. No.	Description	2003	2004	2005	2006	2007	2008	2009	CAGR %
(Reference Date / Period - As on 31st March for Stock Variables - Financial Year ending on 31 st March for Flow Variables)									
D	UTILISATION								
43	Cargo Carried (in thousand tonnes)								
Scheduled									
44	All Scheduled Indian Carriers	206.9	226.5	285.3	299.2	321.3	368.1	340.8	8.67
	(% to Total Cargo Carried)	99.8	99.9	99.9	99.9	99.9	99.9	99.7	-0.01
45	National Carriers	99.9	104.5	124.7	126.1	108.1	106.7	93.9	-1.02
	(% to Total Scheduled Cargo Carried)	48.3	46.1	43.7	42.1	33.6	29.0	27.6	-8.92
46	Private Carriers	79.7	93.0	120.5	130.4	158.3	195.9	183.66	14.94
	(% to Total Scheduled Cargo Carried)	38.5	41.1	42.2	43.6	49.3	53.2	53.9	5.76
47	Scheduled Cargo Operators	27.3	29.0	40.2	42.8	54.9	65.5	63.2	15.00
	(% to Total Cargo Carried)	13.2	12.8	14.1	14.3	17.1	17.8	18.5	5.82
Non-Scheduled[#]									
48	All Indian Carriers	0.51	0.15	0.40	0.29	0.42	0.36	0.995	11.93
	(% to Total Cargo Carried)	0.2	0.1	0.1	0.1	0.1	0.1	0.3	6.99
49	Total Cargo Carried (in thousand tonnes)	207.4	226.7	285.7	299.5	321.8	368.4	341.8	8.68
50	Weight Load Factor (%)								
	All Indian Carriers	53.5	57.5	63.9	67.1	67.1	65.7	59.6	1.82
	National Carriers	51.2	53.3	57.2	59.7	59	56.9	49.4	-0.59
	Private Carriers	55.8	61.5	70	71.6	70.2	68.3	62.4	1.88
51	Tonne km Performed (in Million)								
	All Indian Carriers	1273	1467	1816	2340	3185	3930	3520	18.47
	National Carriers	622	664	771	788	790	795	641	0.50
	Private Carriers	651	803	1045	1552	2395	3135	2879	28.12
VIII	International Traffic								
52	Passenger Traffic (in thousand numbers)								
Scheduled									
53	All Indian Carriers	4201	4493	5326	6547	7561	9108	10049	15.65
	(% to Total Passenger Traffic)	98.5	98.6	99.0	99.6	99.9	99.2	99.0	0.07
54	National Carriers	4201	4491	5102	5923	6478	7294	6659	7.98
	(% to Total Scheduled Passenger Traffic)	100.0	100.0	95.8	90.5	85.7	80.1	66.3	-6.63
55	Private Carriers	-	1	224	624	1083	1814	3390	408.21
	(% to Total Scheduled Passenger Traffic)	-	0.02	4.2	9.5	14.3	19.9	33.7	332.64
Non-Scheduled[#]									
56	All Indian Carriers	62	64	52	29	6	73	104	9.00
	(% to Total Passenger Traffic)	1.5	1.4	1.0	0.4	0.1	0.8	1.0	-5.67
57	Total Passenger Traffic (in thousand numbers)	4263	4556	5378	6576	7567	9182	10153	15.56
58	Passenger Load Factor (%)								
	All Indian Carriers	73.9	72.5	71.6	68.9	68	66.3	65.5	-1.99
	National Carriers	73.9	72.5	71.6	69.2	68.1	66	64.2	-2.32
	Private Carriers	-	-	61.7	64.7	67.4	67.5	67.9	2.42
59	Passenger km Performed (in Million)								
	All Indian Carriers	15819	18108	22272	27858	30355	36130	40741	17.08
	National Carriers	15819	18107	22111	25775	26133	27570	25483	8.27
	Private Carriers	-	1	161	2083	4222	8560	15258	586.59

Table 5.0 (contd.) : Trends in Important Indicators of Air Transport Infrastructure

Sl. No.	Description	2003	2004	2005	2006	2007	2008	2009	CAGR %	
		(Reference Date / Period								
		- As on 31st March for Stock Variables								
		- Financial Year ending on 31 st March for Flow Variables)								
D	UTILISATION									
VIII	International Traffic									
60	Cargo Carried (in thousand tonnes)									
		Scheduled								
61	All Indian Carriers	103.7	97.7	112.0	112.2	123.7	142.9	174.1	9.01	
	(% to Total Cargo Carried)	99.93	100.00	100.00	99.98	99.99	100.00	99.99	0.01	
62	National Carriers	103.7	97.7	111	101	99	91	76	-5.05	
	(% to Total Scheduled Cargo Carried)	100.0	100.0	99.1	90.0	80.0	63.7	43.7	-12.90	
63	Private Carriers	-	-	1	11	25	53	98	214.63	
	(% to Total Scheduled Cargo Carried)	-	-	0.9	9.8	20.2	37.1	56.3	181.78	
		Non-Scheduled[#]								
64	All Indian Carriers	0.091	0.041	0	0.009	0	0.004	0	-	
	(% to Total Cargo Carried)	0.088	0.042	0	0.008	0	0.003	0	-	
									100.00	
65	Total Cargo Carried (in thousand tonnes)	103.8	97.7	112.0	112.2	123.7	142.9	174.1	9.00	
66	Weight Load Factor (%)									
	All Indian Carriers	70	66	65.8	61	59.7	55.1	56	-3.65	
	National Carriers	70.4	66.3	65.8	61.3	60.2	57	60.6	-2.47	
	Private Carriers	-	-	55.7	58.2	57.2	49.9	49.5	-2.91	
67	Tonne km Performed (in Million)									
	All Indian Carriers	1884	2092	2579	3138	3422	4179	4938	17.42	
	National Carriers	1884	2092	2564	2901	2917	3141	3133	8.85	
	Private Carriers	-	-	14	237	506	1038	1805	236.97	
IX	Domestic+Internatinal Traffic									
68	Passenger Traffic (in thousand numbers)									
		Scheduled								
69	All Indian Carriers	18152	20170	24771	31752	43354	53493	49516	18.21	
	(% to Total Passenger Traffic)	98.1	98.5	98.6	98.7	99.0	99.0	98.6	0.09	
70	National Carriers	10448	11198	12947	13686	14391	15459	12951	3.64	
	(% to Total Scheduled Passenger Traffic)	57.6	55.5	52.3	43.1	33.2	28.9	26.2	-12.32	
71	Private Carriers	7704	8972	11824	18066	28963	38034	36565	29.64	
	(% to Total Scheduled Passenger Traffic)	42.4	44.5	47.7	56.9	66.8	71.1	73.8	9.67	
		Non-Scheduled[#]								
72	All Indian Carriers	344	305	352	403	450	557	680	12.03	
	(% to Total Passenger Traffic)	1.9	1.5	1.4	1.3	1.0	1.0	1.4	-5.15	
73	Total Passenger Traffic (in thousand numbers)	18496	20475	25123	32155	43804	54050	50196	18.10	
74	Passenger Load Factor (%)									
	All Indian Carriers	64.8	65.5	68.4	68.3	68.4	67.7	64.7	-0.03	
	National Carriers	66.1	66.4	67.6	66.7	66.1	64.4	61.5	-1.19	
	Private Carriers	-	-	70.9	71.3	71.4	70.7	67	-1.40	
75	Passenger km Performed (in Million)									
	All Indian Carriers	28667	32674	40303	51567	63874	77847	78445	18.27	
	National Carriers	21757	24503	29560	33362	33923	35491	31755	6.50	
	Private Carriers	6910	8171	10742	18205	29951	42356	46690	37.50	

Table 5.0 (contd.) : Trends in Important Indicators of Air Transport Infrastructure

Sl. No.	Description	2003	2004	2005	2006	2007	2008	2009	CAGR %
		(Reference Date / Period - As on 31st March for Stock Variables - Financial Year ending on 31 st March for Flow Variables)							
D		UTILISATION							
IX	Domestic+International Traffic								
76	Cargo Carried (Mail+ Freight) (in thousand tonnes)								
		Scheduled							
77	All Indian Carriers	283.3	295.2	357.3	368.7	390.1	445.5	451.7	8.08
	(% to Total Cargo Carried)	99.8	99.9	99.9	99.9	99.9	99.9	99.8	0.00
78	National Carriers	203.5	202.5	236	227	207	198	169	-3.05
	(% to Total Scheduled Cargo Carried)	71.8	68.6	66.0	61.6	53.1	44.4	37.4	-10.30
79	Private Carriers	80	93	121	142	184	248	282	23.41
	(% to Total Scheduled Cargo Carried)	28.2	31.4	33.9	38.5	47.2	55.7	62.4	14.18
		Non-Scheduled							
80	All Indian Carriers	0.60	0.19	0.40	0.30	0.42	0.36	1.00	8.89
	(% to Total Cargo Carried)	0.21	0.06	0.11	0.08	0.11	0.08	0.22	0.74
81	Total Cargo Carried (in thousand tonnes)	283.9	295.4	357.7	369.0	390.5	445.8	452.7	8.09
82	Weight Load Factor (%)								
	All Indian Carriers	62.4	62.4	65	63.5	63	59.8	57.5	-1.35
	National Carriers	64.4	62.7	63.6	60.9	59.9	57	58.4	-1.62
	Private Carriers	-	-	69.8	69.5	67.5	62.6	56.7	-5.06
83	Tonne km Performed (in Million)								
	All Indian Carriers	3157	3559	4394	5478	6607	8110	8458	17.85
	National Carriers	2506	2756	3334	3689	3706	3935	3773	7.06
	Private Carriers	651	803	1060	1789	2901	4173	4684	38.94
E		AFFORDABILITY							
84	Operating Revenue per Passenger km Performed for National Carriers (in Rs.)	4.53	4.61	4.55	4.67	4.59	4.71	4.78	0.90
85	Operating Revenue per Passenger km Performed for Private Scheduled Domestic Airlines (in Rs.)	5.55	5.93	6.09	6.16	5.56	5.26	7.48	5.09

Inclusive of Non-Scheduled traffic carried by Scheduled operators

Source: India Air Transport Statistics published by DGCA, M/o Civil Aviation

Table 5A.1 : Fleet Strength by Type of Aircraft as on 31.03.2009

Name of the Airline	Type of Aircraft	Number of Aircraft	Passenger Seating Capacity Per Aircraft
Indian Airlines	Airbus A319	15	144/120/122
	Airbus A320	43	145/124
	Airbus A321	12	172
	Airbus A330	2	279
	Boeing CRJ-700#	-	70
	Dornier DO228	-	18
	ATR-42#	-	48
	Total	72	-
Alliance Air	Boeing B737-200(F)	6*	-
	ATR 42-320	7	48
	CRJ-700	3	70
	Total	16	-
Air India	Boeing 747-437	6	423
	Boeing 747-300	1	293
	Airbus 777-200LR	5	238
	Airbus 777-300ER	5	342
	Airbus A-310 SB	6	201
	Airbus A-310 Freighter	2	201
	A-310 Leased	2	202
	Boeing 747-400 Leased	-	419
	747-400 COMBI	-	297
	Boeing 777-222	4	272
	Total	31	-
	Air India Express	Boeing 737-800	14
Boeing 737-800 Dry Leased		7	189
Total		21	375
Jet Airways	B-737-400	2	136
	B-737-700	13	112
	B-737-800	35	144
	B-737-900	2	160
	ATR 72-500	14	62
	A330-200	12	220
	B777-300ER	10	312
	Total	88	-

* Converted to freighter aircraft from passenger aircraft.

**Table 5A.1 (contd.) : Fleet Strength by Type of Aircraft
As on 31.03.2009**

Name of the Airline	Type of Aircraft	Number of Aircraft	Passenger Seating Capacity Per Aircraft
Jetlite	B-737-300	1	144
	B-737-400	2	84
	B-737-700	7	144
	B-737-800	7	186
	CRJ-200	7	50
	Total	24	-
Paramount Airways	Embraer 170-100LR	2	70/72
	Embraer 170-200LR	3	75
	Total	5	-
Spicejet	Boeing 737-800	14	189
	B737-900ER	5	212
	Total	19	-
Kingfisher Airlines	Airbus A330-223	5	217
	Airbus A320-232	32	134/174/180
	Airbus A321-232	8	151/178/199
	Airbus A319-131	3	144
	ATR 72-212A	27	66/72
	ATR42-500	8	48
	Total	83	-
Indigo	Airbus 320-200	19	180
	Total	19	180

All Boeing B-700 & ATR aircrafts of Indian Airlines are operated by the fully owned subsidiary Alliance Air.

Source: Material supplied by DGCA, M/o Civil Aviation

Table 5A.2 : Fleet Size of All Scheduled Airlines (1999-00 to 2008-09)

(in number)											
Sl.No.	Name of the Airline	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
1	Air India	26	28	29	31	35	37	38	35	36	31
2	AI Express	-	-	-	-	-	-	4	13	18	21
3	Indian Airlines	44	42	44	43	47	52	55	59	72	72
4	Alliance Air	12	11	11	11	15	15	15	15	20	16
5	Jet Airways	28	30	38	41	41	42	53	63	81	88
6	Jetlite	9	7	10	12	20	22	29	27	25	24
7	Air Deccan	-	-	-	-	4	16	29	39	41	-
8	Paramount	-	-	-	-	-	-	1	5	5	5
9	Spicejet	-	-	-	-	-	-	5	11	19	19
10	Kingfisher	-	-	-	-	-	-	11	25	41	83
11	Go Air	-	-	-	-	-	-	3	5	6	-
12	Indigo	-	-	-	-	-	-	-	8	17	19
India Total		119	118	132	138	162	184	243	305	381	378

Source: India Air Transport Statistics published by DGCA, M/o Civil Aviation

Table 5B.1 : Air Accident Statistics (2006-07 & 2007-08)

Sl. No.	Name of the Airline	2006-07			2007-08			Cause of Accident		
		No. of Accidents			No. of casualties	No. of Accidents			No. of casualties	
		In Air	On Ground	Total		In Air	On Ground			Total
1	Indian Airlines									
2	Air India									
3	Jet Airlines					1	1	Nil	Note below	
4	Sahara Airlines									
5	Air Deccan									
6	Go Air									
7	Indigo Airlines									
8	Kingfisher									
9	Jagson Airways									
10	Spicejet									
11	Paramount Airways									

Note: The Pilot-in-command in absence of recovery guidance adopted self-perceived technique and kept on adding engine power along with aircraft pitch manipulations to salvage the aircraft from the bounce on landing and damaged the aircraft structure.

Source: Material supplied by DGCA, M/o Civil Aviation

Table 5B.2 : Airline wise and Category wise Staff Strength during 2008-09 and 2007-08 at year end

Sl. No.	Name of the Airline	(in number)							
		2008-09				2007-08			
		Pilot	Cabin Crew	Other Technical Staff	Total Staff	Pilot	Cabin Crew	Other Technical Staff	Total Staff
1	Indian Airlines	562	2116	3145	14338	802	1508	5231	17688
2	Alliance Air	82	148	212	692	78	186	207	768
3	Air India	839	1430	5069	17076	548	2198	2812	14930
4	Air India Express	78	380	126	938	49	324	121	833
5	Jet Airways	1110	4021	2047	13078	1069	4066	2057	13163
6	Jetlite	205	395	520	1365	250	512	620	2557
7	Air Deccan [#]	-	-	-	-	294	520	824	3310
8	Go Air	NA	NA	NA	NA	65	172	163	1198
9	Indigo Airlines	255	444	252	2180	227	455	197	2074
10	Kingfisher	1025	1252	1628	8258	451	1239	791	5023
11	Spicejet	140	412	245	2190	134	421	194	2321
12	Paramount Airways	62	96	111	614	30	95	91	633

[#] Air Deccan merged with Kingfisher Airlines w.e.f. April 2008.

Source: 1. Material supplied by DGCA, M/o Civil Aviation

2. India Air Transport Statistics published by DGCA, M/o Civil Aviation

Table 5C.1 : Airlinewise Operating Revenue and Expenditure (2007-08 & 2008-09)

Sl.No.	Name of the Airline	Operating Revenue Per Revenue Passenger km Performed (In Rs.)		Total Operating Revenue (In Million Rs.)		Operating Expenses Per Revenue Passenger km Performed (In Rs.)		Total Operating Expenses (In Million Rs)	
		2007-08	2008-09	2007-08	2008-09	2007-08	2008-09	2007-08	2008-09
1	NACIL(Air India+Indian Airlines Combined)	4.9	5.2	152574.7	134793.80	5.8	7.3	178542.6	188964.50
2	Alliance Air	8.2	13.94	3034.1	2886.60	9.7	17.87	3595.0	3699.90
3	Air India Express	2.7	2.54	11603.0	14164.00	2.5	2.83	10372.0	15787.00
4	Jet Airways	5.21	5.92	88223.9	126914.40	5.55	5.87	93995.9	125818.70
5	Air Deccan [#]	2.5	-	15454.4	-	4.5	-	28123.3	-
6	Go Air	3.3	NA	5098.6	NA	4.6	NA	6589.4	NA
7	Indigo Airlines	2.9	3.72	11328.3	18763.60	3.5	3.68	13451.1	18582.60
8	Kingfisher Airlines	5.2	6.6	26875.2	52691.70	6.8	9.3	35051.1	73297.40
9	Spicejet	3.0	3.55	12949.9	16894.50	3.6	4.45	15595.3	21200.30
10	Paramount Airways	9.3	10.4	2680.1	3736.70	8.5	9.6	2449.1	3452.70
11	Jetlite*(Sahara Airlines)	3.8	4.2	15055.20	16009.20	4.8	5.3	19147.00	20512.50

* Sahara Airlines acquired by Jet Airways was renamed as Jetlite.

Air Deccan merged with Kingfisher Airlines w.e.f. April 2008.

Source: 1. Material supplied by DGCA, M/o Civil Aviation

2. India Air Transport Statistics published by DGCA, M/o Civil Aviation

Table 5D.1 : Airportwise Domestic Traffic Handled per Day during 2008-09

Sl. No.	State/UT	Name of the Airport	Avg. No. of flights handled per day	Avg. no. of passengers handled per day (in number)	Avg. cargo handled per day (in Tonnes)
1	A & N Island	Portblair	20	1314	7
2	Andhra Pradesh	Hyderabad	188	12736	71
		Rajahmundry	25	339	0
		Tirupathi	10	425	0.07
		Vijayawada	6	175	0
		Vizag	42	1641	2
3	Arunachal Pradesh	Tezu	0.3	0.23	0
4	Assam	Dibrugarh	10	339	1
		Guwahati	69	3743	5
		Jorhat	4	153	0.45
		Lilabari	1	11	0
		Silchar	12	393	1
		Tezpur	0.01	0.008	0
		Gaya	0.04	0.3	0
5	Bihar	Patna	14	944	7
6	Chandigarh	Chandigarh	17	999	1
7	Chhattisgarh	Raipur	28	1094	1
8	Daman & Diu	Diu	3	42	0.003
9	Delhi	Delhi	433	41299	379
10	Goa	Goa	53	5017	10
11	Gujarat	Ahmedabad	71	5867	38
		Bhavnagar	4	167	0
		Bhuj	4	294	0.21
		Jamnagar	2	204	1
		Kandla	3	74	0
		Keshod	0.02	0.1	0
		Porbander	2	39	0
		Rajkot	5	353	3
		Surat	2	78	0
		Vadodara	19	1229	6
		Kulu	4	91	0
12	Himachal Pradesh	Kangra	2	60	0
		Shimla	2	41	0
		Jammu	18	1102	4
13	Jammu & Kashmir	Leh	6	545	2
		Srinagar	19	1964	5
		Ranchi	21	703	2
14	Jharkhand	Ranchi	21	703	2
15	Karnataka	Bangalore	249	19508	160
		Belgaum	2	47	0
		Hubli	6	163	0
		Mangalore	24	1432	1
16	Kerala	Calicut	7	447	1
		Cochin	59	3695	18
		Trivandrum	24	1318	4

Table 5D.1 (contd.) : Airportwise Domestic Traffic Handled per Day during 2008-09

Sl. No.	State/UT	Name of the Airport	Avg. No. of flights handled per day	Avg. no. of passengers handled per day (in number)	Avg. cargo handled per day (in Tonnes)
17	Lakshadweep	Agatti	4	53	0
18	Madhya Pradesh	Bhopal	27	632	3
		Gwalior	3	15	0
		Indore	48	1646	14
		Jabalpur	5	121	0.005
		Khajuraho	5	182	0
19	Maharashtra	Aurangabad	11	520	3
		Mumbai	444	41964	448
		Juhu	65	414	1
		Kolhapur	3	61	0
		Nagpur	30	1958	12
		Pune	51	4408	32
20	Manipur	Imphal	16	877	10
21	Mizoram	Aizwal	6	256	1
22	Nagaland	Dimapur	5	125	1
23	Orissa	Bhuaneshwar	31	1845	5
24	Puducherry	Pondicherry	0.02	0.04	0
25	Punjab	Amritsar	8	367	1
		Ludhiana	0.3	1	0
		Pathankot	0.4	2	0
		Jaipur	39	2692	6
26	Rajasthan	Jodhpur	5	229	0.31
		Udaipur	17	711	0
		Coimbatore	39	2524	13
27	Tamil Nadu	Chennai	234	16930	153
		Madurai	21	967	2
		Tiruchirapalli	5	242	0.05
		Tuticorin	2	106	0
		Agartala	20	1019	18
28	Tripura	Agartala	20	1019	18
29	Uttar Pradesh	Agra	2	52	0
		Allahabad	3	44	0
		Gorakhpur	1	21	0
		Kanpur	2	16	0
		Lucknow	42	1819	6
		Varanasi	15	971	1
		Dehradun	4	140	0
30	Uttaranchal	Pantnagar	1	0.39	0
31	West Bengal	Bagdogra	17	1202	2
		Kolkata	194	16405	137
India Total			2916	211622	1599

Source: Material supplied by DGCA, M/o Civil Aviation

**Table 5D.2 : Airportwise International Traffic
Handled per Day during 2008-09**

Sl. No.	State	Name of the Airport	International Terminal		
			Avg. No. of flights handled per day	Avg. no. of passengers handled per day (nos.)	Avg. cargo handled per day (in Tonnes)
1	A & N Island	Portblair	0	0	0
2	Andhra Pradesh	Hyderabad	33	4293	81
		Vijayawada	0.003	0.008	0
3	Assam	Guwahati	100	7282	2
4	Bihar	Gaya	2	130	0
5	Delhi	Delhi	163	21286	824
6	Goa	Goa	8	1068	2
7	Gujarat	Ahmedabad	15	1875	28
8	J & K	Srinagar	0.48	45	0
9	Karnataka	Bangalore	38	4498	273
		Mangalore	7	566	0
10	Kerala	Calicut	46	4154	34
		Cochin	52	5506	69
		Trivandrum	36	4038	83
11	Maharashtra	Mumbai	180	22244	1046
		Nagpur	4	237	1
		Pune	2	75	0
		Aurangabad	0.12	12	0
12	Punjab	Amritsar	10	1202	5
13	Rajasthan	Jaipur	8	607	1
		Udaipur	0.06	0.32	0
14	Tamil Nadu	Chennai	83	10038	604
		Coimbatore	3	245	3
		Tiruchirapalli	11	1035	2
15	Uttar Pradesh	Agra	0.13	7	0
		Lucknow	6	459	0.1
		Varanasi	2	121	0.008
16	West Bengal	Kolkata	31	2746	112
India Total			840	93769	3170

Source : India Air Transport Statistics published by DGCA, M/o Civil Aviation

Table 5D.3 : Airlinewise Domestic Traffic Operations during 2008-09

Sl. No.	Name of the Airline	Passenger Traffic				Cargo Traffic				
		Passenger Carried (In '000)	Passenger km Carried (In Million)	Seat km Available (In Million)	Passenger Capacity Utilisation %	Cargo Carried (In Tonnes)		Tonne km Performed (In Million)	Tonne km Available (In Million)	Cargo Capacity Utilisation %
					Mail	Freight				
Public Airlines										
1	Indian Airlines	5419	5550	9408	59.0	14083	59535	554	967	57.3
2	Alliance Air	318	207	362	57.2	6336	5627	29	48	60.4
4	Air India	381	343	1675	20.5	18	8349	41	228	18.0
5	Air India Express	173	172	517	33.3	0	0	17	53	32.1
Total Public		6292	6272	11962	52.4	20437	73511	641	1296	49.5
% Share of Public Airlines to Total Airlines		15.9	16.6	20.2	-	86.1	29.1	18.2	21.9	-
Private Airlines										
6	Jet Airways	7923.2	6883.5	10296.9	66.9	2800	82100	665.9	1122.5	59.3
7	Jetlite	3174.4	3694.1	5488.2	67.3	400	8500	296.9	480.8	61.8
8	Air Deccan	2578.4	2237	3305	67.7	0	0	195.7	297.5	65.8
9	Go Air	1128.5	1038.7	1509.9	68.8	100	600	93.7	134.4	69.7
10	Indigo Airlines	4917.4	5044.5	7243.5	69.6	0	34600	492.4	732.5	67.2
11	Kingfisher	8563.8	7345.2	11595.5	63.3	0	53700	644	1073.9	60.0
12	Spicejet	4099.5	4761.2	7208.4	66.1	0	0	452.3	719.9	62.8
13	MDLR	100.4	69.1	86.1	80.3	0	0	6.6	8.7	75.9
14	Paramount Airways	689.9	359.8	463.5	77.6	0	0	32	41.7	76.7
Total Private		33175.5	31433.1	47197	66.6	3300	179500	2879.5	4611.9	62.4
% Share of Private Airlines to Total Airlines		84.1	83.4	79.8	-	13.9	70.9	81.8	78.1	-
India Total		39467.1	37705.1	59159.0	63.7	23737.0	253011.0	3520.5	5907.9	59.6

Source: India Air Transport Statistics published by DGCA, M/o Civil Aviation

Table 5D.3 (contd.) : Airlinewise Domestic Traffic Operations during 2007-08

Sl. No.	Name of the Airline	Passenger Traffic				Cargo Traffic				
		Passenger Carried (In '000)	Passenger km Carried (In Million)	Seat km Available (In Million)	Passenger Capacity Utilisation %	Cargo Carried (In Tonnes)		Tonne km Performed (In Million)	Tonne km Available (In Million)	Cargo Capacity Utilisation %
						Mail	Freight			
Public Airlines										
1	Indian Airlines	6900	6883	10341	66.6	13451	71367	680	1016	66.9
2	Alliance Air	538	370	555	66.7	3983	5090	40	57	70.2
4	Air India	579	521	2012	25.9	6	12697	60	275	21.8
5	Air India Express	148	148	451	32.8	0	58	14	47	29.8
	Total Public	8165	7922	16087	49.2	17440	89212	794	1395	56.9
	% Share of Public Airlines to Total Airlines	18.4	19.0	25.4	-	86.0	31.6	20.7	23.3	-
Private Airlines										
7	Jet Airways	9771	8564	12073	70.9	2783	111430	833	1234.9	67.5
8	Jetlite	3123	3809.6	5361	71.1	54	10049	369	503	73.4
9	Air Deccan	7098	6259	8538	73.3	0	0	459	768	59.8
10	Go Air	1806	1530	1978	77.4	0	2971	135	176	76.7
11	Indigo Airlines	3890	3862	5315	72.7	0	32609	385	538	71.6
12	Kingfisher	5786	5142	7549	68.1	0	36017	426	727	58.6
13	Spicejet	4095	4343	6012	72.2	0	0	413	604	68.4
14	Paramount Airways	652	287	405	70.9	0	0	25	37	67.6
	Total Private	36220	33796.6	47231	71.6	2837	193076	3045	4587.9	66.4
	% Share of Private Airlines to Total Airlines	81.6	81.0	74.6	-	14.0	68.4	79.3	76.7	-
	India Total	44384	41719	63318	65.9	20277	282288	3839	5983	64.2

Source: Material supplied by DGCA, M/o Civil Aviation

Table 5D.4 : Airlinewise International Traffic Operations during 2008-09

Sl. No.	Name of the Airline	Passenger Traffic				Cargo Traffic				
		Passenger Carried (In '000)	Passenger km Carried (In Million)	Seat km Available (In Million)	Passenger Capacity Utilisation %	Cargo Carried (In Tonnes)		Tonne km Performed (In Million)	Tonne km Available (In Million)	Cargo Capacity Utilisation %
						Mail	Freight			
Public Airlines										
1	Indian Airlines	2142	5029	7657	65.7	71	10391	513	723	71.0
2	Air India	2453	15051	24887	60.5	1795	63494	2083	3688	56.5
3	Air India Express	2064	5404	7141	75.7	0	0	537	755	71.1
Total Public		6659.24	25484	39685	64.2	1866	73885	3133	5166	60.6
% Share of Public Airlines to Total Airlines		66.27	62.55	63.83	-	58.94	43.26	63.44	58.62	-
Private Airlines										
4	Jet Airlines	3107.3	14562.3	21355.3	68.2	1000	95400	1741.1	3540.1	49.2
5	Kingfisher	87.9	549.8	932.1	59.0	-	1400	52.5	90.9	57.8
6	Jetlite	194.6	145.4	199.1	73.0	300	100	11.6	15.3	75.8
Total Private		3389.8	15257.5	22486.5	67.9	1300	96900	1805.2	3646.3	49.5
% Share of Private Airlines to Total Airlines		33.73	37.45	36.17	-	41.06	56.74	36.56	41.38	-
India Total		10049.0	40741.5	62171.5	65.5	3166.0	170785.0	4938.2	8812.3	56.0

N.B. Kingfisher Airlines started its international operations on 3 September, 2008

Source: India Air Transport Statistics published by DGCA, M/o Civil Aviation

Table 5D.4 (contd.) : Airlinewise International Traffic Operations during 2007-08

Sl. No.	Name of the Airline	Passenger Traffic				Cargo Traffic					
		Passenger Carried (In '000)	Passenger km Carried (In Million)	Seat km Available (In Million)	Passenger Capacity Utilisation %	Cargo Carried (In Tonnes)		Cargo km Carried (In Million)	Tonne km Performed (In Million)	Tonne km Available (In Million)	Cargo Capacity Utilisation %
						Mail	Freight				
Public Airlines											
1	Indian Airlines	2469	5899	8289	71.2	80	14705	36	603	793	76.0
2	Air India	3260	17595	27987	62.9	2031	71730	421	2116	4123	51.3
3	Air India Express	1565	4077	5498	74.2	0	2281	7	421	594	70.9
Total Public		7294	27571	41774	66.0	2111	88716	464	3140	5510	57.0
% Share of Public Airlines to Total Airlines		80.08	76.31	76.70	-	78.77	63.27	58.68	75.16	72.61	-
Private Airlines											
4	Jet airways	1640	8360	12387	67.5	384	51085	325.5	1018	2052	49.6
5	Jetlite	174	200	303	66.0	185	420	1.2	20	27	74.1
Total Private		1814	8560	12690	67.5	569	51505	326.7	1038	2079	49.9
% Share of Private Airlines to Total Airlines		19.92	23.69	23.30	-	21.23	36.73	41.32	24.84	27.39	-
India Total		9108	36131	54464	66.3	2680	140221	791	4178	7589	55.1

N.B. Kingfisher Airlines started its international operations on 3 September 2008

Source: Material supplied by DGCA, M/o Civil Aviation