



Prof P.S.Senguttuvan

Head, Economic Planning & Research

**Delhi International Airport Private Limited** 

**Indira Gandhi International Airport** 

New Delhi- India

## **Topics of Discussion**

- Global & Regional Economy
- Air Transport & Its Economic Importance
- Factors Influencing Air Travel Demand
- Global Air Transport Trends
- Regional Traffic Distribution
- Market Access
- Challenges
- Conclusion

## Global & Regional Economy

- World GDP growth was 4.9% powered by growth in China, India & Russia
- Industrialized Economies GDP growth was 2.7%
- Emerging Economies led by the giants of China, India, Russia & Brazil were very strong and grown @ of 7.0% to 10.0%
- World Trade expanded significantly by 5.5% (US \$ 14240 Billion)
- World Commercial services in Exports rose by 18.0% to US \$ 3.3
   Trillion
- Transport & Travel in world export were grown @ 18.0% & 14.0%
- International Tourists Arrivals was up by 6.6%
- Foreign Direct Investment was grown @ of 17.8% touching US \$ 1.5
   Trillion

## Global & Regional Outlook - 2007

Regions	GDP	World Trade
African	6.2%	6.5%
Asia Pacific	7.2%	10.0%
European	3.3%	3.5%
Middle East	5.8%	6.5%
Latin America & Caribbean	5.6%	12.5%
North America	3.3%	4.0%
World	4.9%	5.5%

## Air Transport Network

- International in character
- Close interlink with global economic growth GDP
- According to ACI, 4.8 billion passenger, 88.65 million tonnes of cargo and 76.46 million aircraft movements performed during 2007
- 80987 take-off and carrying 9.6 million passenger per day world wide
- Network has become a highway for world commerce
- Indicator to oversee the national economy
- AT network drives economic progress through promoting leisure and business activities
- AT contributes approximately US \$ 2.0 Trillion to World GDP, which equals to 3.0% of the world GDP
- Recent economic trends evolves the aviation industry to transform privatization, cross border acquisition, strategic market alliance & merger of airlines globally

- AT Network is increasing globally due to strong economic growth, liberalization & open skies policies
- Commercial aviation business is continuing implausible sea change & transforming the state economy to grow worldwide without any geographical boundaries
- In parallel with global air traffic growth, emerging economies air travel market is revealing a tremendous growth surpassing other matured economies
- Emerging LCC (New Airline Business Model) attracting wide travel market to fill the growing demand
- Aviation Technology supports towards transforming and creating e-business flourish worldwide to attract market through internet booking

## **Economic Importance**

- Facilitating World Trade
- Indispensable for Tourism
- Improves Productivity
- Influencing Investments & Innovation
- Supports Business Operations & Efficiency
- Just-in Time Delivery High value Products
- Generation of employment opportunities
- Public funds contribution
- Taxation
- Exploring & Expanding Consumer choice & Opportunities

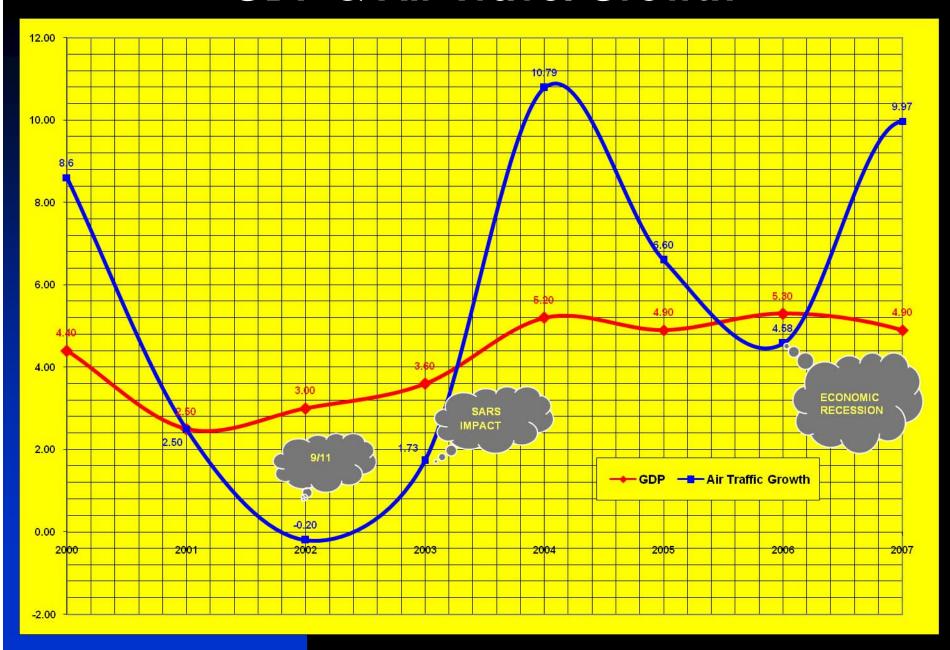
#### **Factors Influencing Air Travel Demand**

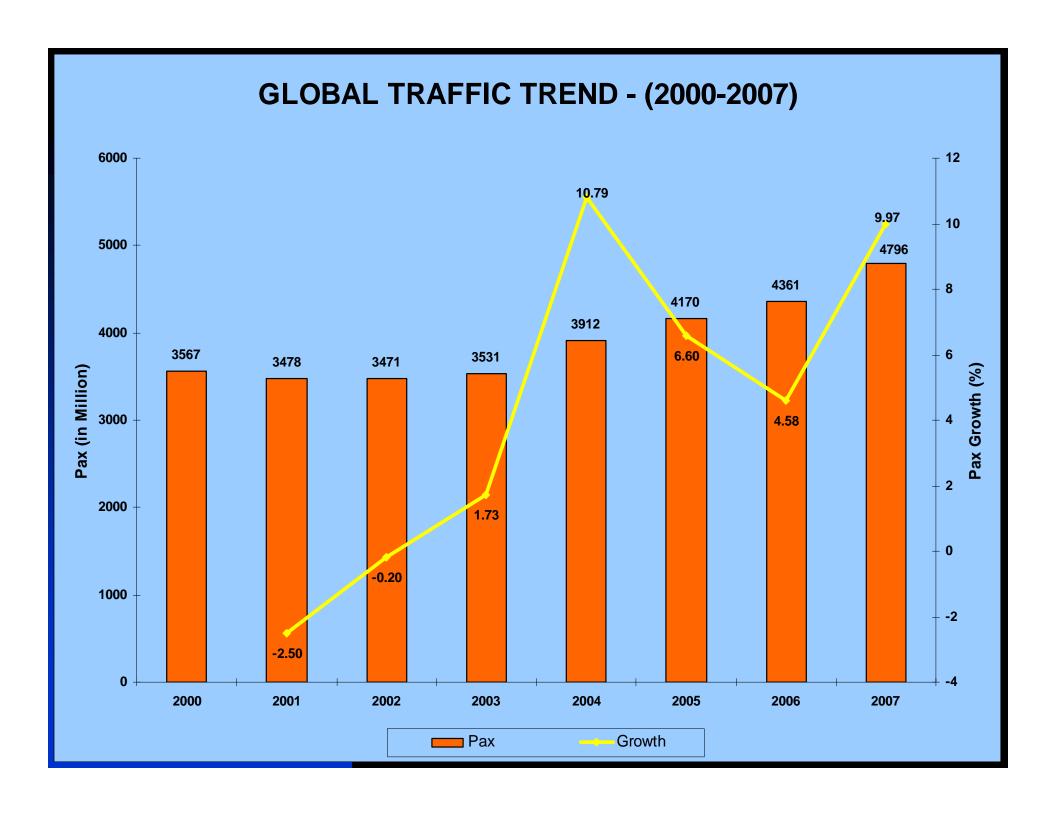
- Gross Domestic Product
- Liberalization & Globalization
- Market Competition
- Industrial Growth
- Rise in Per Capita Income
- Increase in Personal Disposable Income
- New Airline Business Model LCC
- Falling Real Cost of Air Fare
- Growth in International Trade
- Political Stability
- Relaxation of Travel Restrictions
- Ethnic Ties Expanding
- Increasing Leisure Time
- Tourism Promotion
- Foreign Direct Investment

#### Global Air Travel Market

- World wide air travel grown @ of 7.0% showing strong markets in China, India & UAE
- Largest single market in the world remains the USA followed by China (350 Million) and UK (250 Million)
- International and Domestic passenger traffic grown @ of 7.0% and 6.0%
- Air freight traffic grown @ 3.2% handling 88.65 million tonnes during 2007
- Aircraft movements was up by 2.4% disclosing industry world wide moved into wide body aircraft
- Global average on Pax Load factors was 77.0%
- Traffic Ratio 42:58
- Pax revenue accounts to 79.1% of the total aviation revenue

#### **GDP & Air Travel Growth**



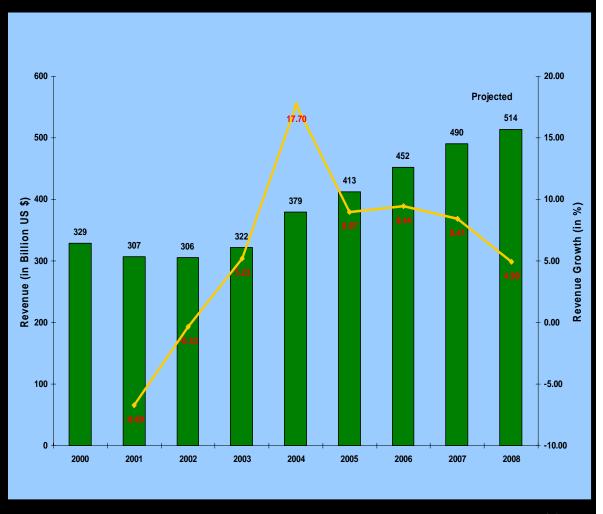


#### Global Air Traffic Growth Performance - 2007

Regions	RPK	ASK	PLF	FTK	ATK
Africa	8.0%	7.0%	69.2%	-6.0%	5.6%
Asia Pacific	7.3%	5.7%	76.0%	6.5%	6.2%
Europe	6.0%	5.2%	77.5%	2.7%	3.9%
Latin America	8.4%	9.1%	72.9%	-5.4%	7.8%
Middle East	18.1%	14.5%	75.9%	10.1%	13.9%
North America	5.5%	4.6%	80.9%	0.7%	2.1%
Global Industry Average	7.4%	6.2%	77.0%	4.3%	5.3%

#### Global Aviation Revenue – (2000-2008)

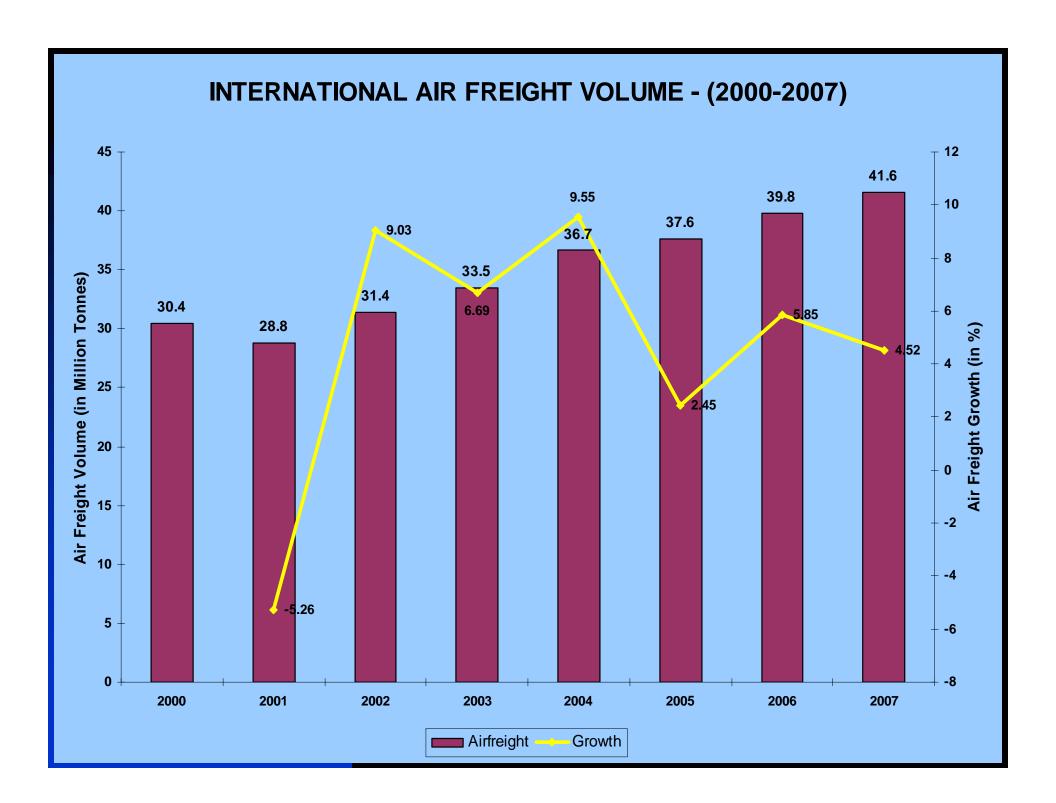
Year	Pax	Cargo	Others	Total
2000	256	40	33	329
2001	239	39	29	307
2002	238	38	30	306
2003	249	40	33	322
2004	294	47	38	379
	-			
2005	323	48	42	413
2006	355	52	45	452
2007	390	52	48	490
2008	410	54	50	514

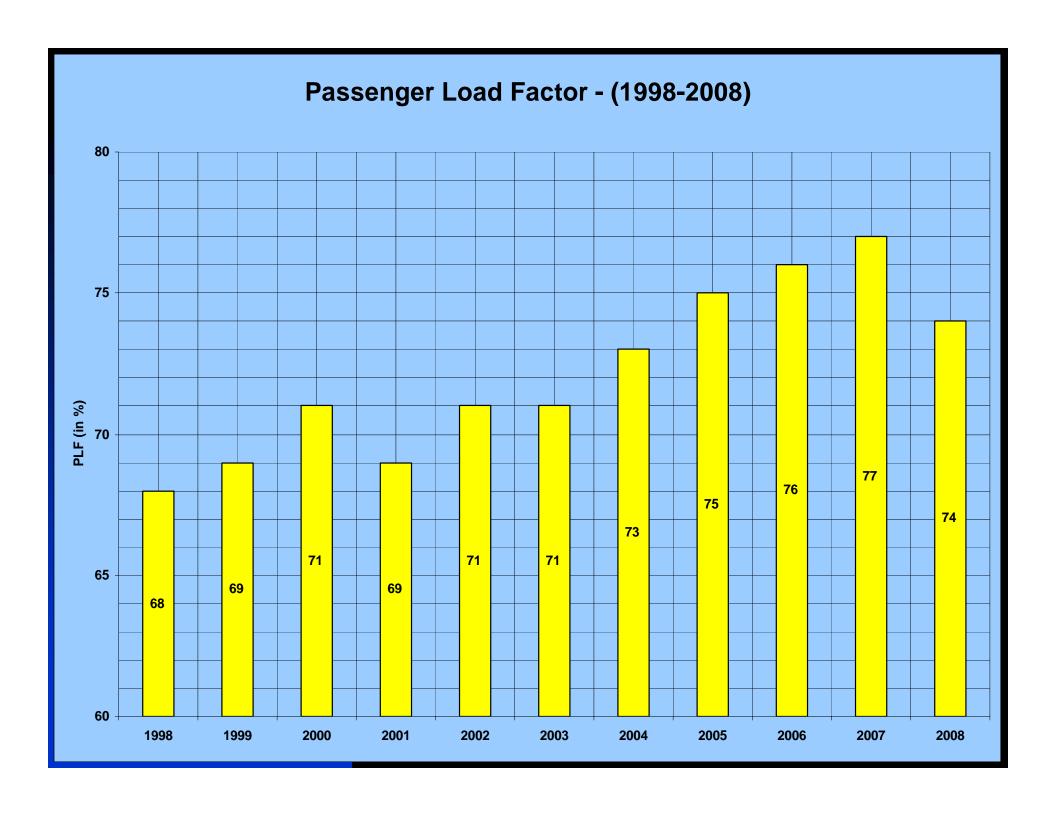


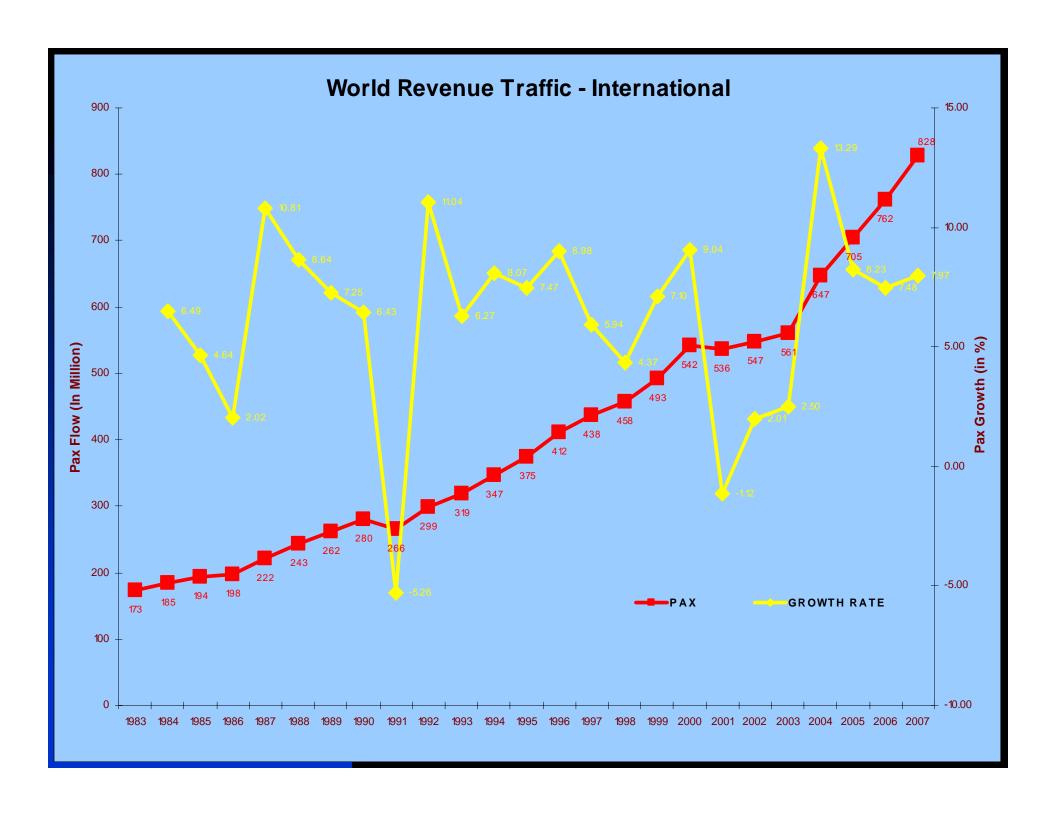
Revenue in Billion US \$

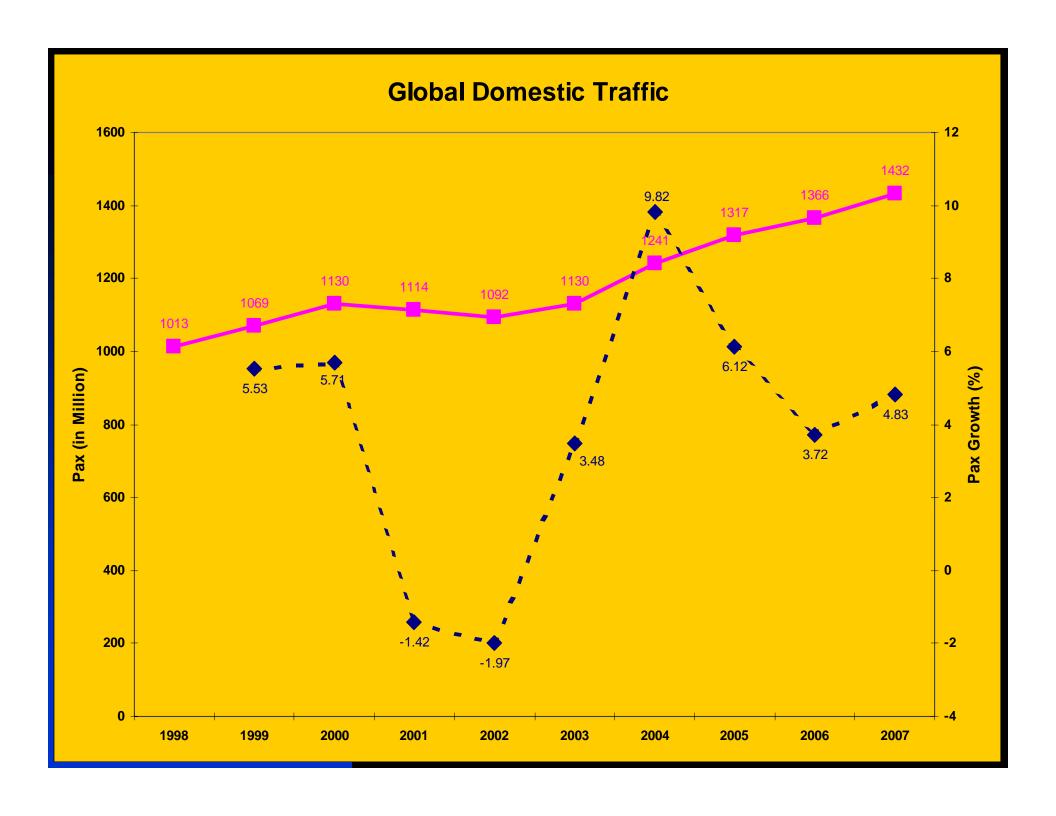
## Top 20 Countries - 2007

	Pass engers	chan ge	Aircraft myts	c han ge	Cargo tonnes	change	Airports
	(thousand)	%		%		%	
USA	1,450,454	3.3	31,046,185	-1.8	29,296,597	-1.0	165
China	349,833	14.3	3,088,401	10.1	11,347,732	9.8	41
United Kingdom	242,995	2.3	3,320,418	-0.7	2,558,932	1.0	37
Spain	210,034	8.7	2,484,601	7.8	676,616	0.8	46
Japan	203,531	0.3	1,179,069	2.3	5,244,337	-0.8	9
Germany	185,739	6.0	2,489,988	2.3	3,496,497	8.5	22
France	140,179	5.0	2,519,628	0.0	2,687,298	6.2	46
Italy	129,241	9.9	1,571,317	7.3	897,091	5.2	24
Brazil	120,403	7.8	2,187,092	6.6	1,524,899	4.8	80
Canada	101,192	6.0	3,074,787	7.7	1,135,934	0.8	31
Australia	101,127	6.9	1,219,298	2.8	2,930	8.0	12
India	99,926	24.0	1,099,529	18.3	1,666,906	10.4	16
Mexico	85,250	13.8	1,661,183	11.7	729,005	-0.1	36
Turkey	66,848	13.2	620,331	9.9	404,202	12.9	9
Korea	64,941	5.9	482,454	13.5	3,040,205	4.8	4
Thailand	57,155	8.4	461,734	16.4	1,296,155	4.6	6
Indonesia	56,204	9.7	620,851	0.4	649,151	20.1	13
Russian Federation	51,568	19.3	639,758	16.1	359,770	6.9	8
Netherlands	50,655	4.1	551,300	3.6	1,743,020	5.6	4
Malaysia	46,508	6.6	637,759	-7.1	1,020,521	-4.8	25





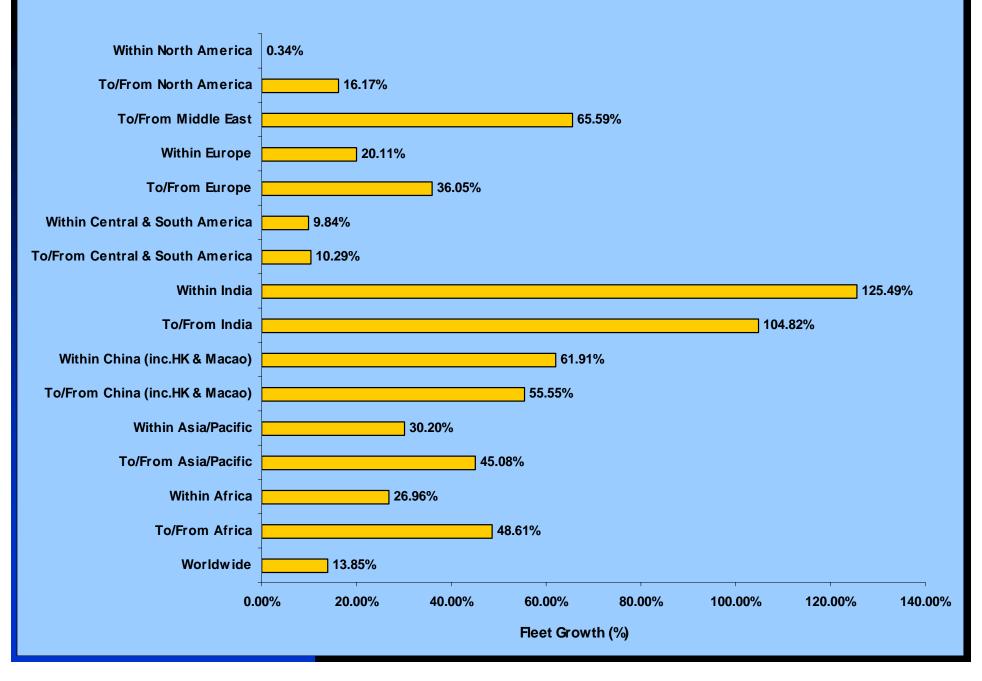




#### Fleet Growth Trend - (2004 - 2008)

Passenger Flights by Region	2004	2005	2006	2007	2008	2008 v	s 2004
Worldwide	2,243,013	2,367,951	2,399,815	2,513,642	2,553,657	310,644	13.85%
To/From Africa	20,232	22,491	24,446	27,759	30,067	9,835	48.61%
Within Africa	46,693	51,844	49,647	51,695	59,282	12,589	26.96%
To/From Asia/Pacific	37,666	40,189	45,151	48,079	54,647	16,981	45.08%
Within Asia/Pacific	410,887	445,483	479,550	517,685	534,964	124,077	30.20%
To/From China (inc.HK & Macao)	27,299	30,543	33,023	38,689	42,464	15,165	55.55%
Within China (inc.HK & Macao)	94,891	110,453	124,471	147,348	153,634	58,743	61.91%
To/From India	8,480	10,120	12,408	13,243	17,369	8,889	104.82%
Within India	21,731	23,318	34,761	43,392	49,002	27,271	125.49%
To/From Central & South America	52,307	54,577	55,336	55,437	57,687	5,380	10.29%
Within Central & South America	171,949	172,144	179,438	185,711	188,868	16,919	9.84%
To/From Europe	72,669	78,230	84,963	90,730	98,867	26,198	36.05%
Within Europe	522,448	557,321	582,536	611,746	627,521	105,073	20.11%
To/From Middle East	24,343	27,029	31,247	33,720	40,310	15,967	65.59%
To/From North America	78,365	82,622	84,719	86,573	91,038	12,673	16.17%
Within North America	922,810	961,537	914,431	940,306	925,936	3,126	0.34%





## Regional Traffic Distribution

- High growth regions are Middle East (13.4%) followed by African (11.2%), Asia Pacific (+ 9.1%) & Europe (7.2%)
- Europe shared 31.0% of the world traffic and set to surpass North American (32.0%) region having largest share of air traffic market
- Asia Pacific region is projected to overtake North America, Europe by 2020
- Fastest growing regions South Asia, North East Asia,
   Middle East, African & Latin America & Caribbean
- European region shares the maximum traffic of international (80.0%)
- North America & Asia Pacific regions concentrates major traffic on domestic routes

### Air Traffic Trend - Region wise

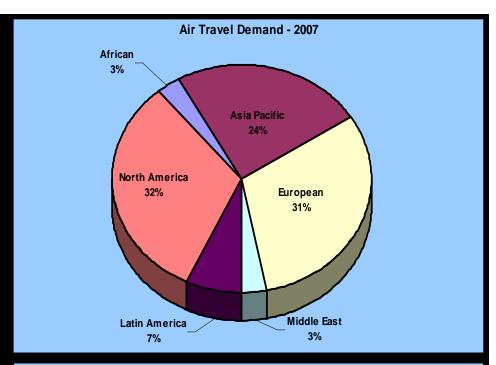
#### In Million

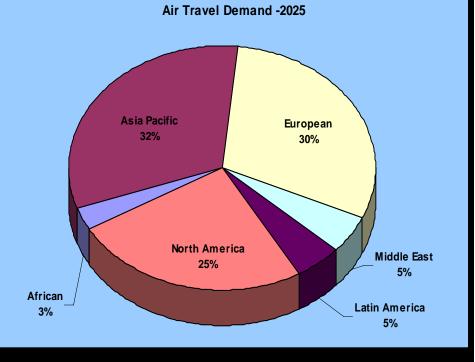
Regions	2004	2007	2008*
African	83.30	137.50	54.84
Asia Pacific	760.90	1149.87	492.52
European	1118.00	1472.84	687.17
Middle East	85.40	159.20	42.53
Latin America & Caribbean	192.00	328.16	142.09
N <mark>orth America</mark>	1411.30	1549.57	763.18

<sup>\*</sup> Figure Jan-June 2008

# Air Traffic Transformation

Region	2007	2025
African	3.0%	3.0%
Asia Pacific	24.0%	32.0%
Europe	31.0%	30.0%
Middle East	3.0%	5.0%
Latin America & Caribbean	7.0%	5.0%
North America	32.0%	25.0%





#### Market Access

- BAS agreements acts as a primary tool for liberalizing international air transport services for most states
- 3000 bilateral air services agreements (amendments and MOU) were in operations between the number of states concluded during these three decades (1978 2008)
- 70% and above of these agreements / MOU were some form of liberalized arrangements, such as expanded traffic rights (3rd, 4th & 5th) freedom traffic rights, multiple designation with or without route limitations, free determination of capacity, free pricing regime and airline ownership control
- BAS agreement included CRS, code sharing, leasing of aircraft and inter modal transport
- As on February 2008, 142 bilateral "Open Skies" agreements have concluded with 91 states, of which US shares in 78 cases
- 60% of the agreements granted "7th freedom traffic rights for all cargo services and
  - \* 11 agreements granting for passenger services
  - \* 10 agreements granted "8th Freedom" traffic rights for all services

#### Market Impact of Air Trade Services Negotiations

Progress of regional liberalization & economic integration interaction between regions increased further liberalization among the states and introduced "New Dimension in International Air Transport Market size"

Creation of Open Aviation Area (OAA): 2003 EU negotiated a comprehensive air services agreement on behalf of all member states with the US, so called "Horizontal" mandate to negotiate with 3rd countries in order augment the market expansion

Creation of Open Aviation Area (OAA) integrating EU's neighbouring states into the single aviation market with Morocco & Western Balkans in 2004, Ukraine in 2006, Jordan in 2007, Canada in 2007. Negotiating further with Israel, Russian Federation, Australia, Chile, China, India & New Zealand to boost and explore the air travel market

2007, ASEAN and China adopted an "Aviation Cooperation Framework to conclude an ASEAN – CHINA Regional Air Services Agreement"

## Global Comparison of Scheduled Airline Departing Seat Capacity (2007 Vs 2006)



## Today's Challenges

- Global Economic Crisis
- Global Safety & Security Threat
- Natural Disaster's
- Resource Crunch
- Environmental Issues
- Regulatory Issues
- Regional Imbalances

#### Conclusion

- New Civil Aviation Programmes of different countries may enhance air traffic market potential and in the process of integrating into world map for efficient operations
- Today civil aviation industry is facing major problems in the resources and thus impacting the Global Air Traffic Market
- Let us presume the optimistic approach towards strong growth trend in the coming decade