Annual Report 2009

Annual analyses of the European air transport market

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SUMMARY

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EUROPEAN COMMISSION

Annual analyses of the European air transport market

Annual Report 2009

German Aerospace Center

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Content

2009 in a nutshell

	WORLD	Source	EUROPE	Source
Passengers	**-0.7%**	ICAO	**-1.7%** **-5.9%** (EU-27)	ICAO Eurostat
Revenue Passenger Kilometres (RPK)	**-1.9%**	ICAO	**-2.4%**	ICAO
Available Seat Kilometres (ASK)	**-2.1%**	ICAO	**-2.4%**	ICAO
Freight tonne-km performed (FTK)	**-10.4%**	ICAO	**-16.6%**	ICAO
Total tonne-km performed*	**-4.3%**	ICAO	**-5.8%**	ICAO
Available Tonne Kilometres (ATK)	**-3.5%**	ICAO	**-5.0%**	ICAO
Aircraft Orders -by Operator area-	**-52.1%**	Ascend	**-12.8%** (Europe) **-34.8%** (EU-27)	Ascend Ascend
TOP Airport -Passengers-	**Atlanta (ATL)** 88 million (-1.9%)	ACI	**London (LHR)** 66 million (-1.5%)	ACI
TOP Airport -Movements-	**Atlanta (ATL)** 962,068 (-0.5%)	ACI	**Paris (CDG)** 518,018 (-6.0%)	ACI
TOP Airport -Freight-	**Memphis (MEM)** 3.7 million tonnes (+0.1%)	ACI	**Paris (CDG)** 1.8 million tonnes (-10.8%)	ACI
TOP Airline -Revenue Passenger Kilometres-	**Air France-KLM** 199,744 (-3.6%)			Ascend
Safety Performance -Fatalities by region of accident-	**954**	Ascend	**44** (Europe) **22** (EU-27)	Ascend Ascend

Air Traffic

On a global scale, the year 2009 was characterised above all by the crisis upon the global business and financial markets, reflecting the turbulences in the air since the latter half of 2008. This crisis had direct consequences upon demand and the market situation in air transport. In comparison with the year 2008, demand for passenger services fell by 1.9% (based upon passengers' kilometres travelled). This decline is the largest since 2002 for the air transport industry, which had been used to a growth of some 5% in prior years. In addition, demand was already stagnant in 2008, so the decline of 1.9% was based upon an already weak initial situation.

The demand for air cargo services in 2009 developed even more dramatically than the demand for passenger services. In this case, the transport volume fell by approximately 7% from approximately 157 billion freight tonne kilometres in 2008 to approximately 141 billion freight tonne kilometres in 2009.

The number of carried passengers in EU-27 declined in 2009 by 5.9%. The international extra-EU transport declined by 3.9% while the international intra-EU transport and the domestic transport decreased by nearly 8%. As was also the case globally, air freight transport in Europe in 2009 declined even more strongly than passenger transport. Thus, the overall volume of loaded freight declined in 2009 by 12.4% from 12.9 million t to 11.3 million t in comparison with the previous year.

Airlines

The airlines' supply, measured by the number of seats offered, was constantly adjusted to the demand expectations in 2009. As in 2008, the Full Service Network Carriers (FNSC) again reduced their capacity offered, this time by 1.9% (2008: -1%). In Europe and North America, supply was reduced by an average of 7%, whereby the slump in demand was of a similar magnitude.

At the forefront, due to varying rates of decline in revenue passenger kilometres, there was a change in favour of the European carrier Air France-KLM which, with just under 200 billion RPKs, is the world's largest airline in 2009. However, FSNC airlines from other regions grew during the crisis (+5.1% ASK), in particular those from the Middle East and China, which demonstrated double-figure growth. Regional carriers increased their capacity by as much as 5%, which was mainly due to an advantageous demand development in the second half-year. The Top 15 Holiday/Charter Carriers demonstrated dramatic supply losses in 2009; capacity sank by more than 14%. In 2008 these groups had already shown losses of a similar magnitude; however, the sector has been considerably altered through mergers and business failures. The market share of the current Top 15 group thus grew considerably in 2009. The Low-Cost Carrier capacity remained approximately at the level of the previous year – in Europe and North America with a slight minus, collectively just into positive figures.

For the 50 largest Full Service Network Carriers globally, the seat load factor was 76.8% in 2009 (-0.1 percentage points – ppts – vs. 2008), of which the therein included European airlines accounted for 77.1% (+0.6 ppts). The 25 largest Low-Cost Airlines achieved a load factor of 77.7% (+1.3 ppts). The European LCCs achieved a comparable 78.2% but sank thereby under the 80% level yardstick reached in 2008. The 25 largest Regional Carriers achieved 77.2% (+0.4 ppts), whereby the slight gain can not be measured against the leap of 8.6 ppts achieved by the two European Regional Airlines in this ranking. The Holiday/Charter Airline business model achieved the highest seat load factor with 84.3% (based on the 15 largest airlines concerned; -2.2 ppts). This ranking is dominated by the European airlines, which managed to achieve a high load factor of 85.9%, despite a moderate reduction of 1.7 ppts compared to 2008.

TOP 20 airlines worldwide

Rank 2009 RPK	Airline	Region	PAX (mill)	change	RPK (mill)	change
1	**Air France-KLM Group**	**EU-27**	**70.3**	**-4.8%**	**199,744**	**-3.6%**
2	American Airlines	North America	85.8	-7.6%	197,079	-7.1%
3	Delta Air Lines	North America	67.9	-5.4%	162,156	-4.7%
4	United Airlines	North America	56.1	-11.2%	161,740	-8.7%
5	Continental Airlines	North America	45.6	-6.4%	128,497	-3.6%
6	**Lufthansa**	**EU-27**	**55.4**	**-2.8%**	**122,511**	**-2.7%**
7	Southwest Airlines	North America	101.4	-0.6%	120,039	+1.3%
8	Emirates Airline	Middle East	25.9	+15.5%	118,284	+17.5%
9	**British Airways**	**EU-27**	**32.3**	**+0.2%**	**112,371**	**+1.4%**
10	Northwest Airlines	North America	41.1	-16.0%	101,341	-12.1%
11	US Airways	North America	51.0	-6.9%	93,193	-4.4%
12	China Southern Airlines	Asia-Pacific	66.3	+13.8%	92,954	+11.8%
13	Cathay Pacific	Asia-Pacific	24.3	-2.6%	88,932	-2.2%
14	Singapore Airlines	Asia-Pacific	16.3	-14.7%	81,552	-12.9%
15	Qantas	Asia-Pacific	22.8	-6.9%	75,580	-7.2%
16	Japan Airlines International	Asia-Pacific	42.0	-10.4%	73,740	-10.2%
17	Air China	Asia-Pacific	39.8	+16.3%	73,369	+11.1%
18	Air Canada	North America	22.2	-4.3%	71,073	-4.9%
19	**Ryanair**	**EU-27**	**65.3**	**+13.2%**	**68,733**	**+10.9%**
20	China Eastern Airlines	Asia-Pacific	44.0	+18.3%	60,917	+13.3%

Sources: Ascend, Airline Business

In 2009, the number of new routes from EU-27 exceeded the number of closed routes by 139. This effect is markedly more pronounced for Low-Cost Carriers (LCCs); here, the difference is 255.

Although the economic crisis happened in 2008, its full impact first reached airlines in 2009. Overall demand – with regard to passenger traffic as well as cargo traffic – decreased and this caused strong turbulences with regard to the financial performance of many European airlines. This applies particularly for the established Full Service Network Carriers. The larger ones amongst those in Europe had to cope with double-digit declines in revenues during the time span of 2008 to 2009. Resulting from this development, the operating result of these players was mainly signified by negative figures of up to more than € -300 million on average. A little more relaxation could only be seen on the side of the Low-Cost Carriers, which also had to handle declines in revenues and operating results, but were nonetheless partially able to adhere to their growth plans. Nevertheless, the year 2009 was not compatible with the relatively stable financial performance of years prior to 2008. This development could not be balanced by the fallen fuel price, which was remarkably lower in 2009 than in 2008 as a result of the economic crisis and fallen global demand.

In 2009, all airline alliances reduced their supply of seats offered, ranging from -2.7% for Star Alliance to -6.0% for Oneworld, with Skyteam in between (-4.6%). However, FSNCs not belonging to any airline alliance increased their number of seats offered by 2.0%.

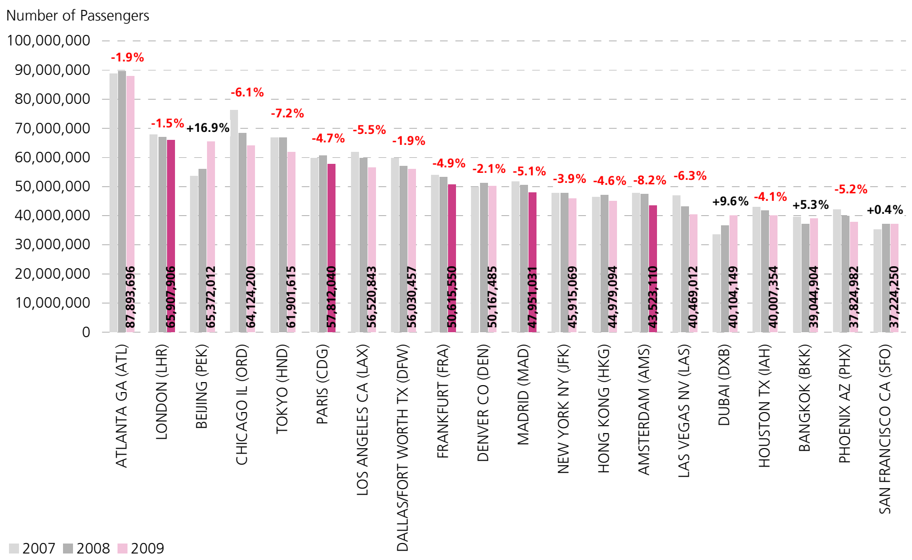
The air cargo industry has seen its worst period in decades. European domestic air freight volume has shown a decline of 9.1%. Intra-EU freight volume was down by about 5.7%, extra-EU freight volume sank by 13.9%. Within a few months, the freight branch lost eight years of growth and with regard to the worldwide transport, volume fell back to the level of the year 2000.

Airports

As reported by the Airports Council International (ACI), 2008 marked a break in the growth in passenger numbers experienced during recent years. Starting with positive results, the year 2008 halted the positive trend in airports' figures. This trend continued until the middle of 2009, so that there were in 2009 about 54 million commercial passenger aircraft movements worldwide, which is around 4% less than in 2008. Within the second half year of 2009, most airports registered positive growth rates against same quarters the year before.

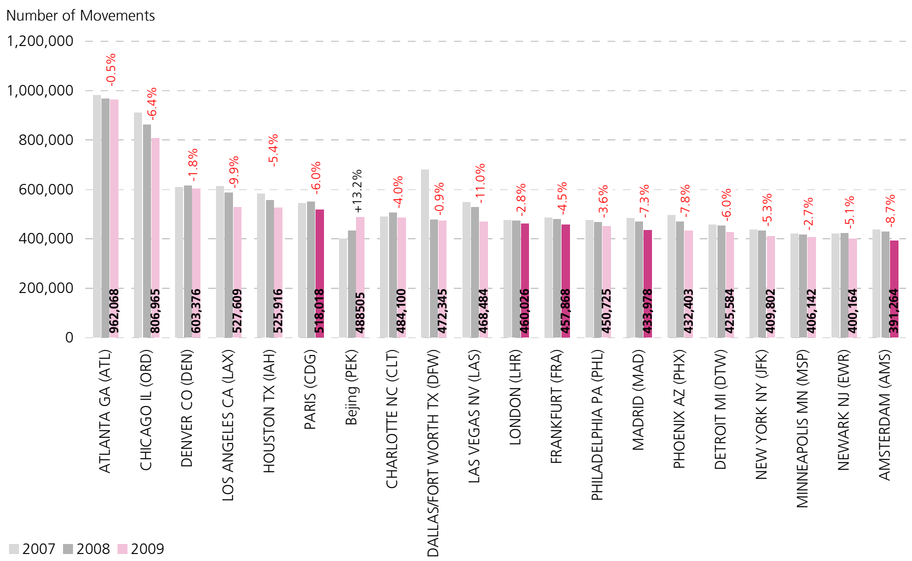
The Top 20 airports worldwide ranked by passenger numbers are made up of five EU, eleven US and four Asian airports. The two busiest airports worldwide are still the US airport Atlanta Hartsfield-Jackson International and, this time in second place, London Heathrow.

The largest European airport in terms of passenger numbers is London Heathrow. The traffic growth rates for the five largest EU airports within the world Top 20 were all negative: traffic was between 1.5% (London Heathrow) and 8.2% (Amsterdam Schiphol) lower than in 2008.



Source: ACI 2010

The Top 20 in terms of commercial aircraft movements is dominated by US and European airports (14 and five airports respectively, only one Asian airport). The two largest airports worldwide are, once again, the US airports Atlanta Hartsfield-Jackson International and Chicago O'Hare International. The largest European airport is Paris Charles De Gaulle, which appears in seventh place worldwide, followed by London Heathrow in twelfth place. Of the five European airports, London Heathrow shows the smallest decline in aircraft movements (-2.8%) while Amsterdam Schiphol has a decrease of 8.7%.



Source: ACI 2010

Forecasts

In 2009, long-term forecasts were published by the regional aircraft manufacturers Bombardier and Embraer and the engine manufacturer Rolls Royce, as well as the forecasts from the aircraft manufacturers Airbus and Boeing. The economic crisis, beginning in 2008, was partly mentioned in the forecasts; however, it generally had no effect on the results of the long-term analysis, as economic cycles were considered to have been accounted for. Starting from a comparable basis of 4,600 billion PKM in 2008, the average annual growth through to 2028 varies by only 0.2% between Boeing and Airbus. While Airbus assumes an average annual growth of 4.7% throughout the given period, Boeing assumes 4.9%.

Eurocontrol published a Short-Term and a Medium-Term Forecast in 2009. From 2009 to 2010, a growth of 1.7% is expected for IFR movements, allowing a forecast margin of 4.4 to 5.5%. The expected growth differs considerably regionally, as already experienced in the past. In the Medium-Term Forecast, three scenarios were presented: Eurocontrol assume for the forecast period from 2009 to 2015 an average yearly growth in flight movements of 2.0% in the Baseline Scenario, 3.4% in the High and 0.5% in the Low Scenario. In the forecast-year 2015, these growth rates would lead to 10.4 million IFR movements in the Low, 11.6 million in the Baseline, and 12.8 million IFR movements in the High Scenario.

Regulatory

Due to the negative effects of the global economic and financial crisis for air carriers, Regulation (EC) No 545/2009 on common rules for the allocation of slots at Community airports came into force at the end of June 2009 to ensure that the non-utilisation of slots allocated for the summer 2009 scheduling period does not cause air carriers to lose their entitlement to those slots. As a temporary measure, it will help airlines cut costs by allowing them to cut capacity more easily at busy airports, knowing that their slots will be safeguarded for the next summer season 2010. In order to react to further effects of the crisis, the Commission shall continue to analyse the impact of the economic crisis on the air transport sector and could make a proposal to renew the arrangements contained in this Regulation for the winter 2010/2011 scheduling period. Such a proposal should be preceded by a full impact assessment.

In 2009, the Commission further implemented the European external aviation policy in order to bring air services agreements in line with Community law and to create new economic opportunities for the air transport industry. To ensure competition and a level playing field for all stakeholders, the Commission was also engaged in several cases concerning state aid, merger control and antitrust and set common principles for the levying of airport charges at Community airports.

The reform of the European air traffic control system aims to meet the challenge of large increases in air traffic expected in the coming years. It also aims to increase safety and reduce costs, delays and the impact of air traffic on the environment. This policy was also pursued in 2009.In February 2009, the EU Directive for the inclusion of international aviation into the EU Emissions Trading Scheme for the limitation of CO_2 emissions came into force. The European Commission aims to improve the quality of the environment by counteracting the growing impact of aviation on climate change. Therefore, aviation will be included in the existing EU

Emissions Trading Scheme by the year 2012. From 2012 onwards, the EU Emissions Trading Scheme will cover virtually all flights departing from or arriving in the EU.

Based on Regulation (EC) No 2111/200577 ("list of banned airlines"), the European Commission, in close cooperation with the authorities responsible in the Member States, has the right to ban operators from operating in EU airspace, should international safety standards be violated. At the end of 2009, all carriers from Angola (with the exception of TAAG's restricted services into Lisbon), Benin, the Democratic Republic of Congo, Djibouti, Equatorial Guinea, Gabon (except for selected aircraft of Gabon Airlines, Afrijet and Nouvelle Air Affaires Gabon), Indonesia, Kazakhstan (with the exception of Air Astana operating under restrictions and conditions), Kyrgyzstan, Liberia, the Republic of Congo, Sierra Leone, Sao Tome and Principe, Swaziland and Zambia were blacklisted. In addition, all operations of Air Koryo from the Democratic People's Republic of Korea, Air West from Sudan, Ariana Afghan Airlines from Afghanistan, Siem Reap Airways International from Cambodia and Silverback Cargo Freighters from Rwanda remained on the blacklist. Finally, three more carriers are only allowed to operate under certain restrictions and conditions. These are: Air Bangladesh, Air Service Comores and Ukrainian Mediterranean Airlines.

In January 2010, the European Commission published a report on the application of Regulation (EC) No 2111/2005 as required under Article 14 of the said regulation. The application of the "the list of banned airlines" has demonstrated, on the one hand, that it is a successful tool in contributing to ensure a high level of safety in the Community. On the other hand, it cannot be seen as a blanket cover for the safety performance of airlines. There are, therefore, a number of areas where the European Commission intends to further develop its policy.

Consumer

According to the AEA's data on the winter season 2008/09, which comprises the months November to March, the AEA member airlines achieved a punctuality of 82.3% (arrival) and 83.2% (departure) on inner-European and medium-haul flights. The European Regions Airline Association (ERA) reported a positive trend in departure punctuality figures, which reached 88% (2008: 85%) in 2009. The recovery in punctuality apparently correlates with the reduction in traffic resulting from the decline in demand.

With regard to delays due to Air Traffic Flow Management, it can be seen that 747,108 (7.8%) of all registered flights were delayed. Compared to the previous year, delays caused by ATFM have been reduced by 38.4% on average. Reductions range from an incredible -63% in February to a still enormous -21% in October. The largest contribution to this vast improvement is probably the 6.4% reduction in traffic. In general, the risk of delay rises disproportionally high with increasing traffic and now it can be seen that this phenomenon also applies in reverse.

There are a series of connections within Europe on which air traffic is severely at risk of delays due to Air Traffic Flow Management intervention. The most serious delays generally occur during the summer holiday months. The route from Scandinavia to Greece is regarded as the most affected traffic flow between May and September. Between 37% and 60% of all traffic on this route is subject to capacity-related delays. Despite declining traffic levels (-10% in January) and reductions in ATFM delays, the delays at some airports increased considerably. London Heathrow, Paris Charles de Gaulle, Frankfurt, Munich, Brussels, Vienna, Geneva, Milan, Madrid and Istanbul airports were particularly affected by such reductions in arrival capacities.

Manufacturers

Due to the global economic recession, 2009 marked a difficult year for airframe and engine manufacturers. Orders for new civil aircraft were more than halved from 1978 aircraft in 2008 to 948 in 2009. Nevertheless, the number of new orders exceeded the figures from 2003 and 2004, when airlines were hit by the aftermath of September 11th. This implies that most airlines are rather optimistic about the business prospects for the near future. Most new orders in 2009 came from European airlines (340 orders in geographical Europe), while in 2008, carriers from the Middle East topped the list (407 orders).

The decline in orders for new aircraft hit Airbus and Boeing almost equally. The two world-leading manufacturers of commercial airplanes had to cope with a decline of about 60% in new orders compared to 2008. Among the smaller manufacturers, ATR and Bombardier increased the number of aircraft sold, mainly as demand for fuel-efficient turboprop aircraft (in the case of ATR) and for a new generation of new regional jets (Bombardier’s CSeries) increased. Overall, the order books for all manufacturers of commercial aircraft combined declined to about 8,000 aircraft, down by US$ 70 billion to US$ 876 billion at list prices.

Despite the crisis, deliveries of new commercial aircraft increased year-over-year by 7.2% to 1,250 aircraft. This is mainly attributable to the fact that Boeing was hit by a strike in 2008, which seriously affected the delivery schedule for a large number of aircraft. Additionally, fuel-efficient aircraft are still in demand by airlines globally to replace less efficient jets. Finally, the business model of low-cost airlines, operating with modern aircraft delivered directly from the manufacturer, is thriving not only in Europe and North America, but also at an increasing pace on other continents.

In the segment of business jets, it is not an exaggeration to say that the market almost collapsed in 2009. The number of new orders declined by more than three-quarters compared to 2008 (from 499 down to 124 aircraft) and the number of deliveries fell by almost a third.

Safety

In 2009, the number of fatalities in air transport rose, bringing to an end a decreasing trend which started in 2005. The total number of fatalities amounted to 954, compared to 682 in 2008. The number of hull losses, however, decreased from 102 in 2008 to 73 in 2009. The worst accident of the year happened about 1,000km northeast of Fernando de Noronha, Brazil, over the Atlantic, when an Airbus A330-200 of Air France crashed into the sea on 1st June, killing all 228 people on board. The Air France accident was the first of a series of fatal crashes during summer 2009. Only one month later, on 30th June, an Airbus A310 operated by Yemenia also crashed into the sea, off the northern Coast of Grand Comore. The aircraft was on its way from Sana'a, Yemen, to Moroni, Comoros, operating as Yemenia flight 626 and carrying 153 passengers and crew members, of whom all but one girl died. The third fatal accident with more than 100 fatalities occurred two weeks later, when a Tupolev 154M of Iranian carrier Caspian Airlines crashed in an agricultural field about 120km northwest of Tehran. The aircraft, which had taken off from Tehran’s Imam Khomenei Airport (IKA) about 16 minutes before the accident, was on its way to Yerevan and had 168 passengers and crew members aboard.

DLR at a glance

DLR is Germany´s national research centre for aeronautics and space. Its extensive research and development work in Aeronautics, Space, Energy, Transport and Security is integrated into national and international cooperative ventures. As Germany´s space agency, DLR has been given responsibility for the forward planning and the implementation of the German space programme by the German federal government as well as for the international representation of German interests. Furthermore, Germany's largest project-management agency is also part of DLR.

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