

# Regional passenger and freight air transport in Europe in 2006

*Île de France handled 82 million passengers in 2006*

## Statistics in focus

### TRANSPORT

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Author

**Anna BIALAS-MOTYL**

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### Highlights

- In air passenger transport, capital regions, often incorporating large airports, display the highest passenger volumes. *Île de France*, *Outer London* and *Darmstadt* are the EU's top regions.
- The main air cargo handling regions are those featuring very large airports. However, certain regions with smaller airports are quite specialized in cargo handling.
- *Southern and Eastern (Ireland)* and *Koblenz (Germany)* are the regions where air freight handling has increased most in recent years.

Table 1a: Top 10 NUTS 2 regions with largest total number of air passengers (1000s) and main airport(s), 2006

	NUTS 2 region	Total	Airport(s)
1	Île de France (FR)	82 052	Paris/Orly, Paris/Charles de Gaulle
2	Outer London (UK)	67 339	London/Heathrow
3	Darmstadt (DE)	52 403	Frankfurt am Main
4	Noord-Holland (NL)	45 998	Amsterdam/Schiphol
5	Comunidad de Madrid (ES)	45 064	Madrid/Barajas
6	Lombardia (IT)	36 719	Milano/Malpensa, Milano/Linate, Bergamo/Orio Al Serio, Brescia/Montichiari
7	Cataluña (ES)	34 853	Barcelona, Girona, Reus
8	Surrey, East and West Sussex (UK)	34 080	London/Gatwick
9	Lazio (IT)	33 804	Roma/Ciampino, Roma/Fiumicino
10	Oberbayern (DE)	30 607	München/Franz Josef Strauss

Table 1b: Top 10 NUTS 2 regions with largest total freight air transport (1000 t), inward and outward freight transport (1000 tonnes) and main airport(s), 2006

	NUTS 2 region	Total	Inward	Outward	Airport(s)
1	Darmstadt (DE)	2 118	1 055	1 063	Frankfurt am Main
2	Noord-Holland (NL)	1 567	814	752	Amsterdam/Schiphol
3	Île de France (FR)	1 416	694	722	Paris/Orly, Paris/Charles de Gaulle
4	Outer London (UK)	1 343	729	614	London/Heathrow
5	Prov. Vlaams-Brabant (BE)	714	347	366	Brussels/Brussels-National
6	Köln (DE)	691	337	354	Köln-Bonn
7	Luxembourg (LU)	634	324	310	Luxembourg/Luxembourg
8	Lombardia (IT)	602	295	307	Milano/Malpensa, Milano/Linate, Bergamo/Orio Al Serio, Brescia/Montichiari
9	Comunidad de Madrid (ES)	344	160	185	Madrid/Barajas
10	Prov. Liège (BE)	323	155	168	Liège/Liège (Civ)

Source: Eurostat

Passenger air transport has been growing at a very fast pace for decades. Between 1995 and 2004, intra-EU and domestic air transport has increased by 49%. The events of September 11<sup>th</sup> 2001 have not had a large impact on this development. Conversely, the impact on extra-EU air transport was more noticeable but the growth rates resumed from 2002 onwards<sup>1</sup>.



<sup>1</sup> See *Panorama of Transport* – Edition 2007, Eurostat, 2007 (p. 104)

## Air passenger transport

Eurostat collects data at airport level which is then aggregated at regional level (NUTS – Nomenclature of Territorial Units for Statistics). This publication offers an insight on which are most important or most dynamic regions with regard to air transport.

Table 1a shows a ranking of the 10 regions where most air passengers have been recorded. The region *Île de France* leads the way, with over 82 million passengers, registered at the Paris airports Orly and Charles-de-Gaulle. The region *Outer London* comes second with 67 million passengers counted at Heathrow airport (the busiest airport in Europe) followed by the German region *Darmstadt*, which incorporates the airport of Frankfurt am Main.

The fairly large Italian region *Lombardia* is a good example of a territorial unit incorporating various geographically spread airports.

The rapid development of activities of low-cost air carriers, often favoring less congested, regional airports, is reflected by a rapid growth of passenger volumes in regions close to densely populated areas. One of the main factors affecting the price of an air fare are the airport charges. Busy airports are expensive and low-cost air carriers hence have a preference for smaller, less congested airports. All over Europe certain regional airports have experienced an unprecedented growth in passenger volumes. These airports are often located near major cities or within the reach of high-density urban areas.

Table 2: Top 10 NUTS 2 regions with the largest average annual growth of total air passengers between 2003 and 2006 (only regions with > 1 million air passengers in 2006)

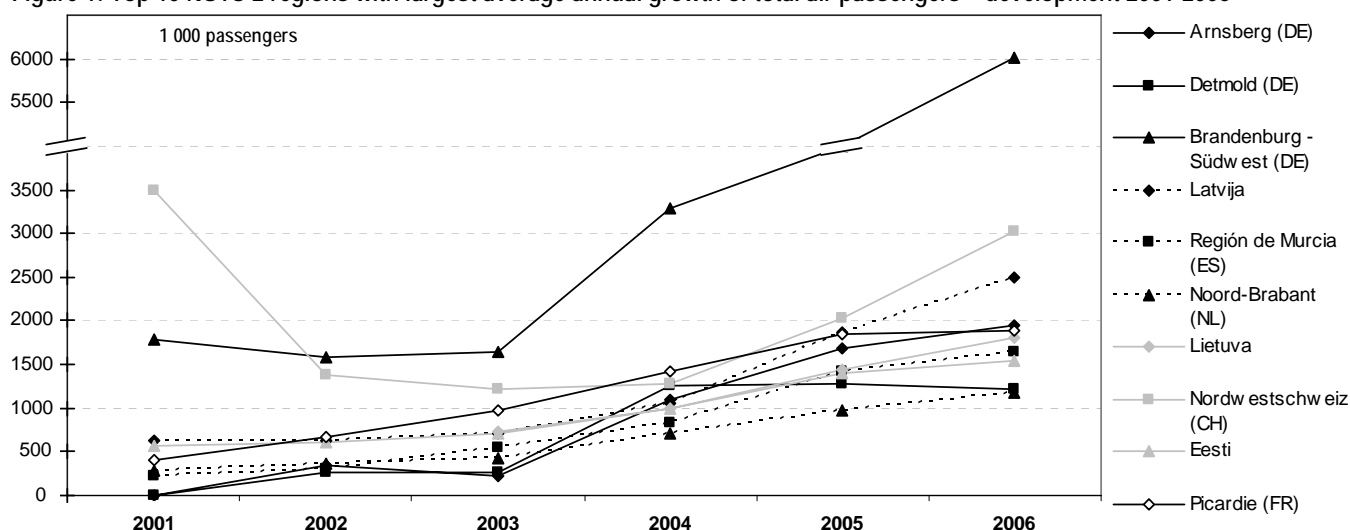
	NUTS 2 region	Airport(s)	Average annual growth 2003 - 2006	Passengers in 2003 (1000)	Passengers in 2006 (1000)
1	Arnsberg (DE)	Dortmund, Siegerland	105%	228	1 958
2	Detmold (DE)	Paderborn-Lippstadt	67%	262	1 227
3	Brandenburg - Südwest (DE)	Berlin/Schönefeld	54%	1 647	6 013
4	Latvija (LV)	Riga	52%	712	2 488
5	Región de Murcia (ES)	Murcia/San Javier	45%	545	1 646
6	Noord-Brabant (NL)	Eindhoven	40%	432	1 177
7	Lietuva (LT)	Kaunas Intl, Palanga Intl, Vilnius Intl	36%	722	1 799
8	Nordwestschweiz (CH)	Basel	35%	1 217	3 014
9	Eesti (EE)	Tallinn	29%	710	1 533
10	Picardie (FR)	Beauvais-Tille	25%	969	1 888

Source: Eurostat

The growth in the activities of low-cost air carriers is reflected in Table 2 and Figure 1. Indeed, the figures for the German region *Arnsberg* reflect the activities at Dortmund/Siegerland airport, although the closest main airport is Düsseldorf. The 67% annual growth over the same period registered for the region *Detmold* is due to the airport Paderborn-Lippstadt,

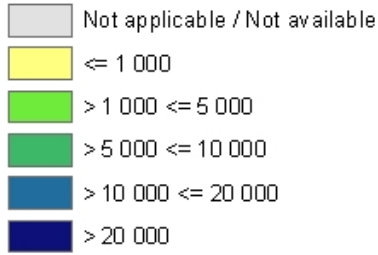
'competing' with the well established airports of Münster-Osnabrück and Hannover. Third in the regions with fastest growing air passenger numbers is *Brandenburg-Südwest*, where the airport Berlin-Schönefeld is regaining importance. Before German re-unification, this was the main airport of the former German Democratic Republic.

Figure 1: Top 10 NUTS 2 regions with largest average annual growth of total air passengers – development 2001-2006

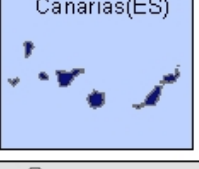
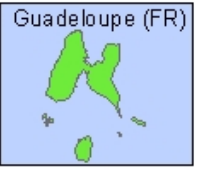
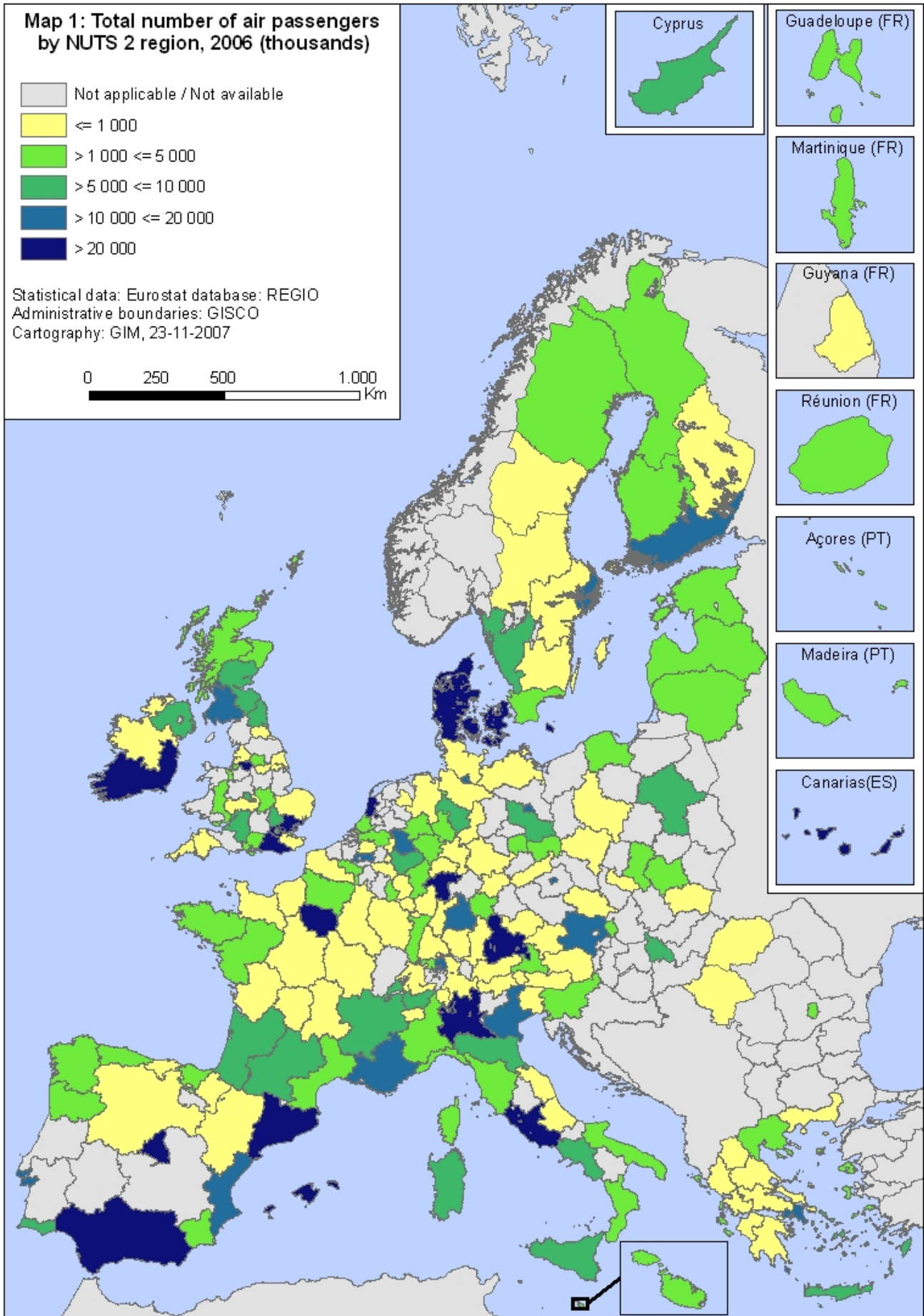


Source: Eurostat.

**Map 1: Total number of air passengers by NUTS 2 region, 2006 (thousands)**



Statistical data: Eurostat database: REGIO  
 Administrative boundaries: GISCO  
 Cartography: GIM, 23-11-2007



It should be noted that the situation for Berlin and its neighbouring regions is likely to change as Schönefeld airport is currently being massively enlarged, regrouping the activities of the other Berlin airports Tegel (formerly the 'West-Berlin' airport and foreseen to be closed by 2011) and the 'city-airport' of Tempelhof (scheduled to be closed in 2008).

The fact that certain countries do not feature a breakdown according to NUTS level 2 (among which Denmark, Estonia, Luxembourg, Lithuania, Latvia) is also reflected in Table 2.

The only non-EU region listed is the Swiss *Nordwestschweiz*, where air traffic at Basel airport has seen passenger figures progress from 1.2 million in 2003 to 3.0 million in 2006 (corresponding to an average annual increase of 35%). However, it should be mentioned here that Basel airport is also often referred to as the EuroAirport 'Bâle-Mulhouse'. Mulhouse is located in France and the airport is 'shared' between the two countries.

Figure 1 outlines the development of regional passenger figures between 2001 and 2006. Whereas many of the regions display broadly similar patterns,

two regions stand out. The first is the Swiss region *Nordwestschweiz*, where passenger numbers at Basel airport dropped sharply between 2001 and 2002, remained at a low level until 2004 and rose sharply again in 2005 and 2006. The other region is *Brandenburg-Südwest*, where passenger volumes at Berlin-Schönefeld remained under 2 million passengers until 2003 and continuously increased ever since to reach over 6 million in 2006.

Map 1 outlines the passenger numbers by NUTS level 2 regions of the EU-27 and Switzerland in 2006. Frequently, capital regions with large airports, often 'hubs' for intercontinental traffic, show up in the category '20 million passengers or more'. This is the case for *Outer London* (London), *Noord-Holland* (Amsterdam), *Île de France* (Paris), *Comunidad de Madrid* (Madrid) and *Lazio* (Rome).

The map further reveals air traffic intensity for popular holiday destinations such as various regions along the Spanish Mediterranean coast, the *Islas Baleares* and the region *Canarias*.

## Air freight transport

Compared to the volumes forwarded in rail, road, inland waterways and maritime transport, air freight transport is very limited. Nevertheless, for the transport of mail and express parcels, perishable goods and articles with a high added value, this activity remains of considerable importance and is growing steadily.

Table 1b gives the ranking of the regions in which the largest quantities of air cargo were handled. It appears that the German region of *Darmstadt*, with Frankfurt airport, is the number one in Europe with 2.1 million tons handled. *Noord-Holland* (with Amsterdam/Schiphol) and *Île de France* (with Paris/Orly and Paris/Charles-de-Gaulle) follow at a considerable distance.

Whereas the top positions in the ranking are occupied by regions with well known airports, the remaining positions are partially taken by NUTS level

2 regions that are less obvious or less known. Apart from the *Provincie Vlaams Brabant*, where the airport of Brussels is notably used by a large courier and parcel service enterprise, the region *Köln* appears, but also *Luxembourg*, which is the home of a large all-cargo airline, and *Liège* (Belgium).

Table 3 lists those NUTS level 2 regions where air cargo handling has experienced the fastest growth between 2003 and 2006. When looking at the ranking, it should not be forgotten that air freight handling in certain regions started from a low level, such as the first listed, the region Devon (United Kingdom). This region increased its cargo volume from only 782 tons in 2003 to 5 609 tons in 2006 (corresponding to an average annual increase of 93% over that period).

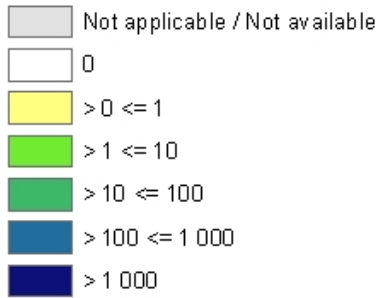
Table 3: Top 10 NUTS 2 regions\* with largest average annual growth in total air freight between 2003 and 2006

NUTS 2 region	Airport(s)	Average annual growth 2003 - 2006	Freight in 2003 (1000 t)	Freight in 2006 (1000 t)
1 Devon (UK)	Exeter	93%	1	6
2 Southern and Eastern (IE)	Dublin, Shannon, Cork	47%	42	132
3 Koblenz (DE)	Frankfurt/Hahn	45%	37	113
4 Lietuva	Kaunas Intl, Palanga Intl, Vilnius Intl	34%	5	13
5 Northumberland and Tyne and Wear (UK)	Newcastle	33%	3	8
6 Eesti	Tallinn	26%	5	10
7 Leipzig (DE)	Leipzig-Halle	19%	16	27
8 Niederösterreich (AT)	Wien/Schwechat	17%	127	202
9 Cataluña (ES)	Barcelona, Girona, Reus	17%	62	98
10 Limburg (NL)	Maastricht-Aachen	16%	34	54

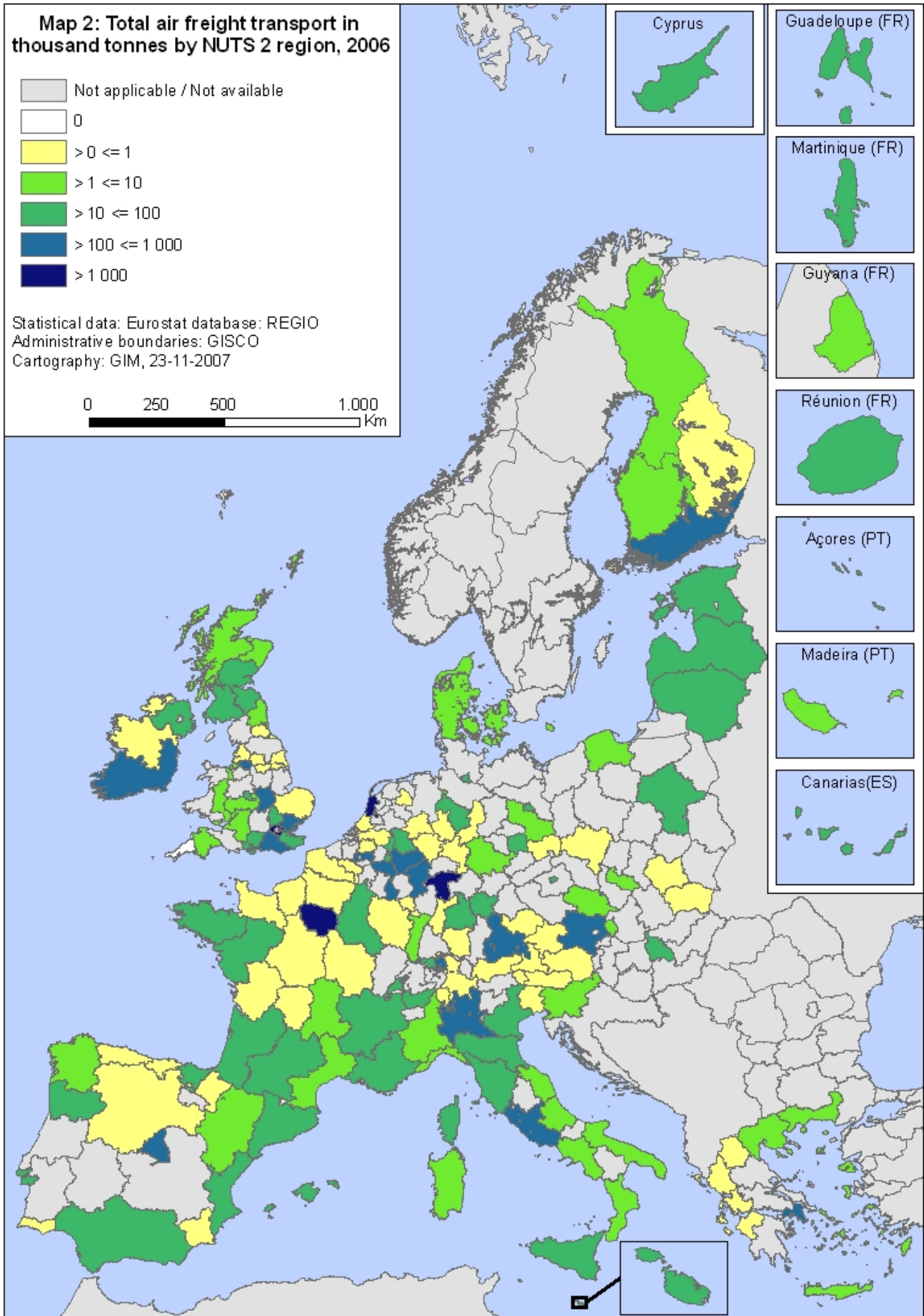
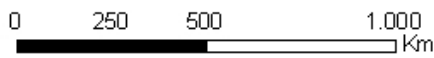
\* only regions with a volume of air cargo exceeding 1 000 tons

Source: Eurostat

**Map 2: Total air freight transport in thousand tonnes by NUTS 2 region, 2006**



Statistical data: Eurostat database: REGIO  
 Administrative boundaries: GISCO  
 Cartography: GIM, 23-11-2007



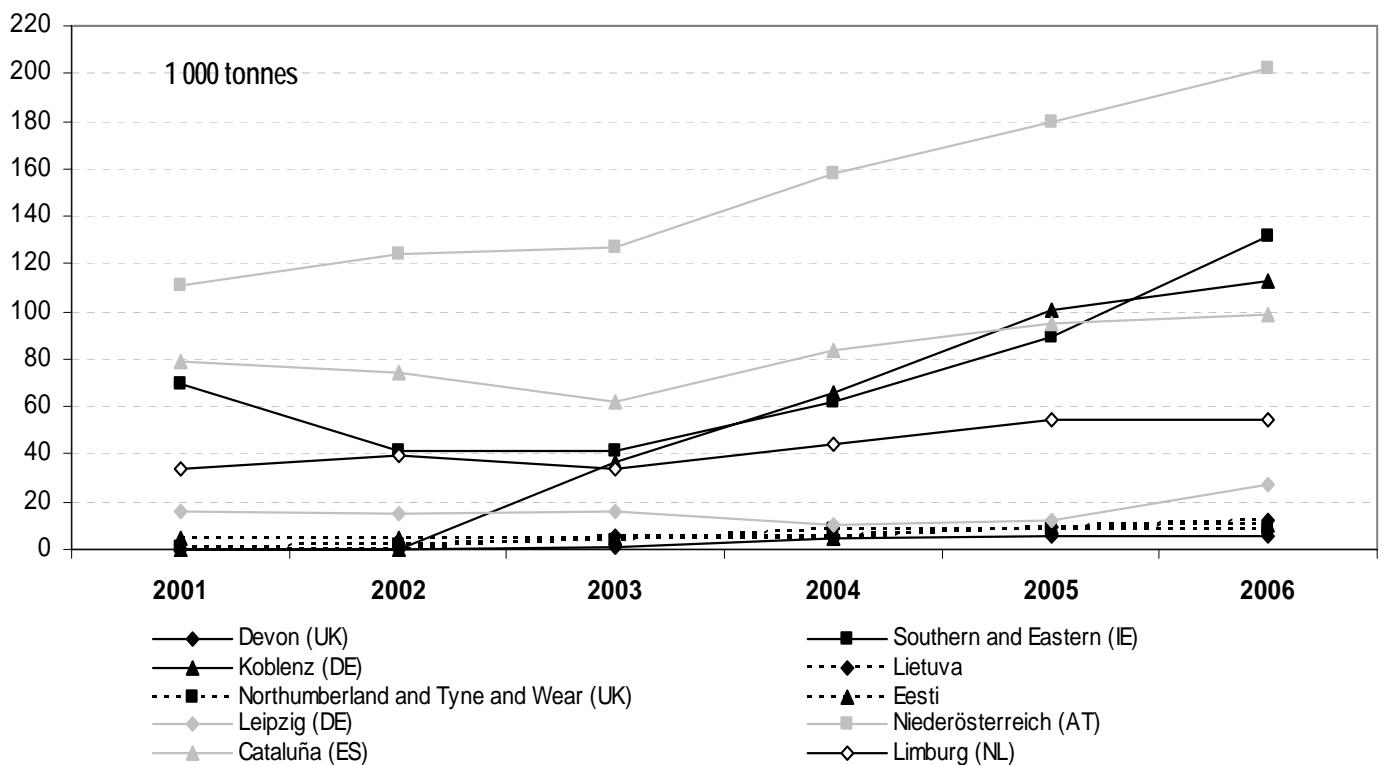
When looking at the regions with more important air freight handling, the region *Southern and Eastern* (Ireland) and *Koblenz* (Germany) display impressive growth rates between 2003 and 2006 (47% and 45% per year respectively). Whereas the former is quite a large region and includes cargo handling activities of three airports (Dublin, Shannon and Cork), the latter is entirely attributable to the airport of Frankfurt/Hahn. This airport (a former military air base) is located in a region with a low population density which plays a role when it comes to flight activities during night time. Furthermore, compared to passenger transport, cargo flights are less time-sensitive. These aspects offer growth possibilities for smaller airports in more remote areas.

Ranking eighth among the most 'dynamic' regions, just over 200 thousand tons of air freight were handled in *Niederösterreich* in 2006. Figure 2 shows that the volumes (at Wien/Schwechat) have been continuously increasing, especially from 2003 onwards.

Air freight activities in the earlier mentioned region of *Koblenz* (with Frankfurt/Hahn airport) started from virtually zero in 2002 and developed particularly steadily from that year onwards.

The airport north of Maastricht in the Netherlands (NUTS level 2 region *Limburg*) is also a truly European airport as it not only serves the very south of the Netherlands but also the neighbouring region around Aachen (Germany). Hence the official name of the airport ('Maastricht-Aachen'). The volume of cargo handling of the Dutch *Limburg* region is not as high as various others but the annual increase of 16% between 2003 and 2006 is nonetheless a significant result. Here, it should be mentioned that the Belgian airport of Liège is geographically quite close. The region Liège is listed in Table 1b and ranked 10<sup>th</sup> in the regions handling the most air freight.

Figure 2: Top 10 NUTS 2 regions with largest average annual growth of total air freight – development 2001-2006



## ➤ ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

### Regional breakdown

Data used are figures at Level 2 of NUTS 2003 rev., Regulation (EC) No 1059/2003 of the European Parliament and of the Council of 26 May 2003 on the establishment of a common classification of territorial units for statistics (NUTS) (Official Journal L 154, 21/06/2003) ([http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l\\_154/l\\_15420030621en00010041.pdf](http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l_154/l_15420030621en00010041.pdf)).

The Nomenclature of Territorial Units for Statistics (NUTS) was established by Eurostat more than 25 years ago in order to provide a single uniform breakdown of territorial units for the production of regional statistics for the European Union.

Certain smaller countries are not sub-divided in NUTS Level 2 regions. This is the case for Cyprus (CY), Luxembourg (LU) and Malta (MT) but also Denmark (DK), Latvia (LV), Lithuania (LT) and Estonia (EE).

### Country codes:

**EU: European Union, including the 27 Member States (EU-27):** Belgium (BE), Bulgaria (BG), the Czech Republic (CZ), Denmark (DK), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL), Spain (ES), France (FR), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania (LT), Luxembourg (LU), Hungary (HU), Malta (MT), the Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden (SE) and the United Kingdom (UK).

### **Also covered in this publication:**

Switzerland (CH).

### Data source and main definitions:

The data collection and the definitions used on air transport statistics are based on Commission Regulation (EC) 1358/2003 implementing Regulation (EC) 437/2003 of the European Parliament and of the Council on statistical returns in respect of the carriage of passengers, freight and mail by air.

The *main definitions* are the following:

On Flight Origin and Destination (OFOD): Traffic on a commercial air service identified by a unique flight number subdivided by airport pairs in accordance

with the point of embarkation and point of disembarkation on that flight. This is linked to the definition of passengers carried.

Passengers carried: All passengers on a particular flight counted once only and not repeatedly on each individual stage of that flight. This excludes direct transit passengers.

Direct transit passengers: Passengers who, after a short stop, continue their journey on the same aircraft on a flight having the same flight number as the flight on which they arrive.

Freight and mail loaded or unloaded: All freight and mail loaded onto or unloaded from an aircraft. This excludes passenger baggage and direct transit freight and mail.

Data source: Eurostat's reference database NewCronos. The air transport domain contains national and international intra and extra-EU data. This provides air transport data for passengers (in number of passengers) and for freight and mail (in 1 000 tonnes) as well as air traffic data by airports, airlines and aircrafts. Data is transmitted to Eurostat by the Member States of the European Union as well as the Candidate Countries, Norway, Iceland and Switzerland.

### ***Airport coverage***

In principle, this publication covers the air transport in the airports of the Reporting Countries with more than 150 000 passengers carried in 2006.

The regional aggregates have been calculated excluding double counting.

### ***Notes on some reporting countries***

**Estonia:** Estonian data refers to Tallinn/Ülemiste airport only.

**Latvia:** Latvian data refers to Riga airport only.

**Luxembourg:** Luxembourg only provided Flight Stage data. Luxembourgish data refers to Luxembourg airport only.

**Hungary:** Hungarian data refers to Budapest/Ferihegy airport only.






**Malta:** Maltese data refers to Malta/Luqa airport only.

**Slovenia:** Slovenian data refers to Ljubljana airport only.

## Further information:

Data: [EUROSTAT Website/Home page/Transport/Data](#)

### Transport

-  **Air transport**
-  Air transport measurement - passengers
-  Air transport measurement - freight and mail
-  Air transport measurement - traffic data by airports, aircrafts and airlines
-  Air transport - data aggregated at standard regional levels (NUTS)

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