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- European flights increased by 4.2% during the first half of 2017 compared with the same period last year and were at the high end of the forecast. Preliminary data for July show an increase of 5.2% in flights on July 2016.
- Amsterdam Schiphol remained the busiest European airport in terms of flights during the first half of 2017 and recorded a 5% growth rate on 1H2016. Paris CDG ranked second and passed Heathrow in the top three airports for flights.
- Oil prices averaged out at €50 per barrel during the first half of 2017 and were down to €42 per barrel in July, the lowest since November last year.

| EUROCONTROL Statistics and Fore | casts 1 |
|---------------------------------|---------|
| Other Statistics and Forecasts | 3 |
| Passenger airlines | 4 |
| Airports | 7 |
| Aircraft Manufacturing | 9 |
| Oil | 10 |
| Fares | 10 |
| | |
| | |

EUROCONTROL Statistics and Forecasts

European flights (ECAC – European Civil Aviation Conference area) increased by 4.2% during the first half of 2017 compared with the same period last year and were at the high end of the forecast published in February. Preliminary data for July show an increase of 5.2% in flights on July 2016 (Figure 1).

The low-cost segment was the main driver of growth during 1H17 (vs. 1H16) with a growth rate of 7.6% and a contribution of 600 extra daily flights to the network meanwhile the traditional scheduled segment added 350 daily flights and recorded a 2.4% growth rate, the weakest among the segments. The all-cargo segment maintained a dynamic growth with an increase of 7.1% for the whole period and was followed by the business aviation and charter segments which grew 6.2% and 2.7% respectively.

Low-cost airlines were the top three adding the most flights to the network on a daily basis during 1H17 (vs. 1H16) and were Ryanair (+188 flights/day), easyJet UK (104 flights/day) and Wizz Air (+55 flights/day).

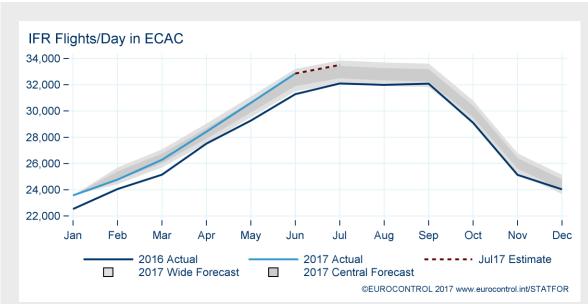


Figure 1: Monthly European Traffic and Forecast (based on the 7-year forecast Feb 17).

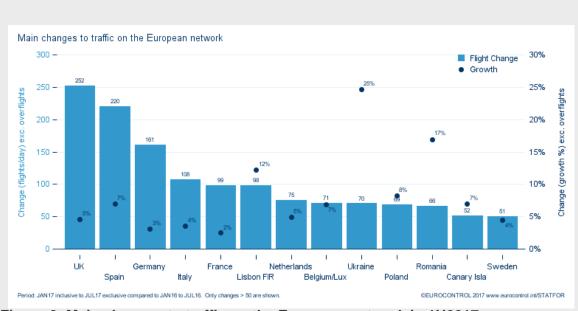


Figure 2: Main changes to traffic on the European network in 1H2017.

During the first half of 2017 (vs. 1H2016) 13 states contributed the most to the growth of local traffic (excluding overflights) in Europe. The top three contributors were the United Kingdom (+250 daily flights), Spain (+220 daily flights) and Germany (+160 daily flights). Italy, France and Portugal (excl. Azores) added together circa 300 flights. The Netherlands, Belgium/Luxembourg, Ukraine, Poland, Romania contributed each to circa 70 extra daily flights to the network whereas Canary Islands and Sweden added each 50 daily flights (Figure 2). It is worth mentioning that Turkey has been reducing its decrease since the beginning of the year and went from 150 fewer daily flights in January to 250 extra daily flights in June (bounce back from the Russian ban on charter flights in 2016).

The top three extra-European partners in average daily flights on flows in both directions were the United States (923 flights, up 5%), the Russian Federation (752 flights, up 20%) and the United Arab Emirates (324 flights, up 1%) (EUROCONTROL, July).

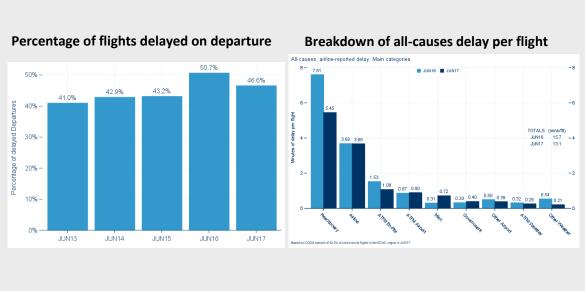


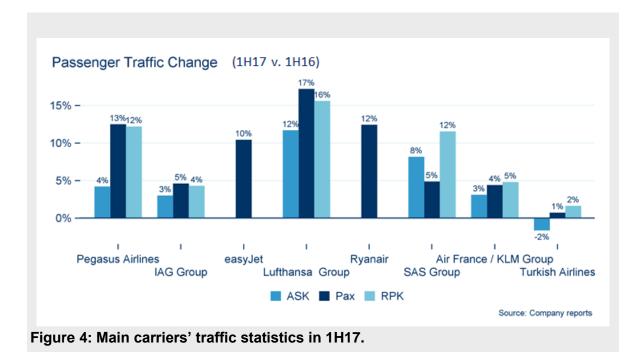
Figure 3: Delay statistics (all-causes, airline-reported delay – June 2017).

Based on data from airlines for delays from all causes, the average departure delay per flight in June 2017 decreased by 2.6 minutes to 13.1 minutes per flight. Further analysis of the delay reasons shows that airline delay remained stable, reactionary decreased by 2.2 minutes per flight to 5.5 minutes per flight. In June 2017, the percentage of delayed flights on departure (>=5 minutes) was 46.6%, a decrease of 4 percentage points compared with June 2016. (Figure 3). ATC capacity delays affected Istanbul Sabiha Gökçen, Amsterdam Schiphol and London Gatwick airports. A power supply issue at Brussels airport on 15 June generated delay. Tenerife South airport suffered from delays due to a disabled aircraft blocking the runway on 27 June. Seasonal weather impacted Frankfurt Main, Zurich, London Heathrow, London Gatwick and Amsterdam Schiphol during the month.(EUROCONTROL, July).

Other Statistics and Forecasts

IATA reported that European scheduled passenger traffic (RPK) increased by 7.5% in May 2017 (vs. May 2016). Capacity was up by 5.2% and passenger load factors were up 1.8 percentage points to 82.8% (IATA, 6 July).

ACI reported that overall passenger counts at European airports saw an increase of 8.2% in May 2017 (vs. May 2016). Total aircraft movements grew by 4.2% (ACI, 7 July).



Passenger airlines

Capacity, costs and jobs

It is reported that Norwegian looks into a partnership with easyJet or Ryanair to feed passengers to its long-haul network. Cooperation would start at airports where Norwegian's partners have a large number of connections and include Gatwick or Paris CDG for easyJet and Ireland airports for Ryanair (Reuters, 16 June).

Alitalia has filed for Chapter 15 in the United States, a restructuring procedure that will enable the loss-making airline to secure its operations in the US. Last May Alitalia was granted Italian government financing to allow it to continue operations (IM194) (Alitalia, 16 June).

TUI Group and Etihad Aviation Group have called off their planned joined venture between TUI fly and FlyNiki to establish a European leisure airline (IM189) (TUI Group, 8 June).

easyJet plans to establish a new airline called easyJet Europe with headquarters in Vienna in order to continue to operate flights within the European countries after the UK has left the EU. easyJet has already applied for an Austrian Air Operator Certificate (AOC) and for an airline operating licence (easyJet, 14 July).

UK Regional Flybe will reduce the size of its fleet in 2017/18 by returning six leased Bombardier Q400 aircraft and will concentrate its business on profitable routes. The airline has reached peak-fleet at 85 aircraft in May (Flybe, 8 June).

SAS has obtained a new Air Operator Certificate (AOC) in Ireland and will establish operational bases at Heathrow and Malaga to complement bases in Scandinavia. SAS plans to base nine Airbus A320neo aircraft at its UK and Spanish bases and will launch operations with the start of the winter schedule (SAS, 21 June).

Adria Airways (Slovenia) has acquired Darwin Airline (Swiss) which operates under the Etihad Regional brand in Europe. Darwin will continue to operate under its own name from its Lugano and Geneva bases. Etihad held a 33% stake in Darwin (Adria Airways, 20 July).



Figure 5: Main carriers' load factors in 1H17.

In its annual strategy review, Finnair now expects to reach the target of doubling its traffic between Asia and Europe from the 2010 level in 2018 i.e. two years earlier than the previous target of 2020 (IM177) (Finnair, 22 June).

Wizzair opened its first UK base at London Luton, also the first base in Western Europe, with one Airbus A320 aircraft and the launch of three new routes to Tel Aviv, Pristina and Kutaisi bringing the total number of routes from Luton to 42 (Wizzair, 22 June).

Azerbaijan's low-cost carrier Buta Airways will launch operations on 1 September with flights from Baku to seven destinations including Tbilisi, Moscow Vnukovo, Kazan (Russia), Mineralnye Vody (Russia), Kiev, Antalya and Tehran. Two additional destinations to Istanbul and St Petersburg will start at the end of October. The carrier will operate a fleet of four Embraer E190 aircraft (Buta Airways, 20 June).

German start-up Azur Air has commenced operations in July from its Düsselforf base to Palma de Mallorca, Hurghada and Punta Cana and plans to fly to Marsa Alam (Egypt), Rhodes and Antalya; in all six destinations during the summer along with plans to start flights to Varadero and Gran Canaria with the start of the Winter schedule. The carrier currently operates a Boeing B767-300ER aircraft (Azur Air, 18 July).

Start-up FlyLolo plans to start operations from Gatwick, Glasgow and Manchester to the Canary Islands (Tenerife Sur and Lanzarote) during the Christmas 2017 season. The airline also plans to start service from Bournemouth. Flights will be operated by Air Europa. (FlyLolo, July).

Air France has launched Joon, its low-cost virtual carrier aimed at "a young working clientele whose lifestyles revolve around digital technology". Operations will start this autumn with medium-haul flights from Paris CDG and a fleet of six Airbus A321-200 aircraft growing to 11 by summer 2018. Long-haul routes will be launched in summer 2018 with up to four Airbus A340-300 aircraft and the introduction of Airbus A350 aircraft in winter 2019 (Air France, 21 July).

Airline Association

IACA (International Air Carrier Association) has been renamed AIRE (Airlines International Representation in Europe) with the addition of three airlines LOT, Turkish Airlines and Ukraine International Airlines bringing to 19 the number of its members. The rebranded association aims to offer airlines more effective representation, information and access to European institutions (AIRE, 13 June).

| Rank 1H16 | Rank 1H17 | Departure Airport | Average Daily Departing Flights in 1H17 | Growth on 1H16 |
|--------------|--------------|--------------------|-----------------------------------------------|----------------|
| 1 | 1 | Amsterdam Schiphol | 678 | 5.2% |
| 3 | 2 | Paris CDG | 648 | 1.6% |
| 2 | 3 📕 | London Heathrow | 645 | 0.2% |
| 4 | 4 | Frankfurt | 629 | 0.7% |
| 5 | 5 | İstanbul Atatürk | 587 | -4.5% |
| 6 | 6 | Munich | 546 | 4.6% |
| 7 | 7 | Madrid | 522 | 3.3% |
| 9 | 8 🕇 | Barcelona | 424 | 5.4% |
| 8 | 9 📕 | Rome Fiumicino | 395 | -4.5% |
| 10 | 10 | London Gatwick | 382 | 5.2% |
| 10 | 1 | | are of total departures in 1H | |

Figure 6: Main departure airports in 1H2017.

Traffic Statistics: 1H2017 Update

Figure 4 and Figure 5 compare 1H2017 figures with 1H2016 figures for the European carriers. In addition to the number of passengers (PAX), passenger capacity is measured in available seat kilometres (ASK), traffic is measured in revenue passenger kilometres (RPK) and load factor as a percentage (%).

Routes, Alliances, Codeshares

Sky Express (Greece) and low-cost Blue Air (Romania) have signed a codeshare agreement to facilitate connections between Greece and Cyprus. Under the agreement, Blue Air will enable its passengers from Cyprus to travel to the Greek islands via Sky Express while passengers from the Greek islands will be able to book with Sky Express and fly to Larnaca via Blue Air through Athens or Thessaloniki (Sky Express, 8 June).

In summer 2018 Lufthansa will transfer five of its 14 Airbus A380 aircraft from its Frankfurt hub to Munich and launch long-haul routes to Los Angeles, Hong Kong and Beijing (Lufthansa, 13 June).

easyJet will launch nine new routes from airports across the UK with the start of the winter schedule. The new routes include Bristol to Stockholm and Athens, London Gatwick to Klagenfurt, Liverpool to Venice, London Luton to Alghero and Seville, London Southend to Malta, Manchester to Agadir and Southampton to Geneva (easyJet, 11 July).

Air Europa will start inter-island flights between Canary Islands at the end of October and will be in direct competition with Binter Canarias and Canary Fly (Air Europa, July).

Long-haul Spanish airline Plus Ultra has launched two new routes from Barcelona to Santiago de Chile and to Havana (Plus Ultra, July).

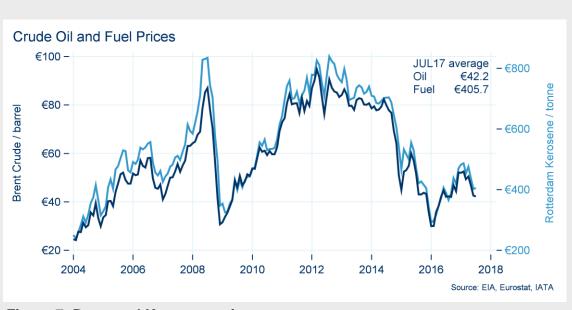


Figure 7: Brent and Kerosene prices.

Edelweiss (SWISS subsidiary) will expand its network by 20% when launching 11 new routes by summer 2018 that include four long-haul flights from Zurich to Orlando, Denver and Varadero along with eight short- and medium-haul routes from Zurich to Djerba, Paphos, Chania, Dubrovnik, Samos, Inverness and Jerez de la Frontera. (Edelweiss, 5 July).

Norwegian will launch two new long-haul US routes from Gatwick to Chicago and Austin in March 2018 bringing to 13 the number of long-haul routes from Gatwick to destinations in the US, South America and Southeast Asia. The carrier also announced two new routes from Paris CDG to Boston and Oakland (Norwegian, 5 July).

Norwegian launched the only direct transatlantic flight from Belfast to two secondary airports on the US east coast; Stewart International (New York) and Providence (Boston) (Norwegian, 1 July).

Eurowings will start in April 2018 long-haul low-cost flights from Munich to 10 destinations in North America, the Caribbean, Asia and Africa. Munich will become the carrier's second long-haul base after Cologne/Bonn (Eurowings, 7 July).

Airports

Aéroports de Paris (ADP) and DSNA (Direction des Services de la Navigation Aérienne) collaborate to develop a long-distance drone detection system with a view to improve security of sensitive sites including airports. The project called Hologarde integrates three technologies (radar, radio frequency and HD video) in a single control centre and can detect any type of drone up to five kilometres (ADP & DSNA Services, 23 June).

Amsterdam Schiphol remained the busiest European airport in terms of flights during the first half of 2017 and recorded a 5% growth rate on 1H2016. Paris CDG ranked second and passed Heathrow in the top three airports for flights. Only Istanbul Atatürk and Rome Fiumicino recorded a decrease in flights and were down 5% compared with 2016 (Figure 6).

The busiest airport pairs in Europe (total flights in both directions) during the first half of 2017 (growth on first half of 2016) were the following:

| Rank | Departure Airport | Arrival Airport | Average Daily Movements | Growth on 1H16 |
|------|------------------------|-----------------|-------------------------|----------------|
| 1 | Istanbul Atatürk | Izmir | 56 | 0.3% |
| 2 | Oslo Gardemoen | Trondheim | 54 | 1.1% |
| 3 | Istanbul Sabiha Gökcen | Ankara | 51 | -10.0% |
| 4 | Oslo Gardemoen | Bergen | 50 | 0.9% |
| 5 | Paris Orly | Toulouse | 50 | -0.2% |
| 6 | Barcelona | Madrid | 48 | -0.8% |
| 7 | Istanbul Sabiha Gökcen | Izmir | 46 | -6.9% |
| 8 | Oslo Gardemoen | Stavanger | 44 | -2.4% |
| 9 | Lisbon | Porto | 43 | 23.6% |
| 10 | Istanbul Atatürk | Ankara | 43 | 0.0% |

(EUROCONTROL, July)

The Lisbon-Porto pair recorded the best performance (+24% on 2016) owing mainly to the shuttle "Ponte Aérea" launched by TAP Portugal in March 2016.

Top five airport pairs adding the most flights during the first half of 2017 (vs. year-ago period) were the following:

| Rank | Departure Airport | Arrival Airport | Average Daily Movem | Change on 1H16 |
|------|-------------------|-----------------|---------------------|-----------------|
| 1 | Moscow Vnukovo | Antalya | 12 | +11 flights/day |
| 2 | Milan Malpensa | Catania | 16 | + 9 flights/day |
| 3 | Lisbon | Porto | 43 | + 8 flights/day |
| 4 | Moscow Domodedovo | Antalya | 8 | + 8 flights/day |
| 5 | Barcelona | Bilbao | 18 | + 7 flights/day |

(EUROCONTROL, July)

Top five airports pairs removing the most flights during the first half of 2017 (vs. year-ago period) were the following:

| Rank | Departure Airport | Arrival Airport | Average Daily Movem | Change on 1H16 |
|------|-------------------|-----------------|---------------------|----------------|
| 1 | Rome Fiumicino | Milan Malpensa | 6 | -7 flights/day |
| 2 | London Luton | Copenhagen | 8 | -7 flights/day |
| 3 | Dublin | Liverpool | 7 | -6 flights/day |
| 4 | Belfast | Liverpool | 2 | -6 flights/day |
| 5 | Thessaloniki | Athens | 36 | -5 flights/day |

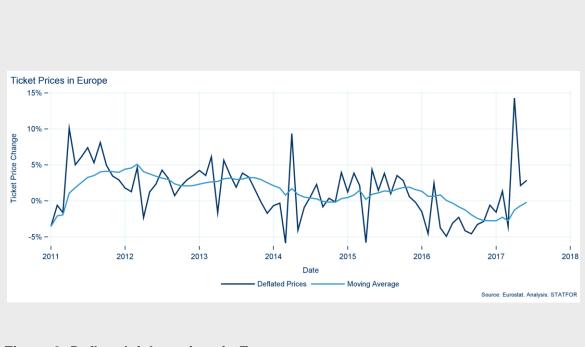
(EUROCONTROL, July)

Passenger traffic and aircraft movements during the first half of 2017 at top five European airports (based on the number of flights) were as follows (growth on the same period in 2016):

| | Passenger traffic | Aircraft movements |
|-------------------------------------------------------------------------------|-------------------------------------------------------|----------------------------------------------|
| 1. Amsterdam Schiphol | 32.3 million (+ 8.7%) | 240K* (+ 4.9%) |
| London Heathrow Paris CDG | 37.1 million (+ 3.9%) 33.0 million (+ 5.2%) | 232K (- <mark>0.3%</mark>) 231K (+ 1.0%) |
| 4. Frankfurt | 30.0 million (+ 4.5%) | 228K (+ 0.2%) |
| 5. Istanbul Atatürk * excluding general aviation | 28.7 million (- 1.8%) | 212K (- <mark>3.9%</mark>) |

(airport reports, July)

Note: Commercial aircraft movements are taken into account in this table vs. all aircraft movements in Figure 6, and explain the different rank order between Heathrow and CDG.





Fraport and Lufthansa signed a cost savings agreement aiming at reducing operating costs for the airline at Frankfurt and therefore enabling Lufthansa's further growth at its main hub. Lufthansa generates circa 60% of the traffic at the airport. In addition, to promote growth at Frankfurt in 2018, Fraport will not increase airport charges for the coming year (Fraport, 5 July).

Aircraft Manufacturing

At Paris air show 326 aircraft were ordered for Airbus, 144 of which were firm orders. Boeing has announced 571 aircraft orders boosted by the new B-737 MAX 10 aircraft. Only circa 7% of these new orders were destined for operations by European airlines (Wizzair, TUI Group, Norwegian, Monarch, Ryanair, Blue Air, Azerbaijan Airlines) (Airbus & Boeing, 22 June).

Boeing released its 2017market outlook which forecasts a demand for 41,030 new aircraft between 2017 and 2036 of which 7,530 are meant for Europe, for a regional traffic growth in revenue passenger kilometres of 3.7% (Boeing, June).

Airbus released its Global Market Forecast 2017-2036 and predicts a demand for 34,170 new passenger aircraft (up 6% compared with the previous forecast) in the next 20 years Europe will account for 20% of the new deliveries. Passenger traffic is set to grow by 3.4% p.a. in Europe over the 20-year period (Airbus, 9 June).

Embraer published its Market Outlook Report 2017 and forecasts 6,400 new commercial jets (2,280 units for the 70 to 90- seat segment and 4,120 units for the 90 to130- seat segment) between 2017 and 2036. North America represents 32% of the demand followed by Asia-Pacific with 27% and Europe with 18%. Passenger traffic in Europe is expected to grow 3.6% annually over the period (Embraer, 23 June).

Airbus has signed an agreement with China Aviation Supplies Holding Company for the purchase of 140 aircraft of which 100 A320 family aircraft and 40 A350 XWB family aircraft (Airbus, 5 July).

Oil

Oil prices averaged out at \in 50 per barrel during the first half of 2017 and were down to \in 42 per barrel in July; the lowest since November last year. Converted indices for Kerosene and Brent are shown in Figure 7.

EIA forecasts Brent crude oil prices to average \$51 per barrel in 2017, \$2 per barrel lower than projected in January. In 2018 crude oil prices are forecast to average \$52 per barrel (EIA, 11 July).

Fares

Ticket prices in Europe increased by 2.9% in June 2017 vs. June 2016. This is above the trend (12-month trailing average) shown in Figure 8. (Eurostat, 17 July).

<u>Note</u>: to eliminate the influence of inflation on euro figures, the ticket price is deflated with a price index. The STATFOR deflated ticket prices are estimated in 2015 constant euros. A detailed explanation of the mechanism can be found <u>here</u>.



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