Aviation Trends

Quarter 4 2015



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Introduction

Welcome to Aviation Trends. Every quarter we update key figures which summarise the levels of activity at the UK's airports. Each edition also includes a section entitled 'Did you know?' which presents interesting facts derived from the various data sources available to the CAA.

The Aviation Trends series is available at www.caa.co.uk/aviationtrends, part of Aviation Intelligence, the online home of the CAA's monthly airport and airline statistical publications. Please note that historic numbers may be subject to minor change as the result of prior period adjustments.\(^1\) Due to rounding of figures, there may be an apparent slight discrepancy between the sum of the constituent items and the total as shown.

For a list of all statistics available on the CAA website, see www.caa.co.uk/data-and-analysis.

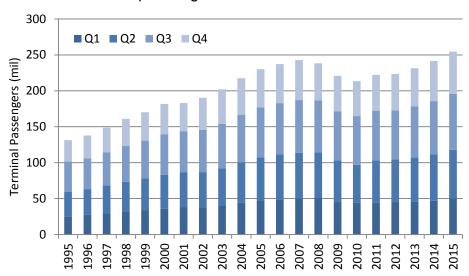
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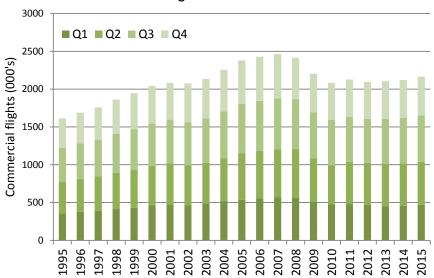
¹ Also, in editions of Aviation Trends prior to quarter 4 2008, all figures included activity at Channel Islands and Isle of Man airports. These islands are not formally part of the UK, and as we wish to present only the trends at UK airports, their figures are now excluded from the UK reporting airports, although travel between the UK and these airports is treated as domestic.

1. Historical overview of traffic see note 5 on p.14

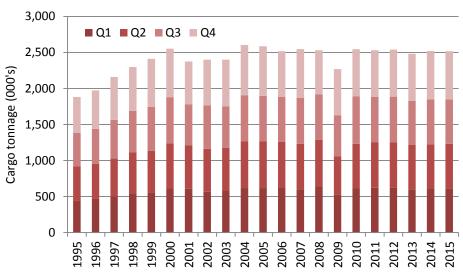
a. Terminal passengers



c. Commercial flights



b. Cargo tonnage



The three time-series charts on this page show both seasonal and annual trends in UK aviation activity for terminal passengers, commercial flights and cargo tonnage.

On pages 4 to 6, the top charts show traffic volume in each quarter (left axis), and the corresponding year-on-year quarterly growth rates (right axis). The bottom charts show the rolling annual total traffic in each quarter (left axis), and the year-on-year percentage growth of the rolling annual total (right axis). The highlighted data points indicate the annual traffic volumes and growth rates of the respective calendar years.

In Q4 2015, UK airports handled 59 million terminal passengers, representing a new high in terms of the number of passengers flown in Q4 of any previous year. On a rolling year basis, terminal passengers also hit a new record (255m pax), surpassing the previous high (252m pax) set in Q3 2015. The new level is 4.3% above the pre-recession rolling year peak (Q2 2007 to Q1 2008).

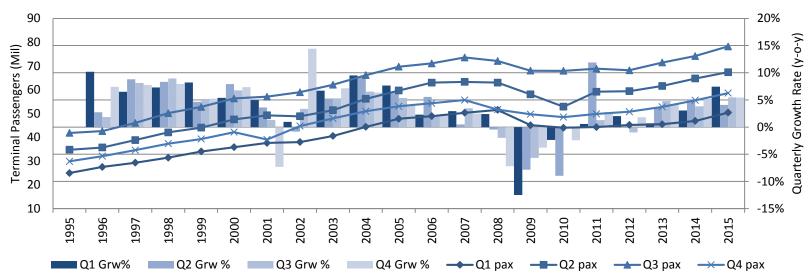
Q4 2015 saw 513 thousand commercial flights, representing 2.2% growth against the same quarter in the previous year. Despite record terminal passenger numbers, commercial flights remain some 12% below the pre-recession peak on a rolling 12-month basis. The general trend over recent years has been for more passengers to be accommodated on a per flight basis due to higher load factors and larger aircraft utilised.

Q4 2015 also saw 671 thousand tonnes of cargo pass through UK airports, which represents no change from levels seen in the same quarter last year. With the exception of 2009, which was impacted by the global financial crisis, cargo tonnage has been reasonably constant over the last decade.

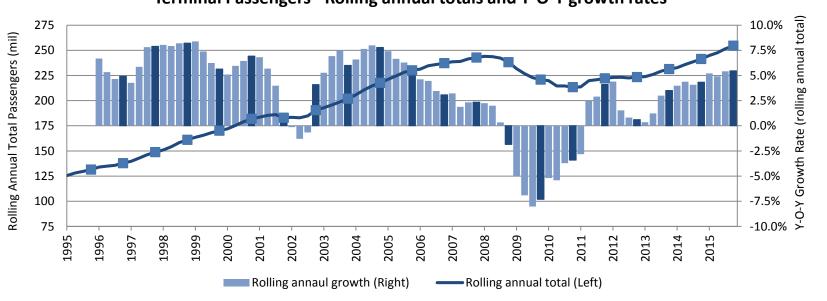
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a. Terminal passengers

Terminal passengers - Quarterly totals and y-o-y growth rates



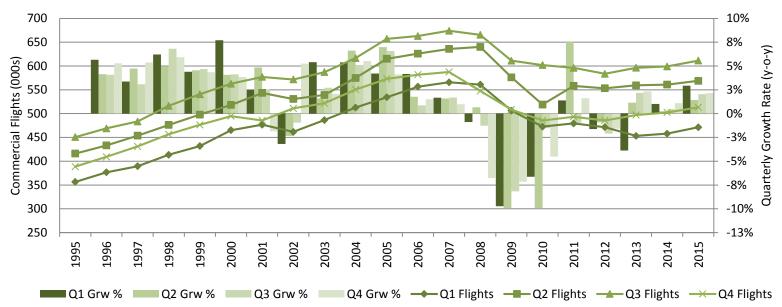
Terminal Passengers - Rolling annual totals and Y-O-Y growth rates



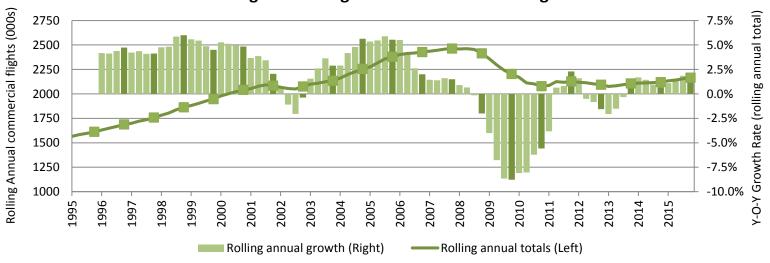
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b. Commercial flights

Commercial Flights - Quarterly totals and growth rates



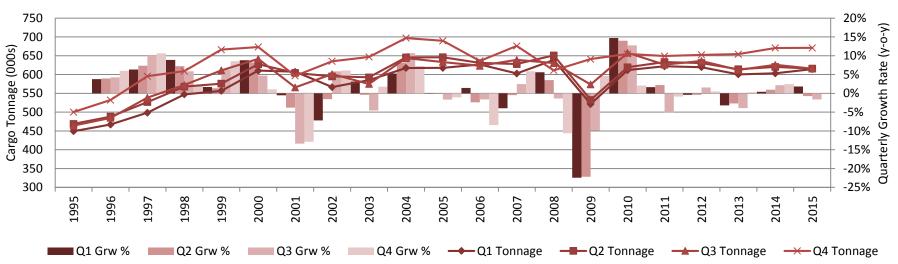
Commercial flights - Rolling annual totals and Y-O-Y growth rates



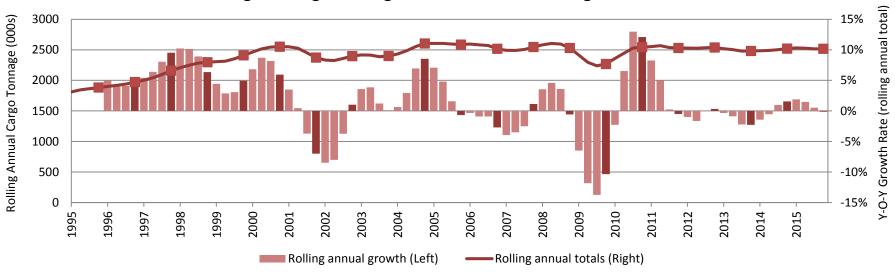
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c. Cargo tonnage

Cargo Tonnage Quarterly totals and growth rates



Cargo tonnage- Rolling annual totals and Y-O-Y growth rates



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2. Terminal passengers at UK airports see note 5 on p.14

		CURR	ENT Q	UARTER	2		ROI	LING YI	EAR	
Pax	Q4	2015	Q4 2014			Q1 15 -	- Q4 15	Q1 14 -		
(millions)	Pax (Mil)	% of total	Pax (Mil)	% of total	% chg	Pax (Mill)	% of total	Pax (Mil)	% of total	% chg
London Airports	36.6	63%	34.7	63%	5.3%	155.2	61%	146.6	146.6 61%	
- Scheduled	35.8	61%	33.9	61%	5.7%	149.9	59%	141.0	59%	6.3%
- Charter	0.8	1%	0.9	2%	-10.2%	5.3	2%	5.6	2%	-5.7%
Regional Airports	21.8	37%	20.6	37%	5.8%	98.5	39%	93.8	39%	5.0%
- Scheduled	19.9	34%	18.7	34%	6.6%	86.7	34%	82.0	34%	5.7%
- Charter	1.9	3%	1.9	3%	-2.3%	11.8	5%	11.8	5%	0.4%
All Airports	58.4	100%	55.3	100%	5.5%	253.7	100%	240.4	100%	5.5%
- Scheduled	55.7	95%	52.6	95%	6.0%	236.6	93%	223.0	93%	6.1%
- Charter	2.6	5%	2.8	5%	-4.8%	17.1	7%	17.4	7%	-1.6%

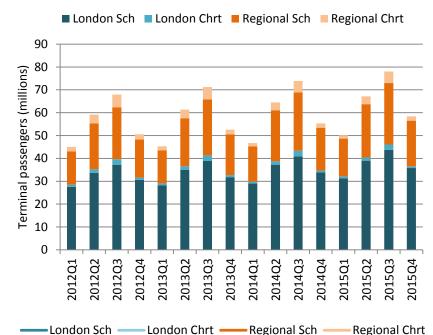
UK terminal passengers are those travellers who board or disembark an aircraft on a commercial flight at a reporting UK airport. The figures in this section therefore exclude transit passengers – those who remain on-board aircraft which land at a UK airport and then continue on to another destination.

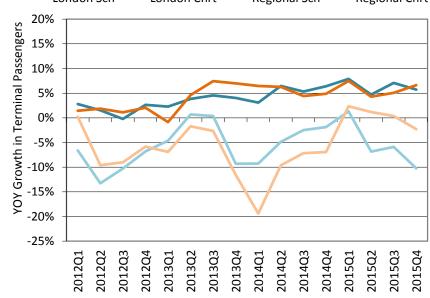
In Q4 2015, London airports handled 5.3% more passengers, and regional airports 5.8% more than in the same quarter last year. Scheduled passengers, which form the majority of total terminal passengers (95% market share), grew by 6% overall. Charter traffic on the other hand saw a decline of 4.8% overall, principally in the London region.

On a rolling year basis covering Q1 2015 to Q4 2015, terminal passengers were 5.8% higher at London airports and 5% higher at regional airports than the year before. This represents 5.5% growth in UK terminal passengers overall for the same period.

The number of terminal passengers at London airports hit a new high in the rolling year to Q4 2015, with nearly 11% more passengers flying than in the pre-recession peak of 140m passengers (rolling year to Q1 2008). The number of terminal passengers using regional airports however have not recovered to their pre-recession levels and remains approximately 7% below the pre-recession peak of 103m passengers (rolling year to Q2 2008).

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3. Passenger flights to and from UK airports see note 5 on p.14

		CURR	ENT QUAF	RTER	ROLLING YEAR						
Flights	Q4 2015 Q4 2014					Q1 15 –	Q4 15	Q1 14 –			
(000's)	Flights (000s)	% of total	Flights (000s)	% of total	% chg	Flights (000s)	% of total	Flights (000s)	% of total	% chg	
London Airports	251.8	52%	245.6	52%	2.5%	1,050.4	52%	1,012.1 51%		3.8%	
- Scheduled	246.8	51%	240.4	51%	2.7%	1,020.5	50%	981.2	49%	4.0%	
- Charter	5.0	1%	5.2	1%	-4.8%	29.9	1%	30.9	2%	-3.2%	
Regional Airports	230.2	48%	223.4	48%	3.0%	985.8	48%	972.3	49%	1.4%	
- Scheduled	217.3	45%	209.6	45%	3.7%	910.8	45%	896.8	45%	1.6%	
- Charter	12.8	3%	13.7	3%	-6.6%	75.1	4%	75.5	4%	-0.5%	
All Airports	481.9	100%	468.9	100%	2.8%	2,036.2	100%	1,984.4	100%	2.6%	
- Scheduled	464.1	96%	450.0	96%	3.1%	1,931.2	95%	1,878.0	95%	2.8%	
- Charter	17.8	4%	19.0	4%	-6.1%	105.0	5%	106.4	5%	-1.3%	

The figures in this table are for commercial passenger flights and thus exclude air freighter flights (those carrying cargo only).

The number of total passenger flights at all UK airports increased by 2.8% when compared to the same quarter last year, lower than the 5.5% achieved for terminal passengers over the same period.

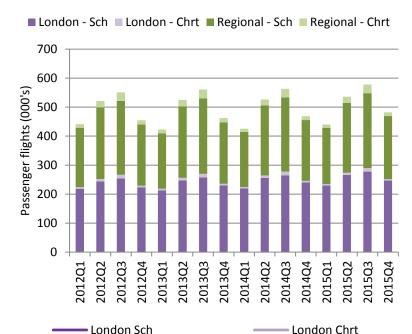
There were 3.1% more scheduled flights and 6.1% fewer charter flights compared to the same quarter last year. For the scheduled segment, this growth in passenger flights trails the equivalent growth rate for scheduled terminal passengers (6%), suggesting more passengers being accommodated on a per flight basis for this segment, either through higher load factors and/or larger aircraft utilised.

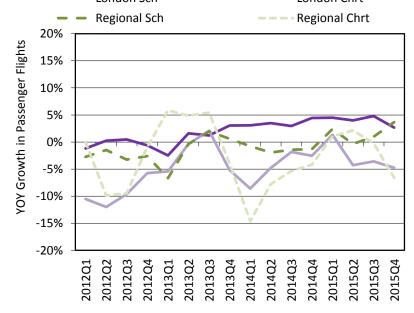
On a rolling year basis, the number of scheduled passenger flights was up by 2.8% and the number of charter passenger flights was down by 1.3%, the latter driven mainly by a decline in traffic from London airports (-3.2%).

Looking at the regional split, there were 2.5% more passenger flights at the London airports and 3% more passenger flights at regional airports when compared to the same quarter last year. On a rolling year basis, the number of flights was up by 3.8% at the London airports and up by 1.4% at the regional airports.

Not only is the scheduled segment the largest in terms of market share, it has also proved to be the most resilient over the course of the last few years, with the London airports contributing most to UK passenger flights growth in this time.

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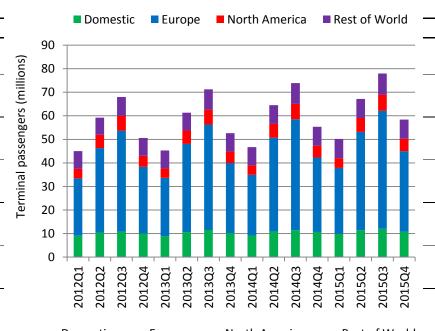
4. Terminal passengers at UK airports by origin/destination see note 5 on p.14

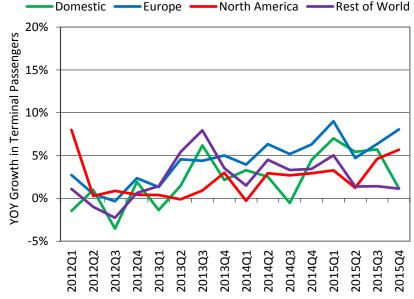
		CURR	ENT QU	ROLLING YEAR							
_	Q4 2	Q4 2015 Q4 2014				Q1 15 -	- Q4 15	Q1 14 -	- Q4 14		
Passengers (millions)	Pax (Mill)	% of total	Pax (Mill)	% of total	% chg	Pax (Mill)	% of total	Pax (Mill)	% of total	% chg	
Domestic	10.8	18%	10.7	19%	1.1%	44.2	17%	42.2	18%	4.8%	
- Scheduled	10.7	18%	10.5	19%	1.4%	43.7	17%	41.7	17%	4.9%	
- Charter	0.1	0%	0.1	0%	-21.4%	0.5	0%	0.5	0%	-4.8%	
Europe	34.2	59%	31.6	57%	8.0%	154.0	61%	144.3	60%	6.7%	
- Scheduled	32.1	55%	29.7	54%	8.1%	140.2	55%	130.6	54%	7.4%	
- Charter	2.0	3%	1.9	3%	7.6%	13.9	5%	13.7	6%	1.0%	
North America	5.3	9%	5.0	9%	5.7%	22.2	9%	21.4	9%	3.7%	
- Scheduled	5.3	9%	5.0	9%	5.8%	22.0	9%	21.2	9%	3.9%	
- Charter	0.0	0%	0.0	0%	-9.4%	0.2	0%	0.2	0%	-13.5%	
Rest of World	8.1	14%	8.0	14%	1.1%	33.3	13%	32.6	14%	2.2%	
- Scheduled	7.6	13%	7.3	13%	4.6%	30.7	12%	29.6	12%	3.6%	
- Charter	0.5	1%	0.7	1%	-34.0%	2.6	1%	2.9	1%	-12.0%	
All Airports	58.4	100%	55.3	100%	5.5%	253.7	100%	240.4	100%	5.5%	
- Scheduled	55.7	95%	52.6	95%	6.0%	236.6	93%	223.0	93%	6.1%	
- Charter	2.6	5%	2.8	5%	-4.8%	17.1	7%	17.4	7%	-1.6%	

Compared to the same quarter last year, total passengers increased by 5.5% across all UK reporting airports. All regions experienced an increase in passenger numbers over the same period, with Europe being the best performing (+8%), while the Domestic and the Rest of the World were the markets with the weakest growth (+1.1%). There were 5.7% more passengers travelling to North American destinations.

On a rolling year basis, the total number of passengers was also up by 5.5%. This was made up of an increase of 6.7%, 3.7% and 2.2% of passengers travelling to and from Europe, North America and Rest of the World respectively, and a 4.8% increase in domestic traffic.

The European market has proved to be the strongest in terms of terminal passenger growth over the last few years, and has seen a gradual increase in market share, at the expense of all other markets which have all seen a decline in their respective market shares.





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5. Air cargo tonnes carried to and from UK airports see note 5 on p.14

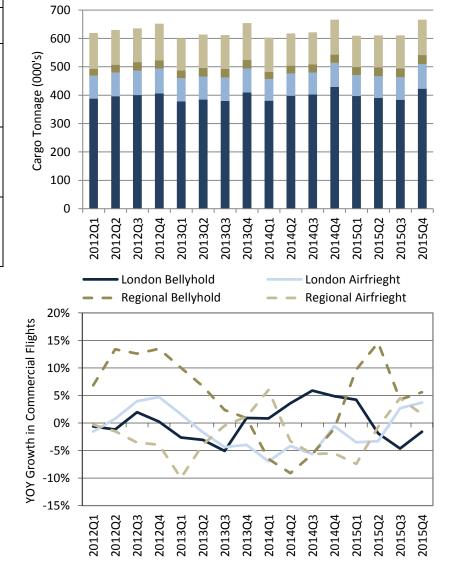
		CURRENT QUARTER						ROLLING YEAR						
Tonnes	Q4 2015 Q4 2014			014		Q1 15 –	Q4 15	Q1 14 –						
(000's)	Tonnes (000's)	% of total	Tonnes (000's)	% of total	% chg	Tonnes (000's)	% of total	Tonnes (000's)	% of total	% chg				
Cargo only flights	212.0	32%	206.9	31%	2.5%	781.2	31%	783.9	31%	-0.3%				
- London	87.2	13%	84.1	13%	3.7%	315.5	13%	315.5	13%	0.0%				
- Regional	124.8	19%	122.8 18 %		1.6%	465.7	19%	468.4	19%	-0.6%				
Bellyhold cargo	454.0	68%	459.1	69%	-1.1%	1,716.8	69%	1,724.0	69%	-0.4%				
- London	422.9	64%	429.7	65%	-1.6%	1,594.8	64%	1,611.4	64%	-1.0%				
- Regional	31.1	5%	29.4	4%	5.6%	122.0	5%	112.5	4%	8.4%				
Total cargo	666.0	100%	666.0	100%	0.0%	2,498.0	100%	2,507.8	100%	-0.4%				
- London	510.1	77%	513.8	77%	-0.7%	1,910.2	76%	1,926.9	77%	-0.9%				
- Regional	155.8	23%	152.2	23%	2.4%	587.7	24%	580.9	23%	1.2%				

Air cargo – freight and mail – is transported into and out of the UK on air freighters and in the bellyhold of passenger aircraft.

Overall, total cargo tonnage at UK airports remained unchanged compared with the same quarter last year. At London airports cargo tonnage decreased by 0.7% and regional airports saw an increase of 2.4% at regional airports. Air freighter tonnage increased by 2.5% and bellyhold cargo tonnage decreased by 1.1% compared with the same quarter last year.

The vast majority of cargo tonnage at London airports (approximately 84%) is transported in the bellyhold of passenger aircraft, which in turn comprises approximately 60-65% of all cargo tonnes transported in the UK. The weak performance of the London airports was driven by the 1.6% reduction in bellyhold cargo tonnes in Q4 2015.

On a rolling year basis, total cargo tonnage handled at UK airports was down by 0.4% compared with the year before, driven by a 0.4% decrease in bellyhold cargo tonnage and a 0.3% reduction in air freighter cargo tonnage.



London Airfreight

■ Regional Airfreight

■ London Bellyhold

■ Regional Bellyhold

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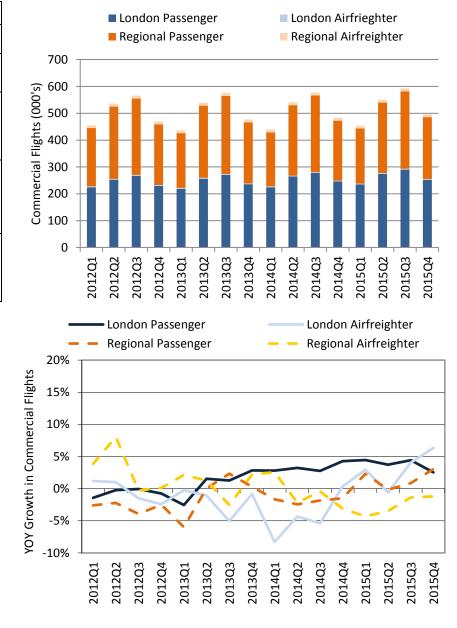
6. All commercial flights to and from UK airports $^{\text{see note 5 on p.14}}$

		CURR	ENT QUAR	TER		ROLLING YEAR						
Flights	Q4 2015 Q			014		Q1 15 –	Q4 15	Q1 14 –				
(000s)	Flights (000's)	% of total	Flights (000's)	% of total	% chg	Flights (000's)	% of total	Flights (000's)	% of total	% chg		
Airfreighter	14.5	3%	14.4	3%	0.6%	56.0	3%	56.7	6.7 3%			
- London	3.7	1%	3.5	1%	6.3%	13.7	1%	13.2	1%	3.2%		
- Regional	10.8	2%	10.9	2%	-1.2%	42.4	2%	43.5	2%	-2.6%		
Passenger flights	481.9	97%	468.9	97%	2.8%	2,036.2	97%	1,984.4	97%	2.6%		
- London	251.8	51%	245.6	51%	2.5%	1,050.4	50%	1,012.1	50%	3.8%		
- Regional	230.2	46%	223.4	46%	3.0%	985.8	47%	972.3	48%	1.4%		
Total flights	496.4	100%	483.3	100%	2.7%	2,092.3	100%	2,041.1	100%	2.5%		
- London	255.4	51%	249.0	52%	2.6%	1,064.0	51%	1,025.3	50%	3.8%		
- Regional	241.0	49%	234.3	48%	2.8%	1,028.2	49%	1,015.8	50%	1.2%		

The number of commercial flights at reporting UK airports is a measure of commercial aviation activity in the UK. It includes both passenger and cargo flights, but excludes military flights, general aviation, and aircraft that pass through UK airspace without landing.

The total number of commercial flights in the UK was up 2.7% compared to the same quarter last year – the combined effect of a 2.8% increase in the number of passenger flights and a 0.6% increase in the number of freighter flights. Overall, London airports and regional airports grew at a similar pace, at 2.6% and 2.8% respectively.

On a rolling year basis, the total number of commercial flights was up 2.5% compared with the year before, driven by 3.8% growth at London airports. Commercial flights at regional airports rose by 1.2% over the same period.



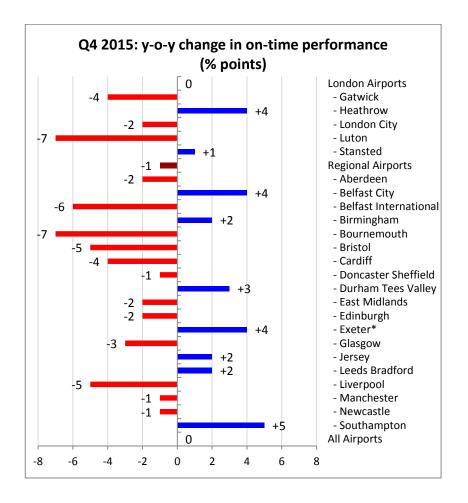
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7. Punctuality of scheduled passenger flights to and from UK airports see note 6 on p.14

a. On-time performance

Matched scheduled	Q4 2	2015	Q4 2	2014	Change
passenger flights (000s), % of flights on- time	Flights (000s)	% on- time	Flights (000s)	% on- time	(% points)
London Airports	242.0	77%	237.2	77%	0
- Gatwick	54.0	72%	53.7	76%	-4
- Heathrow	113.9	78%	115.0	74%	+4
- London City	19.7	83%	19.2	85%	-2
- Luton	19.6	74%	16.2	81%	-7
- Stansted	34.7	80%	33.1	79%	+1
Regional Airports	188.4	80%	180.8	81%	-1
- Aberdeen	12.1	78%	13.6	80%	-2
- Belfast City	10.1	84%	9.1	80%	+4
- Belfast International	7.6	83%	7.0	89%	-6
- Birmingham	20.1	84%	19.6	82%	+2
- Bournemouth	1.5	80%	0.5	87%	-7
- Bristol	11.5	80%	10.5	85%	5
- Cardiff	2.8	77%	2.3	81%	-4
- Doncaster Sheffield	0.9	82%	0.7	83%	-1
- Durham Tees Valley	0.9	86%	1.0	83%	+3
- East Midlands	6.3	83%	6.5	85%	-2
- Edinburgh	23.5	79%	22.5	81%	-2
- Exeter*	2.1	85%	1.5	81%	+4
- Glasgow	18.7	77%	17.0	80%	-3
- Jersey	5.1	78%	5.5	76%	+2
- Leeds Bradford	6.2	83%	6.5	81%	+2
- Liverpool	8.5	78%	6.6	83%	-5
- Manchester	35.0	79%	33.8	80%	-1
- Newcastle	7.9	83%	8.3	84%	-1
- Southampton	7.6	84%	8.4	79%	+5
All Airports	430.3	79%	418.0	79%	0

^{*} Exeter data only available from November 2014



Punctuality of arriving and departing passenger flights is measured by comparing actual and planned times of operation. The data covers 24 airports.

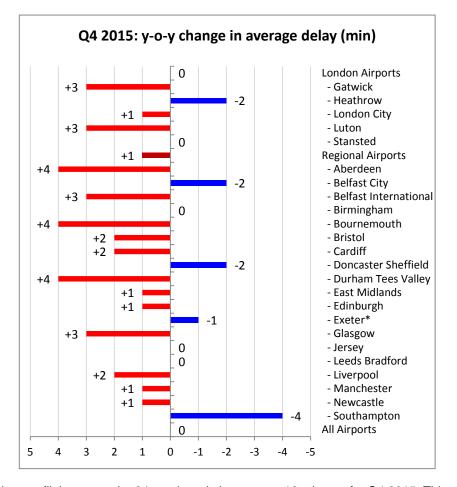
On-time performance is defined as the proportion of flights arriving or departing early or up to and including 15 minutes late. It is calculated from the scheduled on-stand time, the reported runway time and the expected time an aircraft takes to travel between a stand and the runway.

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b. Average delay

Matched scheduled	Q4 2	015	Q4 2	014	Change
passenger flights (000s), Average Delay (min)	Flights (000s)	Avg. Delay (min)	Flights (000s)	Avg. Delay (min)	in Avg. delay (min)
London Airports	242.0	13	237.2	13	0
- Gatwick	54.0	16	53.7	13	+3
- Heathrow	113.9	12	115.0	14	-2
- London City	19.7	9	19.2	8	+1
- Luton	19.6	14	16.2	11	+3
- Stansted	34.7	12	33.1	12	0
Regional Airports	188.4	12	180.8	11	+1
- Aberdeen	12.1	15	13.6	11	+4
- Belfast City	10.1	10	9.1	12	-2
- Belfast International	7.6	10	7.0	7	+3
- Birmingham	20.1	10	19.6	10	0
- Bournemouth	1.5	13	0.5	9	+4
- Bristol	11.5	12	10.5	10	+2
- Cardiff	2.8	14	2.3	12	+2
- Doncaster Sheffield	0.9	11	0.7	13	-2
- Durham Tees Valley	0.9	13	1.0	9	+4
- East Midlands	6.3	11	6.5	10	+1
- Edinburgh	23.5	12	22.5	11	+1
- Exeter*	2.1	10	1.5	11	-1
- Glasgow	18.7	14	17.0	11	+3
- Jersey	5.1	14	5.5	14	0
- Leeds Bradford	6.2	11	6.5	11	0
- Liverpool	8.5	13	6.6	11	+2
- Manchester	35.0	12	33.8	11	+1
- Newcastle	7.9	10	8.3	9	+1
- Southampton	7.6	10	8.4	14	-4
All Airports	430.3	12	418.0	12	0

^{*} Exeter data only available from November 2014



Average delay per flight across the 24 monitored airports was 12 minutes for Q4 2015. This represented no change against the same quarter last year.

Southampton topped the airports with the biggest improvement, with four minutes shaved off average delays compared with Q4 2014.

Most airports experienced an increase in average delay in Q4 2015, notably Aberdeen, Bournemouth and Durham Tees Valley airports, all of which saw an extra four minutes of average delay compared to Q4 2014.

The airport with the least average delay in Q4 2015 was London City (9 minutes), whilst Gatwick saw the longest average delay of the 24 monitored airports (16 minutes).

Explanatory notes

- 1. The Civil Aviation Authority data is prepared with the co-operation of the United Kingdom airport and airline operators. The assistance from all these organisations is gratefully acknowledged.
- 2. The information contained in this report has been compiled from various sources and it is not possible for the CAA to check and verify whether it is accurate and correct, nor does the CAA undertake to do so. Consequently the CAA cannot accept any liability for any financial loss caused by any person's reliance on it.
- 3. More detailed data are available from the Civil Aviation Authority website at the following address www.caa.co.uk/aviationintelligence.
- 4. The CAA is the UK's specialist aviation regulator whose regulatory activities range from ensuring the aviation industry meets the highest safety standards to preventing holidaymakers from being stranded abroad because of tour operator insolvency.
- 5. Explanatory notes for Parts 1 to 6:

Notes		Appl	icab	le to	t	
Notes	1	2	3	4	5	6
Tables and charts are generated from data in CAA Airport Statistics.	✓	✓	✓	✓	✓	✓
All data excludes the activity of Air Taxis – those aircraft with maximum take-off weights of less than 15 tonnes flying non-scheduled	1	1	1	1	√	/
services.	ľ	•	•	•	•	
London airports are Heathrow, Gatwick, Stansted, Luton, London City and Southend. Regional Airports are all other UK airports, this						
category includes the Channel Island Airports – Jersey, Guernsey, and Alderney – and the Isle of Man, which are not formally part of the	✓	✓	✓	✓	✓	✓
UK.						
Exclude traffic to and from North Sea oilrigs.		✓	✓	✓	✓	√
Terminal passengers are those commencing their journey or connecting between flights at the airport, but exclude transit passengers who	✓	1		1		
do not disembark.	•	•		•		
Cargo comprises mail and freight.	✓				✓	✓
For the purposes of this report, World Areas are defined as follows:						
Domestic - the United Kingdom, the Channel Islands and the Isle of Man (these numbers are not adjusted for the double counting which				./		
occurs when both airports report arriving and departing passengers to the CAA); Europe - geographical Europe including Turkey and the				•		
former Soviet Union states; North America - USA, Canada and Puerto Rico; Rest of World - all other countries.						
A destination is defined to be where a passenger boards or alights the aircraft on which they arrived or departed from the reporting airport;				/		ĺ
it is not necessarily the first or last stop of a multi-sector flight.				•		i

6. Explanatory notes for Part 7:

- In these punctuality data, 'delay' is recorded as the difference between an aircraft's scheduled and actual arrival or departure time at the airport terminal. It does not therefore measure any delay, such as that due to congestion, which has already been allowed for in the planned flight times of the service.
- Average delay is the total minutes of delay recorded by all flights (with early arriving flights counted as zero delay) divided by the total number of flights monitored.
- On-time performance and delay is calculated from the scheduled on-stand time (provided by Airport Co-ordination Ltd.), the reported runway time (provided by the airport) and the expected time an aircraft takes to travel between a stand and the runway (taxiing time calculated from historic data). The use of average taxi times is sufficient for calculating an aggregate level of on-time performance, but would not be suitable for reviewing the punctuality of an individual flight.
- The statistics cover only those flights which were operated and do not cover those flights which were cancelled.

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