

Aviation Trends

Quarter 4 2017



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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.

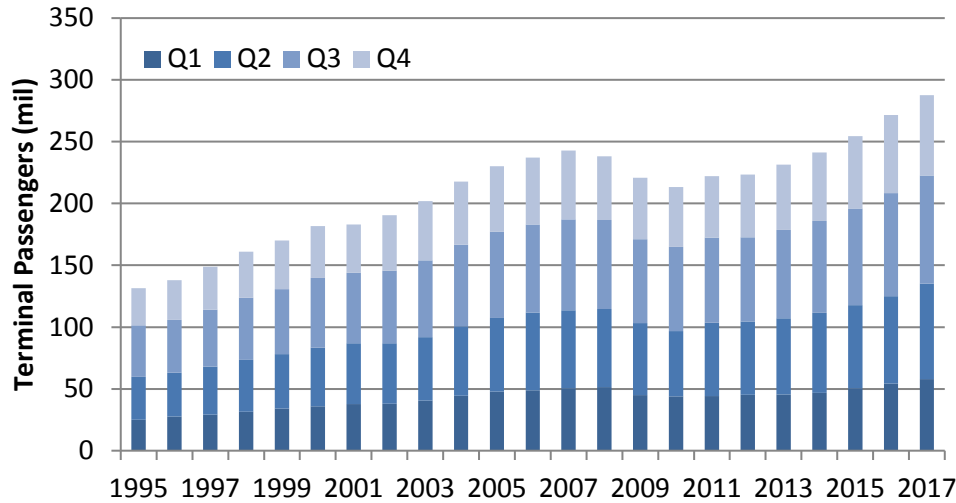
The Aviation Trends series is available at www.caa.co.uk/aviationtrends, part of Aviation Intelligence, the online home of the CAA's monthly airport and airline statistical publications. Please note that historic numbers may be subject to minor change as the result of prior period adjustments.¹ Due to 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.

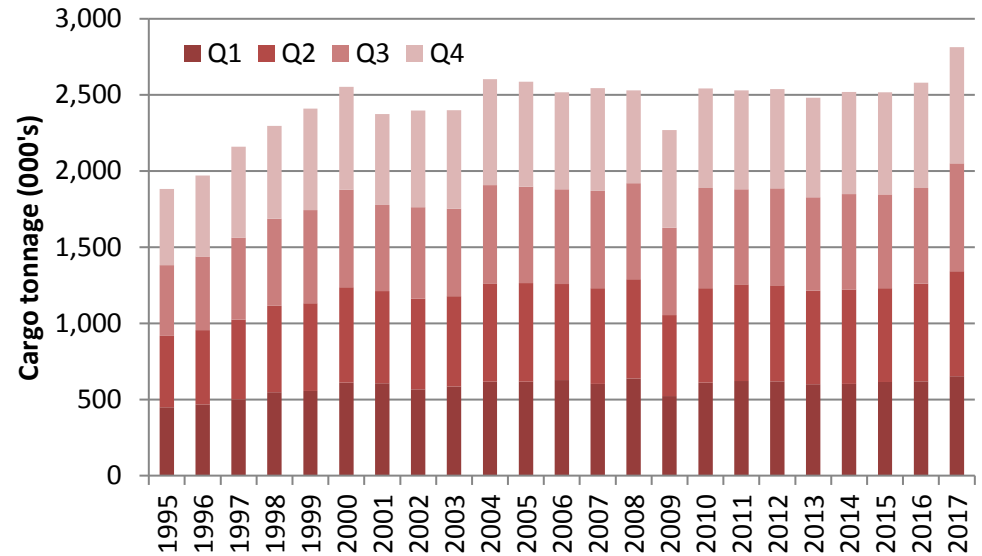
¹ Also, in editions of Aviation Trends prior to quarter 4 2008, all figures included activity at Channel Islands and Isle of Man airports. These islands are not formally part of the UK, and as we wish to present only the trends at UK airports, their figures are now excluded from the UK reporting airports,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

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

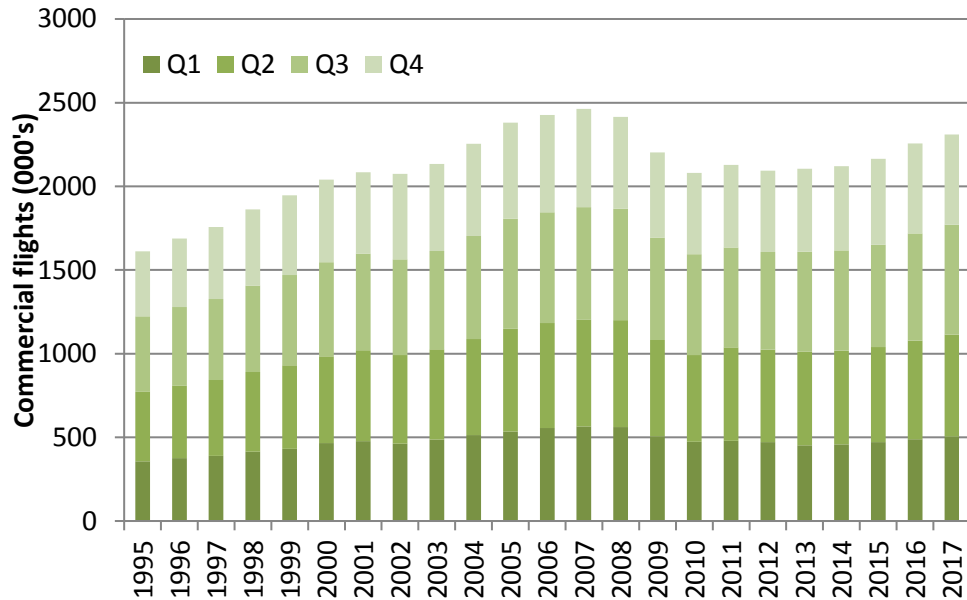
a. Terminal passengers



b. Cargo tonnage



c. Commercial flights



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.

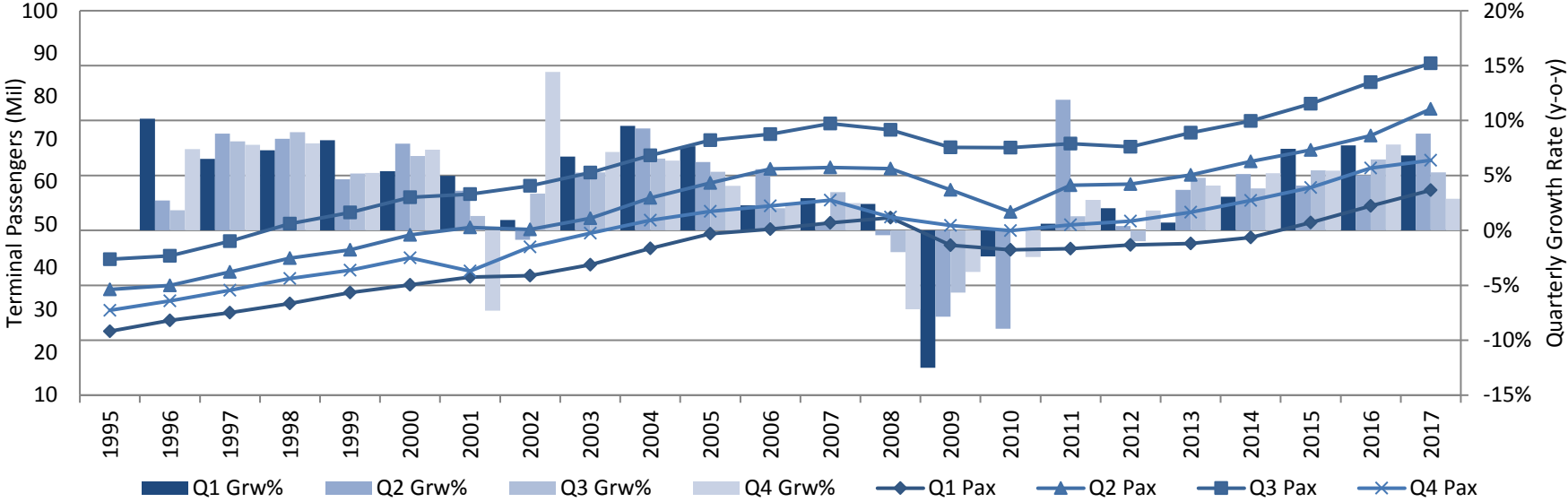
In Q4 2017, UK airports handled 65 million terminal passengers, representing 2.9% growth against the same quarter in the previous year and a new high in terms of the number of passengers flown in Q4 of any previous year. On a rolling year basis, terminal passengers also hit a new record (288m pax) in Q4 2017, surpassing the previous rolling 12-month high (286m pax) set in Q3 2017.

Q4 2017 saw 541 thousand commercial flights, representing 0.6% growth against the same quarter in the previous year. For the rolling 12 months to Q4 2017, commercial flights totalled 2.31 million, representing growth of 2.4% against the 12-month period the year before (Q1 2016 to Q4 2016).

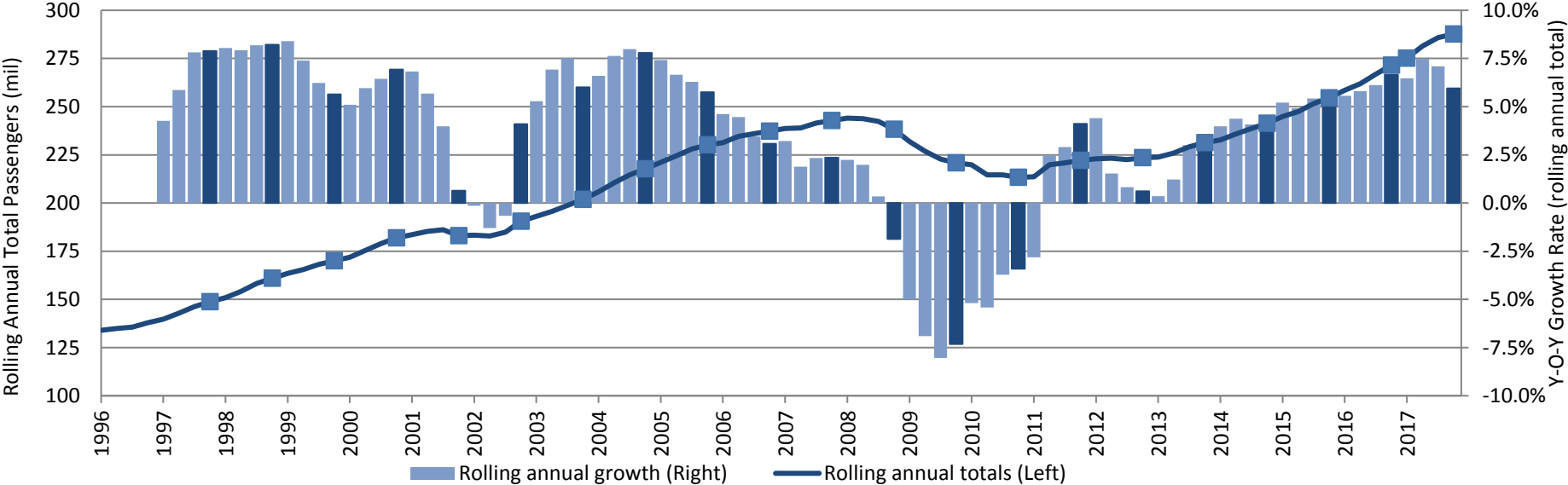
Q4 2017 also saw 763 thousand tonnes of cargo pass through UK airports, representing 10.6% growth on Q4 2016. For the rolling 12 months to Q4 2017, 2.81 million tonnes of cargo were handled at UK airports, up 9.1% on the 12-month period the year before (Q1 2016 to Q4 2016).

a. Terminal passengers

Terminal passengers - Quarterly totals and Y-O-Y growth rates

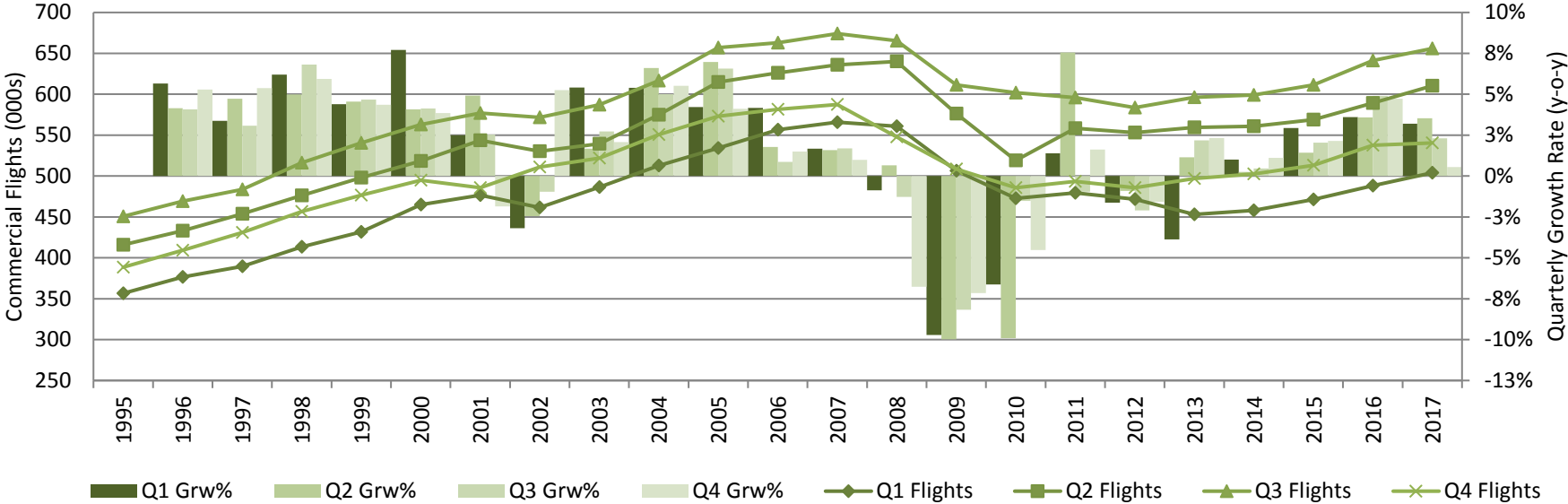


Terminal Passengers - Rolling annual totals and Y-O-Y growth rates

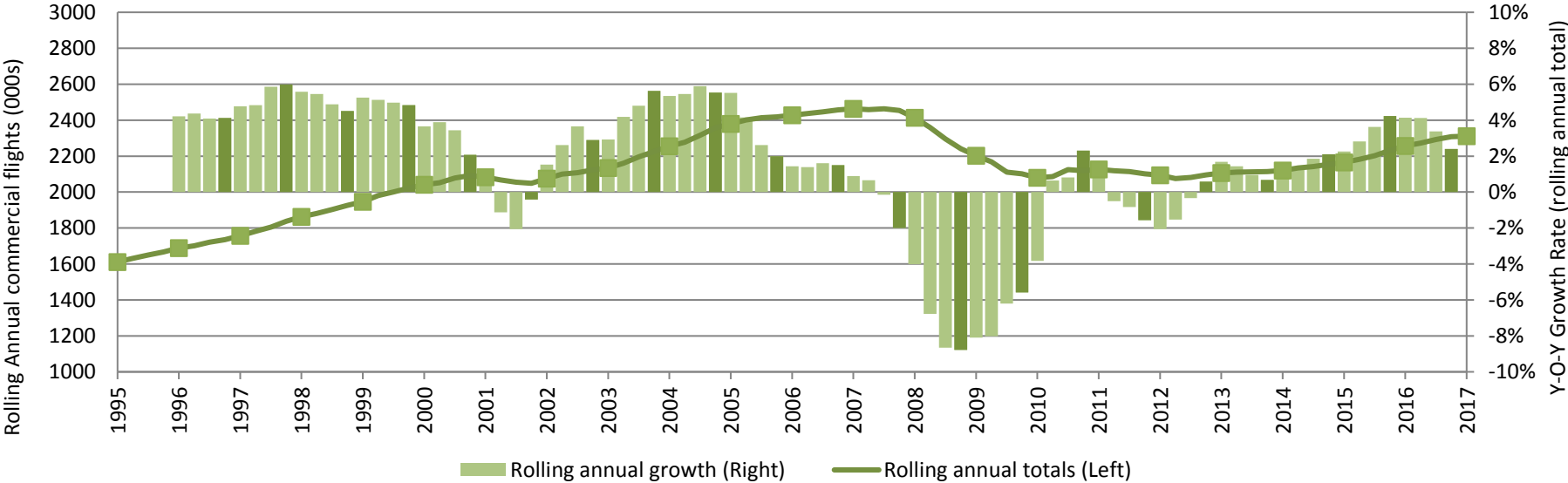


b. Commercial flights

Commercial Flights - Quarterly totals and Y-O-Y growth rates

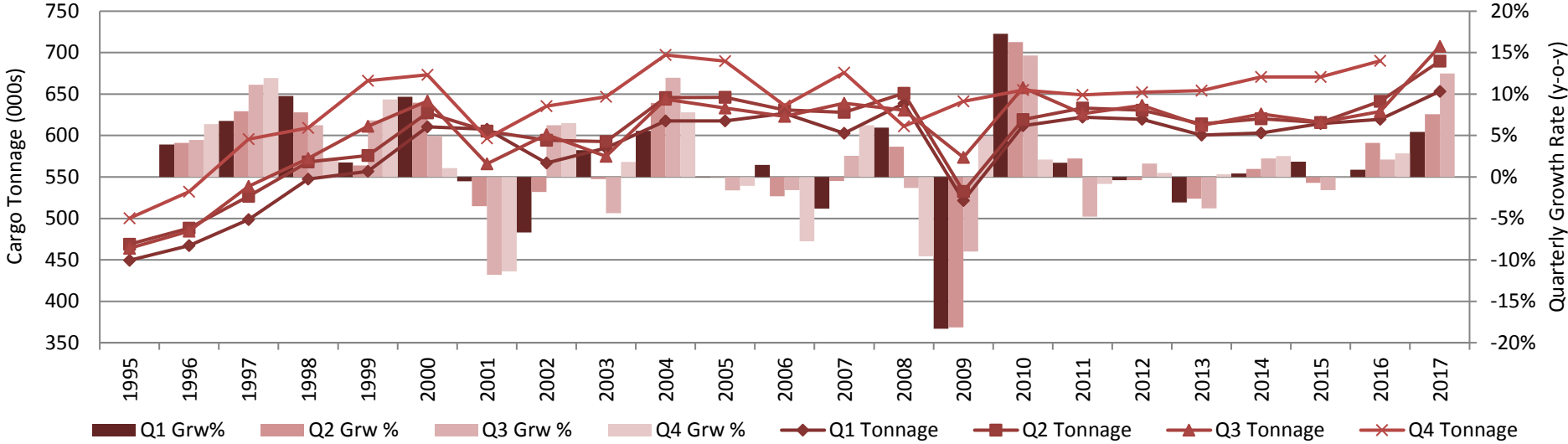


Commercial flights - Rolling annual totals and Y-O-Y growth rates

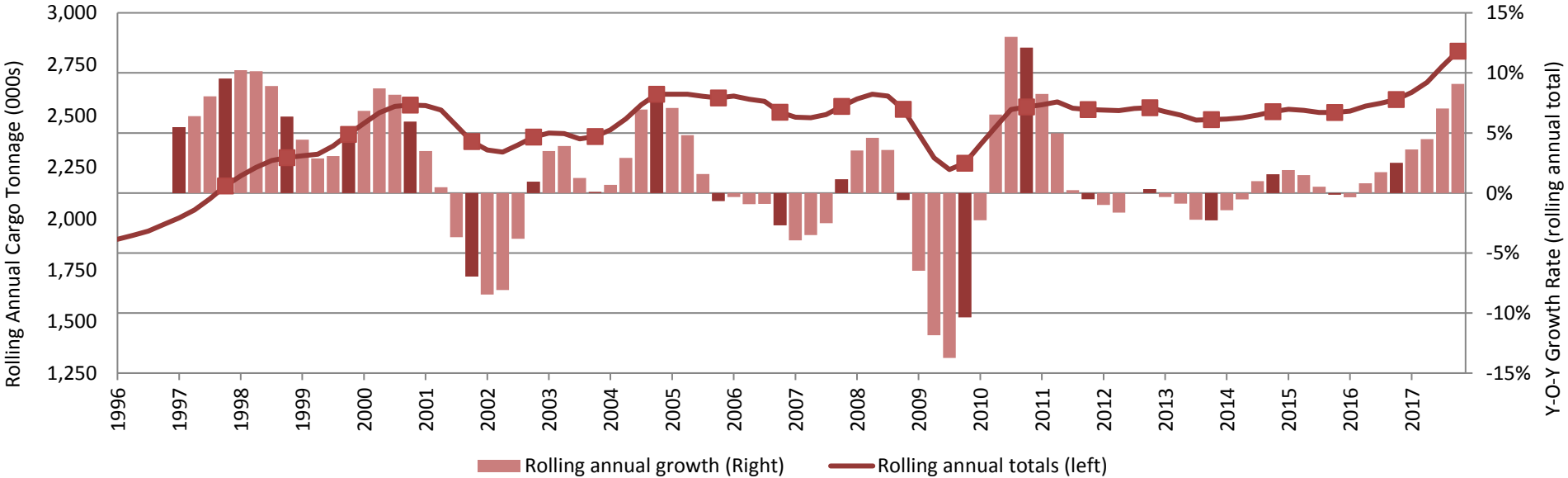


c. Cargo tonnage

Cargo Tonnage - Quarterly totals and Y-O-Y growth rates

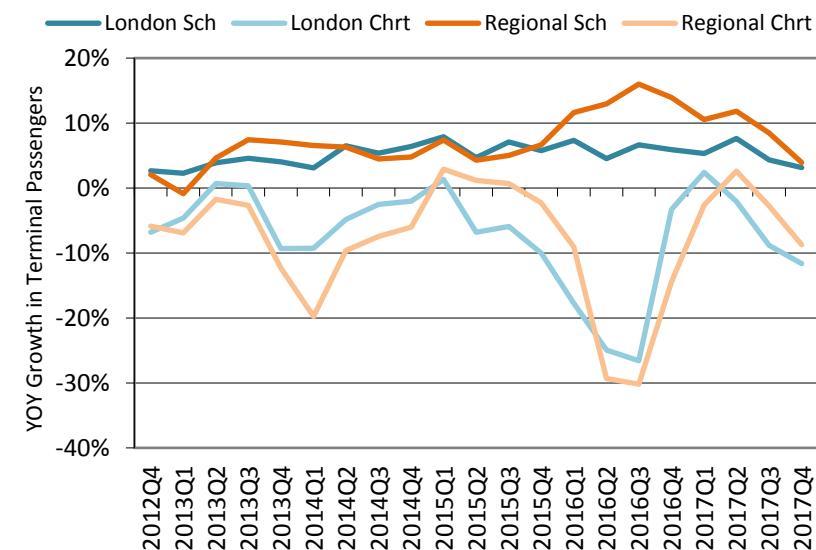


Cargo tonnage - Rolling annual totals and Y-O-Y growth rates

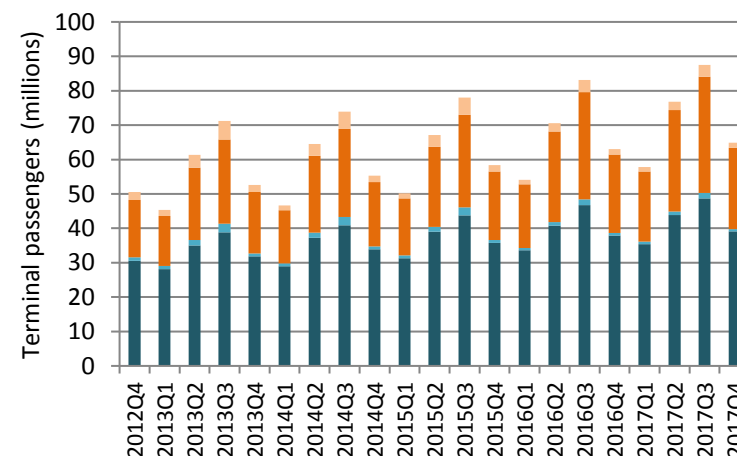


2. Terminal passengers at UK airports see note 5 on p.14

Pax (millions)	CURRENT QUARTER					ROLLING YEAR				
	Q4 2017		Q4 2016			Q1 17 – Q4 17		Q1 16 – Q4 16		
	Pax (Mil)	% of total	Pax (Mil)	% of total	% chg	Pax (Mil)	% of total	Pax (Mil)	% of total	% chg
London Airports	39.8	61%	38.7	61%	2.8%	171.0	60%	163.2	60%	4.8%
- Scheduled	39.1	60%	37.9	60%	3.1%	167.1	58%	159.0	59%	5.1%
- Charter	0.7	1%	0.8	1%	-11.7%	3.9	1%	4.2	2%	-5.8%
Regional Airports	25.1	39%	24.3	39%	3.1%	116.0	40%	107.6	40%	7.8%
- Scheduled	23.6	36%	22.7	36%	3.9%	107.3	37%	98.7	36%	8.7%
- Charter	1.5	2%	1.6	3%	-8.7%	8.7	3%	8.9	3%	-2.3%
All Airports	64.9	100%	63.0	100%	2.9%	287.0	100%	270.8	100%	6.0%
- Scheduled	62.7	97%	60.6	96%	3.4%	274.4	96%	257.7	95%	6.5%
- Charter	2.1	3%	2.4	4%	-9.7%	12.6	4%	13.1	5%	-3.4%



Legend: London Sch (dark blue), London Chrt (light blue), Regional Sch (orange), Regional Chrt (light orange)



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 onto another destination.

In Q4 2017, London airports handled 2.8% more passengers, and regional airports 3.1% more than in the same quarter last year. Scheduled passengers grew by 3.4% overall. Charter traffic on the other hand declined by 9.7%.

For the rolling 12 months to Q4 2017, terminal passengers were 4.8% higher at London airports and 7.8% higher at regional airports, respectively compared to the previous rolling 12-month period (Q1 2016 to Q4 2016). Overall for the period, UK airports handled 287m passengers in total, up by 6.0% on the previous 12 months.

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

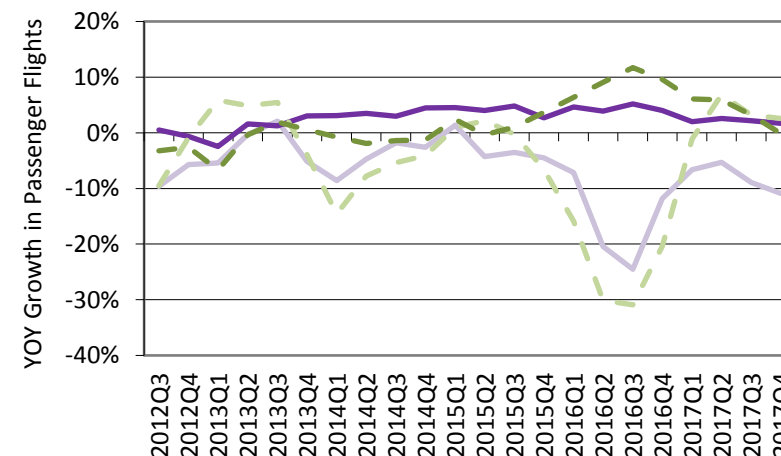
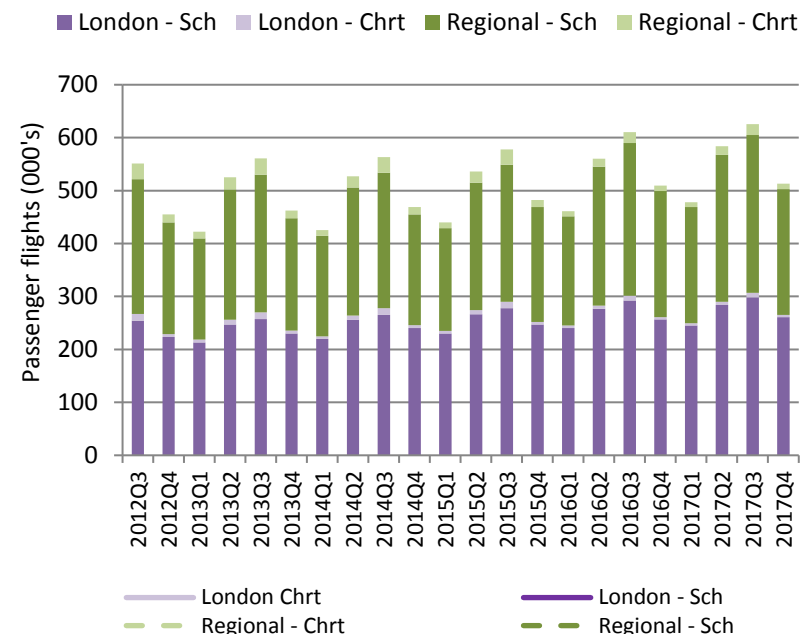
Flights (000's)	CURRENT QUARTER					ROLLING YEAR				
	Q4 2017		Q4 2016			Q1 17 – Q4 17		Q1 16 – Q4 16		
	Flights (000s)	% of total	Flights (000s)	% of total	% chg	Flights (000s)	% of total	Flights (000s)	% of total	% chg
London Airports	265.0	52%	261.1	51%	1.5%	1,111.0	50%	1,090.4	51%	1.9%
- Scheduled	261.1	51%	256.7	50%	1.7%	1,088.6	49%	1,066.0	50%	2.1%
- Charter	3.9	1%	4.4	1%	-10.9%	22.5	1%	24.4	1%	-7.9%
Regional Airports	248.3	48%	248.4	49%	0.0%	1,090.0	50%	1,051.2	49%	3.7%
- Scheduled	237.8	46%	238.2	47%	-0.2%	1,033.1	47%	996.1	47%	3.7%
- Charter	10.5	2%	10.2	2%	2.6%	56.9	3%	55.1	3%	3.3%
All Airports	513.4	100%	509.6	100%	0.7%	2,201.0	100%	2,141.6	100%	2.8%
- Scheduled	498.9	97%	494.9	97%	0.8%	2,121.6	96%	2,062.1	96%	2.9%
- Charter	14.4	3%	14.6	3%	-1.5%	79.4	4%	79.5	4%	-0.1%

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

In Q4 2017, the number of total passenger flights handled at UK airports increased by 0.7% to 513 thousand. There were 0.8% more scheduled flights and 1.5% fewer charter flights compared to the same quarter last year.

For the rolling 12 months to Q4 2017, the number of passenger flights handled by UK airports reached 2.20 million. The number of scheduled passenger flights was up by 2.9% whilst the number of charter passenger flights fell by 0.1% against the previous year.

Looking at the regional split in Q4 2017, there were 1.5% more passenger flights at the London airports and the same number of passenger flights at regional airports when compared to the same quarter last year. For the rolling 12 months to Q4 2017, the number of flights was up by 1.9% at London airports and up by 3.7% at regional airports.

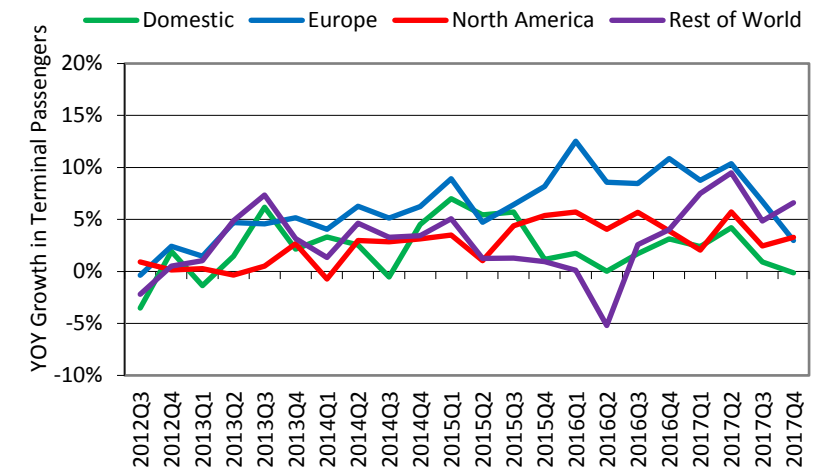
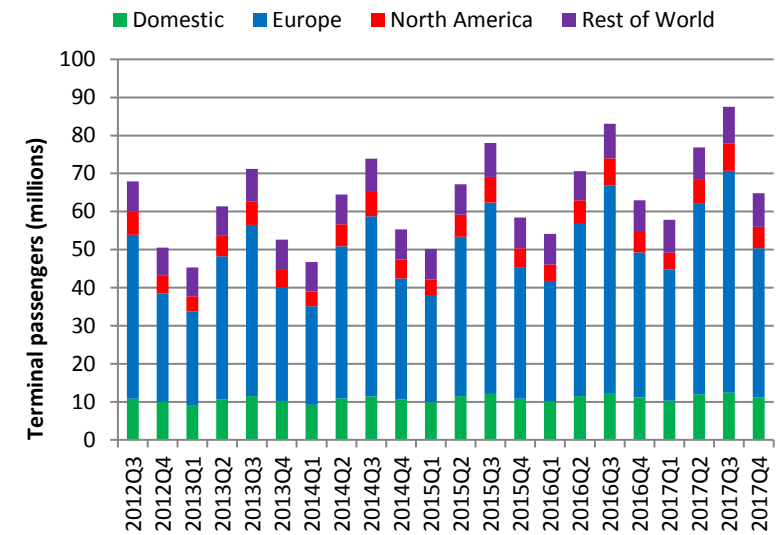


4. Terminal passengers at UK airports by origin/destination see note 5 on p.14

Passengers (millions)	CURRENT QUARTER					ROLLING YEAR				
	Q4 2017		Q4 2016		% chg	Q1 17 – Q4 17		Q1 16 – Q4 16		% chg
	Pax (Mill)	% of total	Pax (Mill)	% of total		Pax (Mill)	% of total	Pax (Mill)	% of total	
Domestic	11.1	17%	11.1	18%	-0.1%	45.7	16%	44.9	17%	1.8%
- Scheduled	11.0	17%	11.1	18%	-0.4%	45.4	16%	44.6	16%	1.7%
- Charter	0.1	0%	0.1	0%	60.5%	0.3	0%	0.2	0%	29.7%
Europe	39.3	61%	38.1	61%	3.0%	182.3	64%	170.0	63%	7.2%
- Scheduled	37.6	58%	36.3	58%	3.5%	171.5	60%	158.9	59%	7.9%
- Charter	1.7	3%	1.8	3%	-6.6%	10.8	4%	11.1	4%	-2.6%
North America	5.6	9%	5.4	9%	3.3%	23.5	8%	22.7	8%	3.4%
- Scheduled	5.5	9%	5.3	8%	3.5%	23.3	8%	22.5	8%	3.5%
- Charter	0.0	0%	0.0	0%	-29.9%	0.2	0%	0.2	0%	-2.8%
Rest of World	8.9	14%	8.4	13%	6.6%	35.5	12%	33.1	12%	7.0%
- Scheduled	8.6	13%	7.9	13%	8.6%	34.2	12%	31.6	12%	8.1%
- Charter	0.3	0%	0.4	1%	-29.3%	1.3	0%	1.5	1%	-15.2%
All Airports	64.9	100%	63.0	100%	2.9%	287.0	100%	270.8	100%	6.0%
- Scheduled	62.7	97%	60.6	96%	3.4%	274.4	96%	257.7	95%	6.5%
- Charter	2.1	3%	2.4	4%	-9.7%	12.6	4%	13.1	5%	-3.5%

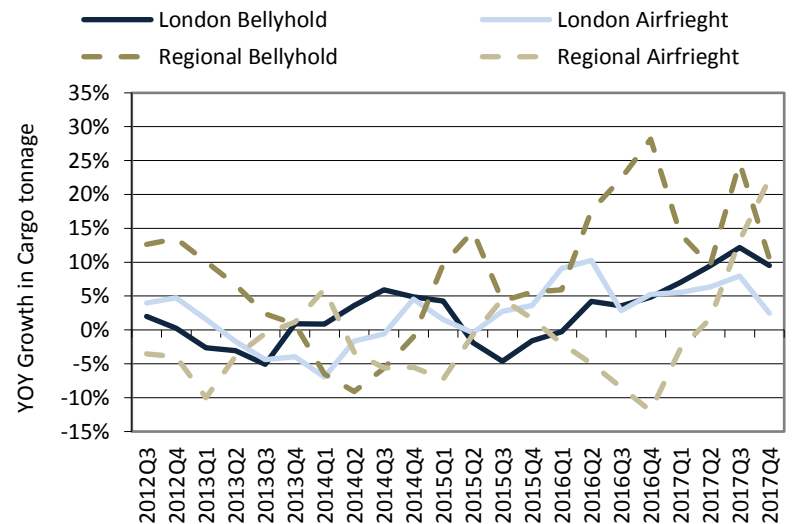
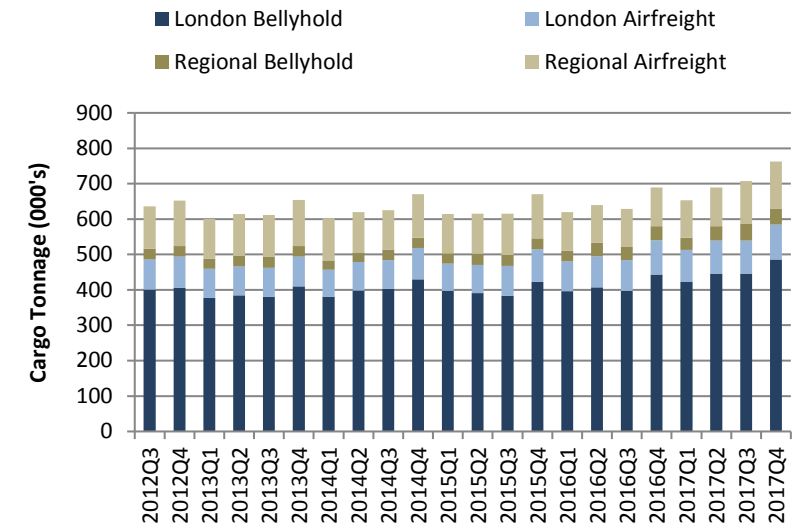
Compared to the same quarter last year, total passenger (excluding those going to/from North Sea oil rigs) increased by 2.9% across all UK reporting airports in Q4 2017. All regions experienced an increase in passenger numbers over the same period, with rest of the world being the best performing (+6.6%), while the Domestic market saw the weakest growth (-0.1%). There were 3.3% more passengers travelling on North American routes and 3.60 more passengers travelling to the rest of the world.

For the rolling 12 months to Q4 2017, the total number of passengers was up by 6.0%. This was made up of an increase of 7.2%, 3.4% and 1.8% and 7.0% of passengers travelling to and from Europe, North America, domestic and rest of the world respectively.



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

Tonnes (000's)	CURRENT QUARTER					ROLLING YEAR				
	Q4 2017		Q4 2016			Q1 17 – Q4 17		Q1 16 – Q4 16		
	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	233.3	31%	206.4	30%	13.0%	844.8	30%	788.0	31%	7.2%
- London	98.8	13%	96.4	14%	2.5%	374.1	13%	354.6	14%	5.5%
- Regional	134.5	18%	109.9	16%	22.3%	470.8	17%	433.3	17%	8.6%
Bellyhold cargo	529.6	69%	483.2	70%	9.6%	1,967.5	70%	1,789.3	69%	10.0%
- London	485.6	64%	443.4	64%	9.5%	1,801.3	64%	1,644.3	64%	9.5%
- Regional	44.0	6%	39.8	6%	10.6%	166.2	6%	144.9	6%	14.7%
Total cargo	762.9	100%	689.6	100%	10.6%	2,812.4	100%	2,577.2	100%	9.1%
- London	584.4	77%	539.8	78%	8.3%	2,175.4	77%	1,999.0	78%	8.8%
- Regional	178.5	23%	149.8	22%	19.2%	637.0	23%	578.2	22%	10.2%



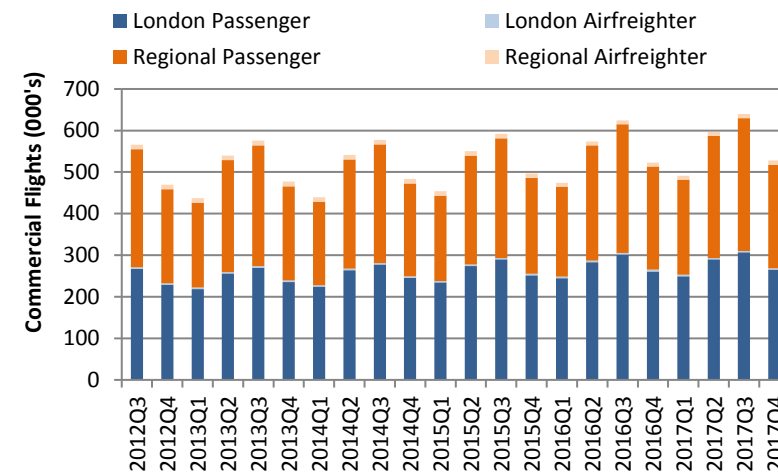
Air cargo – freight and mail – is transported into and out of the UK on air freighters and in the bellyhold of passenger aircraft.

In Q4 2017, total cargo tonnage at UK airports grew by 10.6% compared with the same quarter last year. At London airports cargo tonnage grew by 8.3% while cargo tonnage at regional airports increased by 19.2%. Air freighter tonnage increased by 13.0% whilst bellyhold cargo tonnage grew by 9.6% over the same period.

For the rolling 12 months to Q4 2017, total cargo tonnage handled at UK airports grew by 9.1% compared with the previous 12 month period (Q1 2016 to Q4 2016). London airports grew by 8.8% while regional airports grew by 10.2%. In this period bellyhold cargo increases by 10.0% while air freighter grew by 7.2%.

6. All commercial flights to and from UK airports see note 5 on p.14

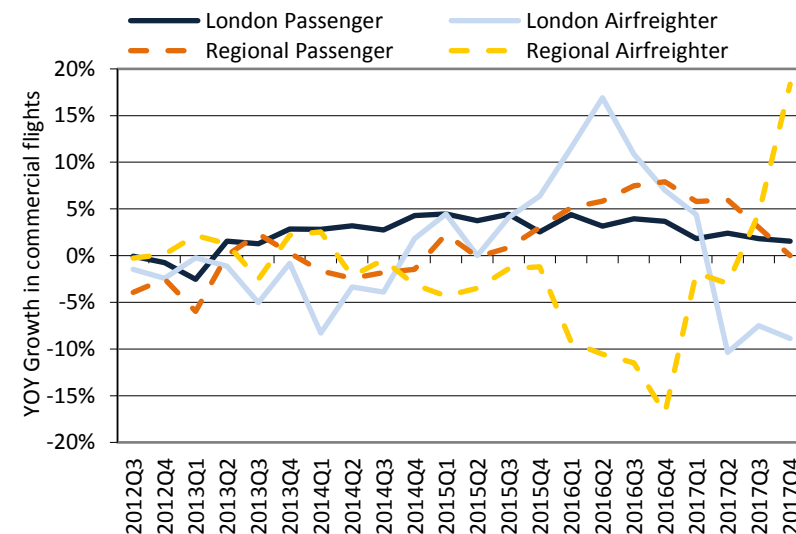
Flights (000s)	CURRENT QUARTER					ROLLING YEAR				
	Q4 2017		Q4 2016			Q1 17 – Q4 17		Q1 16 – Q4 16		
	Flights (000's)	% of total	Flights (000's)	% of total	% chg	Flights (000's)	% of total	Flights (000's)	% of total	% chg
Airfreighter	14.3	3%	13.0	2%	10.0%	53.5	2%	52.7	2%	1.4%
- London	3.6	1%	4.0	1%	-8.9%	14.6	1%	15.5	1%	-5.7%
- Regional	10.6	2%	9.0	2%	18.4%	38.9	2%	37.3	2%	4.4%
Passenger flights	513.7	97%	509.6	98%	0.8%	2,201.4	98%	2,142.0	98%	2.8%
- London	265.2	50%	261.1	50%	1.5%	1,111.2	49%	1,090.4	50%	1.9%
- Regional	248.5	47%	248.4	48%	0.0%	1,090.2	48%	1,051.7	48%	3.7%
Total flights	527.9	100%	522.5	100%	1.0%	2,254.8	100%	2,194.8	100%	2.7%
- London	268.8	51%	265.1	51%	1.4%	1,125.8	50%	1,105.9	50%	1.8%
- Regional	259.1	49%	257.4	49%	0.7%	1,129.1	50%	1,088.9	50%	3.7%



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 1.0% in Q4 2017 compared to the same quarter last year – the combined effect of a 0.8% increase in the number of passenger flights and a 10% increase in the number of freighter flights. Overall for the same quarter, London airports and regional airports grew at 1.4% and 0.7% respectively.

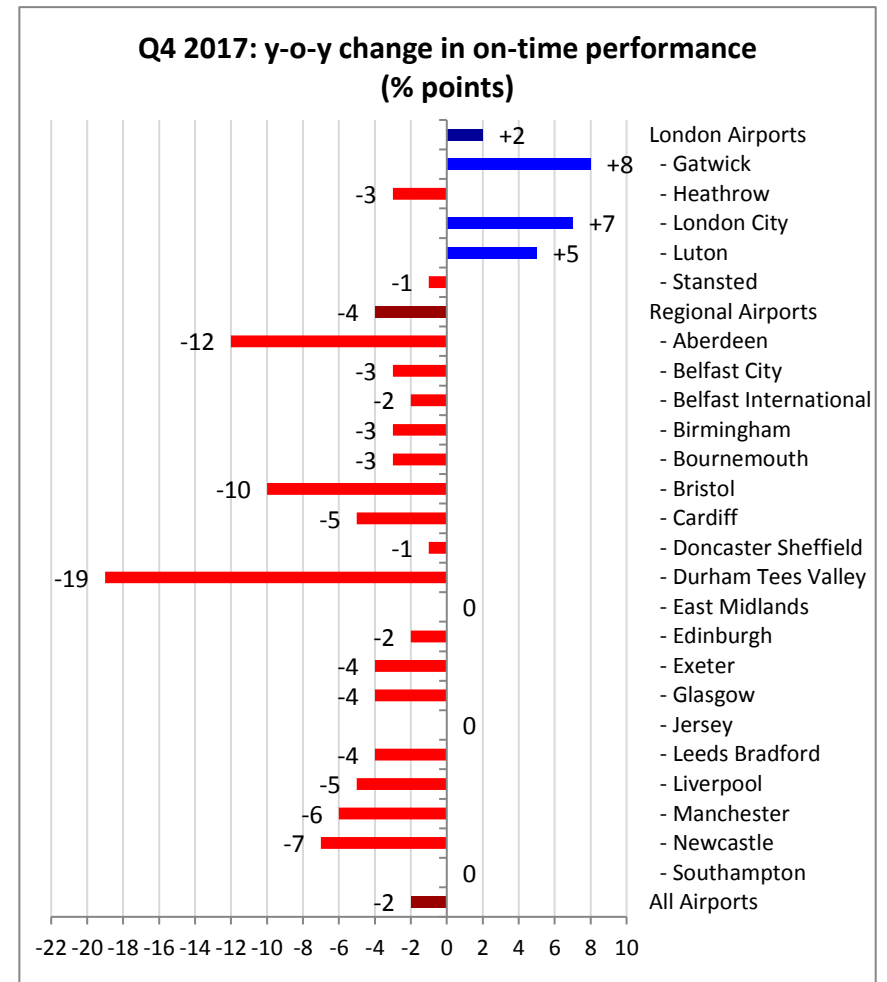
For the rolling 12 months to Q4 2017, the total number of commercial flights reached 2.25m, up by 2.7% compared with the previous rolling 12 months (Q1 2016 to Q4 2016). Commercial flights at London airports rose by 1.8% while at regional airports the increase was 3.7%.



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

a. On-time performance

Matched scheduled passenger flights (000s), % of flights on-time	Q4 2017		Q4 2016		Change (% points)
	Flights (000s)	% on-time	Flights (000s)	% on-time	
London	254.7	75%	254.2	73%	+2
Gatwick	60.3	75%	60.9	67%	+8
Heathrow	116.3	75%	115.0	78%	-3
London City	18.2	84%	19.3	77%	+7
Luton	22.4	72%	23.2	67%	+5
Stansted	37.6	70%	35.8	71%	-1
Regional	206.1	74%	208.0	78%	-4
Aberdeen	12.4	69%	11.6	81%	-12
Belfast City (George Best)	8.8	80%	9.6	83%	-3
Belfast International	8.7	74%	9.2	76%	-2
Birmingham	21.8	74%	23.9	77%	-3
Bournemouth	0.5	77%	0.6	80%	-3
Bristol	13.4	68%	13.4	78%	-10
Cardiff Wales	3.1	75%	3.2	80%	-5
Doncaster Sheffield	1.5	75%	1.7	76%	-1
Durham Tees Valley	1.3	61%	0.8	80%	-19
East Midlands International	6.5	80%	6.2	80%	0
Edinburgh	27.1	75%	25.8	77%	-2
Exeter	2.5	76%	2.5	80%	-4
Glasgow	20.2	74%	19.2	78%	-4
Jersey	5.0	76%	5.2	76%	0
Leeds Bradford	6.6	80%	6.8	84%	-4
Liverpool (John Lennon)	8.0	75%	8.4	80%	-5
Manchester	40.8	71%	41.2	77%	-6
Newcastle	9.2	77%	9.1	84%	-7
Southampton	8.7	79%	9.5	79%	0
Grand Total	460.8	74%	464.0	76%	-2



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

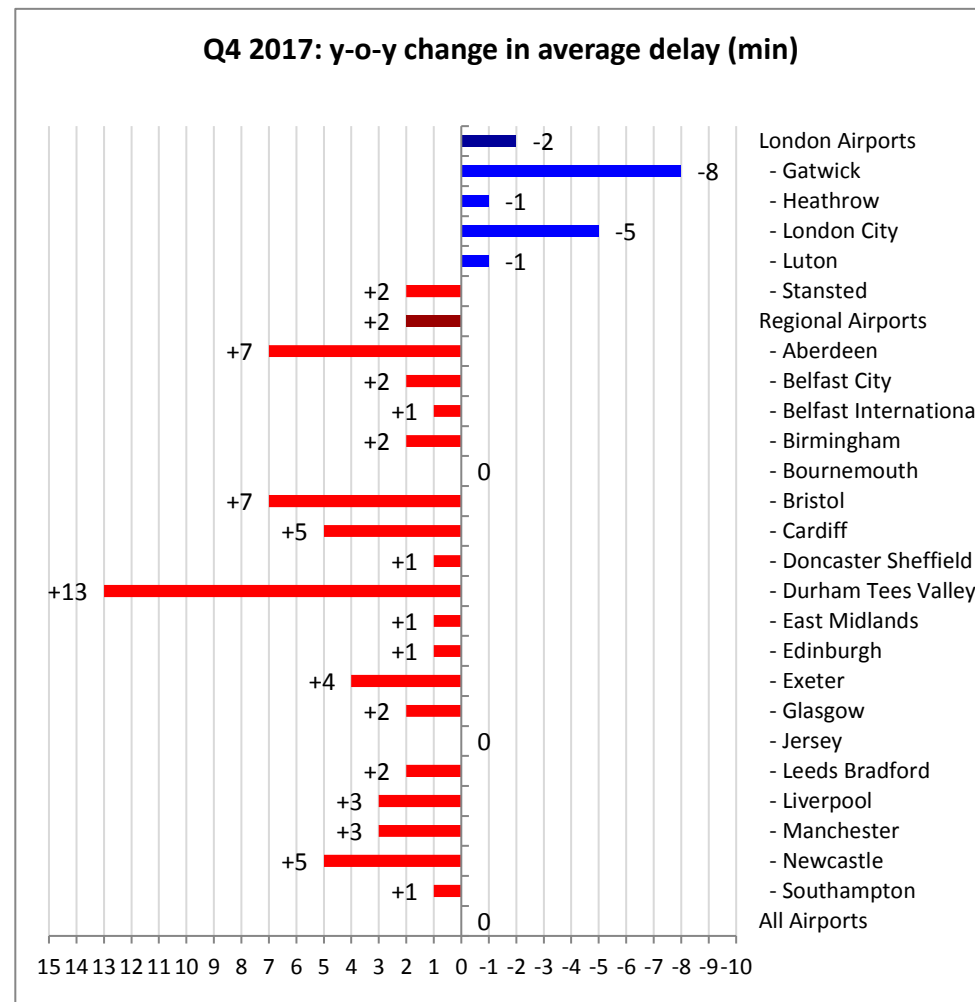
On-time performance is defined as the proportion of flights arriving or departing early or up to and including 15 minutes late. It is calculated from the scheduled on-stand time, the reported runway time and the expected time an aircraft takes to travel between a stand and the runway.

* Exeter data only available from November 2014

b. Average delay

Matched scheduled passenger flights (000s), Average Delay (min)	Q4 2017		Q4 2016		Change in Avg. delay (min)
	Flights (000s)	Avg. Delay (min)	Flights (000s)	Avg. Delay (min)	
London	254.7	14	254.2	16	-2
Gatwick	60.3	14	60.9	22	-8
Heathrow	116.3	13	115.0	14	-1
London City	18.2	9	19.3	14	-5
Luton	22.4	17	23.2	18	-1
Stansted	37.6	17	35.8	15	+2
Regional	206.1	15	208.0	13	+2
Aberdeen	12.4	19	11.6	12	+7
Belfast City (George Best)	8.8	12	9.6	10	+2
Belfast International	8.7	16	9.2	15	+1
Birmingham	21.8	15	23.9	13	+2
Bournemouth	0.5	11	0.6	11	0
Bristol	13.4	20	13.4	13	+7
Cardiff Wales	3.1	17	3.2	12	+5
Doncaster Sheffield	1.5	15	1.7	14	+1
Durham Tees Valley	1.3	24	0.8	11	+13
East Midlands International	6.5	13	6.2	12	+1
Edinburgh	27.1	14	25.8	13	+1
Exeter	2.5	16	2.5	12	+4
Glasgow	20.2	15	19.2	13	+2
Jersey	5.0	16	5.2	16	0
Leeds Bradford	6.6	12	6.8	10	+2
Liverpool (John Lennon)	8.0	15	8.4	12	+3
Manchester	40.8	16	41.2	13	+3
Newcastle	9.2	14	9.1	9	+5
Southampton	8.7	14	9.5	13	+1
Grand Total	460.8	15	464.0	15	0

* Exeter data only available from November 2014



Average delay per flight across the 24 monitored airports was 15 minutes for Q4 2017. This represented no change in average delay against the same quarter last year.

Heathrow, Gatwick, City and Luton airports all experienced a decrease in average delay. Average delay remained unchanged at Bournemouth and Jersey while all other airports experienced an increase in delay.

The airport with the shortest average delay in Q4 2017 was London City (9 minutes), whilst Durham, saw the longest average delay (24 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	Applicable to Part					
	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 services.	✓	✓	✓	✓	✓	✓
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 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; it is not necessarily the first or last stop of a multi-sector flight.				✓		

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.