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OAG flightview punctuality league 2015

On-time performance results for airlines and airports

Contents

Foreword

As 2015 passes into history, it will go on record as one of the most successful for commercial aviation. Initial indications are that the industry will report profits of around $33 billion and more passengers will have been carried than ever before as additional capacity continues to be introduced to the market.

As always, new airlines have appeared during the course of the year, adding healthy competition whilst welcome consolidation of some airlines has created a more sensible level of competition and consumer choice in some markets.

The introduction of the A350 into commercial service and the continued expansion of B787 services on long and thin markets reflects the exciting opportunities around emergent markets and the opening of new city pairs around the globe. Along with the A320NEO and B737MAX aircraft launches, there has perhaps never been as much optimism as we currently see for global aviation.

More aircraft, more flights, new aircraft types and more passengers all place pressure on one of our most important industry metrics; on-time performance.

Therefore, as we publish the 2015 OAG Punctuality League, it is pleasing to report that overall punctuality continues to improve in many parts of the world. Investment in new technology, improved operating procedures and most importantly, the skill and professionalism of the airline and airport operators translates into the continual improvements we are reporting year on year.

To those airlines and airports which have improved their on-time performance, we offer our congratulations and for those which have seen a slight reduction against previous years, we know your efforts will lead to improvements in 2016.

No doubt the upcoming year will bring its own set of challenges and delivering on-time performance will be one of those and we look forward to reporting on those challenges in 2017.

With best wishes for 2016,

John Grant
OAG

About this report

OAG's acquisition of real-time flight information provider FlightView Inc. last year, cemented our position at the forefront of the air travel intelligence community with the world's largest network of air travel data.

This acquisition has allowed us to grow the size, depth and coverage of our flight status offering. We track more flights than anyone else and receive data from more airline and airport sources than ever before.

OAG's flight status and day-of-travel products now sit under our new product brand, OAG flightview.

This year's Punctuality League has been compiled using the power of two market-leading databases, now consolidated, to offer customers even more accuracy and coverage than ever before. The league is based on more than 50 million flight records using full year data from 2015 to create the best performers in an expanded range of categories. As in 2014, to qualify for inclusion in the OAG Punctuality League, the OAG schedules database should have data for at least 80% of all scheduled flights operated by an airline or for an airport.

Introducing OAG flightview

Flight status information you can act on

Experts in day-of-travel and flight status information, the OAG flightview team offers specialist knowledge to ensure the day-of-travel is smoother and more enjoyable for all involved. Underpinned by OAG's leading schedules database, OAG flightview collects data from over one hundred sources to create the world's most comprehensive database of real-time flight information.

It distributes flight status, location and history information to a wide variety of organisations across the global air travel ecosystem, from airlines and airports to leading online travel agencies, search engines and travel technology providers. All of these organisations want to improve operations, customer service delivery, grow sales and unlock hidden business opportunities. This information can be accessed via data APIs, web and mobile content, digital display content, alerts and reports.

Category criteria

The OAG Punctuality League presents on-time performance data as a series of tables based on a range of Airport and Airline categories. To qualify for inclusion in the OAG Punctuality League, OAG must have received data for at least 80% of scheduled flights operated by an airline and for an airport. Queries regarding inclusion and content should be sent to pl@oag.com

Airport categories

As defined by number of departing scheduled seats per annum.

- Small airports, under 10 million seats
- Medium airports, between 10 million and 20 million seats
- Large airports, more than 20 million seats
- Most improved airports
- Megahub airports, defined as those airports included in OAG's 2015 Megahubs Index
- Meetings & Convention Destinations[1], defined as airports within a city

Airline categories

- All airlines
- Mainline airlines (i.e. excluding low-cost carriers)
- Low-cost carriers
- Airlines based in Asia & Southwest Pacific
- Airlines based in Europe, the Middle East and Africa
- Airlines based in Latin America
- Airlines based in North America
- Most improved airlines

Additional qualifying criteria are as follows:
All airports – Only airports with over 3 million scheduled seats in 2015 are included in our airport categories.

Mainline airlines – Airlines must have been ranked among the top 200 operators globally in terms of Available Seat Kilometres (ASKs) in 2015, and must have operated more than 30,000 scheduled flights in 2015

Low-cost carriers (LCCs) – Low-cost carriers must have ranked among the top 200 operators globally in terms of Available Seat Kilometres (ASKs) in 2015 and operated at least 18,000 scheduled flights in 2015, equivalent to approximately 50 flights a day, with a fleet of at least 10 aircraft.

Airlines based in a region – There are four regional categories which rank the best airlines, mainline and LCC, operating in each of our global regions. In each category airlines must have operated a minimum of 18,000 scheduled flights in 2015 to qualify for inclusion.

Most Improved airports and airlines – Airports and airlines must have met the qualifying criteria in both 2014 and 2015.

In this report a 'record' is defined as a flight for which we either have a 'code', or an actual time of arrival (and departure in the case of airports), and excludes cancelled services.

On-Time Performance – also referred to as OTP. 'On-time' is defined as departures and arrivals that take place strictly less than 15 minutes after schedule for airports. For airlines, 'on-time' is defined as arrivals that take place strictly less than 15 minutes after schedule.

'Schedules' is defined as what has been provided by airlines to the OAG database. To qualify for inclusion in the OAG Punctuality League, the OAG database must have received data for at least 80% of scheduled flights operating to and from an airport in 2015.

[1] ICCA top city rankings 2014. Based on number of meetings per city, www.iccaworld.org. Top 20 rankings of where large associations were based on number of meetings per city in 2014. The airports included in each city are detailed in Appendix 1.

Airports: small category
<10m seats per annum

The Top 20 small airports on average ensured that 89.8% of arriving and departing flights were within 15 minutes of their scheduled arrival and departure times in 2015. This was unchanged from 2014. The average data coverage for these airports was 92.5%.

Table 1: Top 20 small airports by OTP

Rank	Coverage	Airport Name	Code	Average OTP 2015
1	94.3%	Osaka	ITM	93.85%
2	92.5%	Brussels South Charleroi	CRL	93.61%
3	94.0%	Panama City	PTY	92.55%
4	96.5%	Stavanger	SVG	91.15%
5	97.1%	Bergen	BGO	90.91%
6	92.9%	Cologne Bonn	CGN	90.42%
7	92.3%	Adelaide	ADL	90.18%
8	96.5%	Warsaw	WAW	89.87%
9	93.3%	Bristol	BRS	88.64%
10	93.4%	Hannover	HAJ	88.59%
11	94.3%	Perth	PER	88.58%
12	81.5%	Medellin	MDE	88.51%
13	89.3%	Cairns	CNS	88.40%
14	88.7%	Berlin Schoenefeld	SXF	88.30%
15	94.5%	Christchurch	CHC	88.14%
16	81.2%	Nagoya	NKM	88.11%
17	89.6%	Porto Alegre	POA	87.65%
18	87.8%	Cali	CLO	87.61%
19	96.9%	Milan Linate	LIN	87.51%
20	89.9%	Curitiba	CWB	87.38%

Osaka[2] (ITM) moves into first place in this category in 2015, improving OTP from an already impressive 93.2% in 2014 to 93.9% this year. Brussels South Charleroi (CRL) maintains second place in the small airports category, but also manages to improve on last year's performance, increasing OTP from 93.1% to 93.6%. Third place goes to a new entrant this year, Panama City (PTY), boosted into the Punctuality League with OAG's improved coverage, achieving an impressive 92.6% of flights arriving and departing on time in 2015.

There are some other new entrants to the small airports category this year. In addition to Panama City (PTY), there are a further four new airports from Latin America as a result of OAG's improved coverage in the region.

In the Asia-Pacific region, Cairns (CNS) enters the category for the first time too, boosting the number of Australian airports to three in this category.

As a result, some of last year's top performers have moved down the rankings. Berlin Schoenefeld (SXF) falls from 3rd place to 14th, with 88.3% of flights on time this year. Norwegian airports however have kept standards high with Stavanger (SVG) and Bergen (BGO) remaining in the Top 10. Warsaw (WAW) has also improved performance, rising from 17th to 8th place this year.

Seven out of the Top 20 managed to achieve over 90% of flights on time, a level of performance not replicated in the other airport categories.

[2] Due to a slight fall in scheduled capacity between 2014 and 2015, Osaka (ITM) has moved from the Medium Airports category to the Small Airports category. Hamburg (HAM) and Athens (ATH) have moved the other way, growing departing capacity to over 10m, putting these airports into the Medium category. Trondheim (TRD) has not qualified for the Small Airports category this year with departing seats falling below 3m in 2015.

Airports: medium category
10-20m seats per annum

The Top 20 Airports in the medium category on average ensured that 86.2% of arriving and departing flights were within 15 minutes of their scheduled arrival and departure times in 2015. This marked an improvement from 85.5% last year. The average data coverage for these airports was 93.5%, a slight increase on last year.

Table 2: Top 20 medium airports by OTP

Rank	Coverage	Airport Name	Code	Average OTP 2015
1	96.3%	Copenhagen	CPH	88.53%
2	93.7%	Moscow Sheremetyevo	SVO	88.48%
3	98.0%	Helsinki	HEL	88.43%
4	94.6%	Brisbane	BNE	88.31%
5	99.0%	Salt Lake City	SLC	87.93%
6	85.1%	São Paulo-Congonhas	CGH	87.81%
7	95.7%	Athens	ATH	87.79%
8	82.2%	Honolulu	HNL	87.41%
9	94.4%	Auckland	AKL	86.67%
10	88.3%	Hamburg	HAM	85.99%
11	89.9%	Berlin Tegel	TXL	85.64%
12	97.7%	Oslo	OSL	85.50%
13	91.5%	Brasilia	BSB	85.49%
14	81.7%	Vancouver	YVR	85.17%
15	94.9%	Vienna	VIE	85.12%
16	96.9%	Detroit	DTW	84.61%
17	96.8%	Stockholm	ARN	84.23%
18	93.7%	Bogota	BOG	83.79%
19	90.6%	Santiago	SCL	83.72%
20	94.4%	Rio de Janeiro	GIG	83.53%

Copenhagen (CPH) takes the top spot in this category this year, up from third place last year, despite a slight fall in on-time performance from 89.8% to 88.5% this year. Moscow Sheremetyevo (SVO) retains second place, with 88.5% of flights on time. Helsinki (HEL) moves up the table from 6th place to 3rd this year with 88.4% of flights on time.

None of the airports in this category achieved over 90% on-time performance, perhaps reflective of the capacity challenges faced at some of these airports by hub operations that create intense periods of activity at certain times during the day. Some of these airports are also wrestling with outgrowing their terminal and runway capacity. Several in this category are expanding with Brisbane (BNE) and Auckland (AKL) planning new runways in the next 10 years, and both Oslo (OSL) and Salt Lake City (SLC) are in the process of expanding terminal facilities.

As with the small airports category, some new entrants to this category are due to increases in capacity. Athens (ATH) has moved category this year whilst also improving on-time performance slightly from 87.4% to 87.8%. Hamburg (HAM) also moves in and climbs the rankings but actually has seen on-time performance fall slightly. Some other new entrants appear due to improved coverage, just as in the small airports category. Three airports in Brazil – São Paulo-Congonhas (CGH), Brasilia (BSB) and Rio de Janeiro (GIG) – all make it into the Top 20 as do two other airports in Latin America, Bogota (BOG) and Santiago (SCL).

Scandinavian airports also feature highly again with Helsinki (HEL), Copenhagen (CPH), Oslo (OSL) and Stockholm (ARN) all appearing in the Top 20.

Airports: large category
>20m seats per annum

The top 20 large airports on average ensured that 83.3% of arriving and departing flights were within 15 minutes of their scheduled arrival and departure times in 2015. This marked a slight improvement from 82.9% last year. Comparisons to the average on-time performance for the small and medium sized airport categories highlights that in general the largest airports appear to have the most difficulty meeting published scheduled times. The average data coverage for these airports was 95.0%, up from 90.0%.

Table 3: Top 20 large airports by OTP

Rank	Coverage	Airport Name	Airport Code	Average OTP 2015
1	84.9%	Tokyo Haneda	HND	91.25%
2	94.3%	Munich	MUC	87.71%
3	92.5%	São Paulo Guarulhos	GRU	87.47%
4	97.3%	Minneapolis	MSP	85.27%
5	95.2%	Sydney	SYD	85.20%
6	84.2%	Melbourne	MEL	85.02%
7	93.3%	Singapore Changi	SIN	84.75%
8	98.5%	Atlanta	ATL	84.38%
9	96.4%	Frankfurt	FRA	84.12%
10	98.1%	Seattle	SEA	83.56%
11	96.8%	Phoenix	PHX	83.53%
12	94.4%	Madrid	MAD	82.62%
13	98.3%	Charlotte	CLT	81.43%
14	93.2%	Las Vegas	LAS	81.40%
15	98.0%	Amsterdam	AMS	81.15%
16	90.1%	Orlando	MCO	80.79%
17	92.7%	Boston	BOS	80.68%
18	97.3%	Houston	IAH	80.10%
19	93.0%	Miami	MIA	80.08%
20	95.8%	Dallas/Fort Worth	DFW	79.89%

Just one large airport managed to achieve over 90% on-time performance this year, Tokyo Haneda (HND), which takes the number one spot, up from second place last year. Tokyo has managed to improve on-time performance from 87.9%, to 91.3% this year, no mean feat for an airport which handled an average of 920 operations every day in 2015. Munich (MUC) drops to second place and third place goes to a new entrant, São Paulo Guarulhos (GRU).

There are five new entrants from the United States – Phoenix (PHX), Las Vegas (LAS), Orlando (MCO), Boston (BOS) and Dallas/Fort Worth (DFW), taking the total of US airports in the large category to 11.

Perhaps surprisingly, there are only two Asian airports, Tokyo Haneda (HND) and Singapore (SIN) in this category. There are also two Australian airports – Melbourne (MEL) and Sydney (SYD) – which make it into the Top 10 this year. There are no Middle East airports in any of the airport categories and only three of the Top 10 biggest airports[3], make it into our league. Some notable exceptions are London Heathrow (LHR), Beijing (PEK) and Hong Kong (HKG).

Most improved airports

New for 2015 we take a look at the most improved airports. These airports must have met qualifying criteria in both 2014 and 2015.

Table 4: Top 5 most improved airports

Rank	Airport		Average OTP		Points
	Name	Code	2014	2015	improved
1	Milan Bergamo	BGY	62.8%	86.9%	24.1
2	Lisbon	LIS	65.2%	76.0%	10.8
3	Cali	CLO	77.3%	87.6%	10.4
4	Medellin	MDE	78.4%	88.5%	10.1
5	Bogota	BOG	75.4%	83.8%	8.4

Looking across all three categories, there are some airports which stand out as having delivered a significant improvement in on-time performance.

Milan Bergamo (BGY) saw the greatest improvement, up 24 percentage points compared to last year, when on-time arrivals and departures improved to 86.9% in 2015. This was driven by a full year of operations in 2015 following the airport's closure in May 2014 for one month for runway resurfacing.

Lisbon (LIS) also has seen considerable improvement in on-time performance, with 2015 seeing OTP that is nearly 11 percentage points better than last year. Operations at Lisbon grew by 6%, with Ryanair nearly doubling their capacity and growing their overall share of capacity to 10.3%.

Three Colombian airports also appear to be taking steps to improve performance, averaging almost a 10 percentage point improvement compared to last year.

[3] Top 10 Biggest Airports by 2015 seats according to OAG Schedules Analyser

Top airlines: all

The Top 20 airlines category sees an average on-time performance for arriving flights of 88.9%, a slight increase from 88.8% last year. Average coverage has also improved slightly from 92.7% up to 93.1%.

Table 5: Top 20 airlines by OTP

Rank	Coverage	Airline		Average OTP 2015
		Name	Code	
1	94.4%	airBaltic	BT	94.39%
2	91.7%	Copa Airlines	CM	91.69%
3	91.0%	Azul	AD	91.03%
4	90.4%	Japan Airlines	JL	90.44%
5	89.7%	All Nippon Airways	NH	89.65%
6	89.5%	Finnair	AY	89.52%
7	89.5%	TAM	JJ	89.50%
8	89.3%	Austrian Airlines	OS	89.28%
9	89.1%	Hawaiian Airlines	HA	89.11%
10	88.9%	LOT - Polish Airlines	LO	88.88%
11	88.6%	Virgin Australia	VA	88.56%
12	88.5%	KLM	KL	88.45%
13	88.2%	SAS	SK	88.21%
14	88.2%	Monarch Airlines	ZB	88.18%
15	88.1%	Qantas Airways	QF	88.08%
16	87.5%	Iberia	IB	87.53%
17	87.5%	Flybe	BE	87.47%
18	87.3%	Air New Zealand	NZ	87.33%
19	87.1%	Qatar Airways	QR	87.12%
20	86.7%	Norwegian Air Shuttle	DY	86.67%

airBaltic tops the table for all airlines for the second year running, with just a slight dip in on-time performance from 94.9% to 94.4% of flights arriving on time. This year, four airlines have achieved over 90% of flights arriving on-time, up from just three last year.

As with the airport categories, there are some new entrant airlines to the Punctuality League this year. In fact, there are 8 new airlines in the Top 20. Some of these have been included due to improved coverage in Latin America, such as Copa Airlines, Azul and TAM whilst others have improved OTP on last year, such as Qatar Airways which has improved from 81.4% last year to 87.1% this year.

It seems that on the whole, mainline carriers have performed better this year than low-cost carriers (LCCs). There are only two LCCs, Azul and Norwegian in the Top 20 airlines, whereas last year Norwegian, easyJet and Thai AirAsia were all included. It is interesting that LCCs are not high on the list and undoubtedly their high aircraft utilisation has an impact on scheduling. As we will see in the LCC category, average on-time performance for the Top 20 LCCs is considerably lower than for all carriers, at just 82.5%.

Top airlines: mainline category

The Top 20 airlines mainline category sees an average on-time performance for arriving flights of 88.6% in 2015, up slightly compared to 88.3% in 2014. The average coverage for this category was 94.7%.

Table 6: Top 20 mainline airlines by OTP

Rank	Coverage	Airline		Average OTP 2015
		Name	Code	
1	87.0%	airBaltic	BT	94.39%
2	94.6%	Copa Airlines	CM	91.69%
3	99.6%	Japan Airlines	JL	90.44%
4	93.9%	All Nippon Airways	NH	89.65%
5	99.3%	Finnair	AY	89.52%
6	85.9%	TAM	JJ	89.50%
7	99.0%	Austrian Airlines	OS	89.28%
8	99.5%	Hawaiian Airlines	HA	89.11%
9	99.9%	LOT - Polish Airlines	LO	88.88%
10	93.0%	Virgin Australia	VA	88.56%
11	99.2%	KLM	KL	88.45%
12	99.3%	SAS	SK	88.21%
13	81.8%	Monarch Airlines	ZB	88.18%
14	96.2%	Qantas Airways	QF	88.08%
15	90.5%	Iberia	IB	87.53%
16	85.9%	Flybe	BE	87.47%
17	94.5%	Air New Zealand	NZ	87.33%
18	81.1%	Qatar Airways	QR	87.12%
19	98.6%	Alaska Airlines	AS	86.38%
20	94.2%	Aegean Airlines	A3	86.20%

Given the lack of many LCCs in the previous category, the Top 20 Mainline airline category looks quite similar, with just two differences, the addition of Alaska Airlines and Aegean Airlines in places 19 and 20. Both Japan Airlines and All Nippon Airlines have climbed the rankings from last year moving up from 8th and 12th place respectively to 3rd and 4th.

Top airlines: LCC category

This category has seen a significant improvement in the spread of on-time performance across the Top 20. Last year, the range went from 89.7% down to 58.3% for the 20th carrier. This year, the carriers towards the bottom of the Punctuality League have improved considerably with the spread ranging only from 91.3% down to 74.7%. On average though, on-time performance for the Top 20 LCCs is lower than mainline carriers, at 83.1%.

Table 7: Top 20 LCC airlines by OTP

Rank	Coverage	Airline Name	Airline Code	Average OTP 2015
1	82.0%	Azul	AD	91.03%
2	84.8%	Norwegian Air Shuttle	DY	86.67%
3	93.9%	GOL	G3	86.45%
4	99.5%	WestJet	WS	85.88%
5	87.0%	Jet2.com	LS	85.62%
6	84.3%	IndiGo Air	6E	84.57%
7	88.2%	Thai AirAsia	FD	84.28%
8	91.8%	Germanwings	4U	84.25%
9	92.2%	Ocean Air	O6	83.94%
10	83.0%	Transavia	HV	82.29%
11	93.5%	Southwest	WN	82.12%
12	90.6%	Skymark Airlines	BC	81.94%
13	98.6%	Virgin America	VX	81.58%
14	96.8%	easyJet	U2	80.12%
15	97.9%	Jetstar Airways	JQ	80.10%
16	89.4%	AirAsia	AK	79.25%
17	82.7%	Sun Country	SY	78.97%
18	99.5%	JetBlue	B6	78.26%
19	81.3%	Vueling Airlines	VY	76.86%
20	99.6%	Frontier Airlines	F9	74.66%

Azul takes the top spot as a new entrant to the Punctuality league this year and is the only LCC with on-time performance of over 90%. Norwegian drops to second place and GOL, another new entrant, takes third place with 86.5% of flights arriving on time.

There are 9 new entrants to the LCC category this year, including WestJet which enters in 4th place with above average on-time performance of 85.9%. Southwest also makes it into the Punctuality League this year, in 11th place. JetBlue has fallen from 14th to 18th, however it has improved its performance – reflecting the overall improvement in this category.

There is a notable absentee from the Punctuality League, namely Europe's largest LCC, Ryanair. Coverage for Ryanair was just below OAG's threshold meaning it couldn't be included but had it been, its average on-time performance of 88.7% for arriving flights would have put it firmly in second place. Ryanair would have also made it into 11th place in the Top 20 airlines category.

Airlines by region

These tables report the Top 10 best performing airlines by region. To maintain transparency, consistency and benchmarking integrity we apply the same criteria for inclusion as used across all categories.

Asia Pacific

Table 8: Top 10 Asia-Pacific airlines by OTP

Rank	Coverage	Airline Name	Airline Code	Average OTP 2015
1	99.6%	Japan Airlines	JL	90.44%
2	93.9%	All Nippon Airways	NH	89.65%
3	93.0%	Virgin Australia	VA	88.56%
4	96.2%	Qantas Airways	QF	88.08%
5	94.5%	Air New Zealand	NZ	87.33%
6	84.3%	IndiGo Air	6E	84.57%
7	99.1%	Singapore Airlines	SQ	84.31%
8	88.2%	Thai AirAsia	FD	84.28%
9	89.6%	Jet Airways	9W	81.98%
10	90.6%	Skymark Airlines	BC	81.94%

Performance in this category remains similar to last year – although there is one carrier which has broken through the 90% barrier this year – Japan Airlines which remains in the top spot and has improved on-time performance from 88.8% to 90.4%.

There are also two new entrants to this category, Jet Airways and Skymark Airlines, reflecting OAG's enhanced coverage in the Asia-Pacific region.

Europe, Middle East & Africa (EMEA)

Table 9: Top 10 airlines in EMEA

Rank	Coverage	Airline Name	Airline Code	Average OTP 2015
1	87.0%	airBaltic	BT	94.39%
2	99.3%	Finnair	AY	89.52%
3	99.0%	Austrian Airlines	OS	89.28%
4	99.9%	LOT - Polish Airlines	LO	88.88%
5	99.2%	KLM	KL	88.45%
6	99.3%	SAS	SK	88.21%
7	81.8%	Monarch Airlines	ZB	88.18%
8	90.5%	Iberia	IB	87.53%
9	85.9%	Flybe	BE	87.47%
10	81.1%	Qatar Airways	QR	87.12%

European carriers dominate this category with just one Middle Eastern carrier, Qatar, making it into the Top 10.

Latin America

Table 10: Top 10 Latin American airlines

Rank	Coverage	Airline Name	Airline Code	Average OTP 2015
1	94.6%	Copa Airlines	CM	91.69%
2	82.0%	Azul	AD	91.03%
3	85.9%	TAM	JJ	89.50%
4	93.9%	GOL	G3	86.45%
5	98.6%	Avianca	AV	85.22%
6	92.2%	Ocean Air	O6	83.94%
7	91.9%	Lan Airlines	LA	80.86%
8	96.7%	Caribbean Airlines	BW	79.32%
9	97.8%	Aeromexico	AM	77.98%
10	95.6%	Aerolineas Argentinas	AR	74.29%

Due to enhanced depth and coverage from our newly consolidated OAG flightview database, we are pleased to be able to include a Latin America specific category this year. Copa tops the table with strong on-time performance and there are two carriers which have managed to achieve over 90% of flights arriving on time.

North America

Table 11: Top 10 North American airlines

Rank	Coverage	Airline Name	Code	Average OTP 2015
1	99.5%	Hawaiian Airlines	HA	89.11%
2	98.6%	Alaska Airlines	AS	86.38%
3	99.5%	WestJet	WS	85.88%
4	99.7%	Delta Air Lines	DL	84.46%
5	93.5%	Southwest	WN	82.12%
6	98.6%	Virgin America	VX	81.58%
7	98.9%	American Airlines	AA	80.14%
8	99.2%	Air Canada	AC	79.46%
9	99.4%	United Airlines	UA	78.99%
10	99.5%	JetBlue	B6	78.26%

Looking north, the superior nature of OAG's US coverage means there are some new entrants to the North America category, with WestJet and Southwest appearing for the first time. Performance is largely unchanged compared to last year, with the Top 10 carriers averaging on-time performance of 81.6%.

Most improved airlines

Table 12: Top 5 most improved airlines

Rank	Airline Name	Code	Average OTP 2014	2015	Percentage improved
1	Etihad Airways	EY	56.8%	72.7%	15.2
2	TAP Portugal	TP	66.1%	79.2%	13.1
3	Avianca	AV	75.6%	85.2%	9.7
4	Hainan Airlines	HU	57.4%	65.0%	7.6
5	Skymark Airlines	BC	75.3%	81.9%	6.6

This category highlights that carriers across the globe are improving on-time performance. There is one from the Middle East, one from Europe one from Latin America and two from Asia. Etihad was undoubtedly impacted by the closure of the southern runway at Abu Dhabi (AUH) in 2014 and the significant improvement in performance is due to a full year of operations.

OAG Megahub airports

Table 13: Top Megahubs

Rank	Coverage	Airport Name	Airport Code	Average OTP 2015
1	84.9%	Tokyo Haneda	HND	91.25%
2	85.1%	São Paulo-Congonhas	CGH	87.81%
3	92.5%	São Paulo Guarulhos	GRU	87.47%
4	97.3%	Minneapolis	MSP	85.27%
5	95.2%	Sydney	SYD	85.20%
6	93.3%	Singapore Changi	SIN	84.75%
7	96.9%	Detroit	DTW	84.61%
8	98.5%	Atlanta	ATL	84.38%
9	98.1%	Seattle	SEA	83.56%
10	96.8%	Phoenix	PHX	83.53%
11	98.3%	Charlotte	CLT	81.43%
12	91.1%	Chicago Midway	MDW	81.21%
13	92.7%	Boston	BOS	80.68%
14	97.3%	Houston	IAH	80.10%
15	95.8%	Dallas/Fort Worth	DFW	79.89%
16	95.4%	Denver	DEN	79.48%
17	93.8%	Toronto	YYZ	78.82%
18	98.3%	San Francisco	SFO	78.68%
19	97.4%	Philadelphia	PHL	78.50%
20	95.8%	Chicago O'Hare	ORD	78.29%

In 2015, OAG published its Megahubs Index. listing global airports with the largest number of potential connections between flights on a chosen day. Looking at this grouping from a different perspective helps place performance into wider context given all the different variables at play for these kinds of airports. Despite handling up to half a million connections per day, some of the biggest North American airports dominate the on-time performance rankings with 10 of the top 15 airports in this category.

Most on-time performance in this category is between 78% and 88% – reflecting just how hard it is for a large hub airport to achieve very high on-time performance as they are dependent on on-time departures for flights arriving into the hub, and if their on-time performance goes too low then they stop being effective as a hub, meaning this is clearly a balancing act.

Meetings and conventions destinations – global & US

Table 14: Top global meetings & conventions cities

OTP Rank	Coverage	City Name	City Code	Average OTP 2015	ICCA Rank
1	96.3%	Copenhagen	CPH	88.53%	13
2	89.6%	Berlin	BER	86.29%	4
3	94.9%	Vienna	VIE	85.12%	2
4	93.3%	Singapore	SIN	84.75%	7
5	96.0%	Stockholm	STO	84.23%	19
6	93.3%	Prague	PRG	83.74%	10
7	94.4%	Madrid	MAD	82.62%	3
8	95.5%	Brussels	BRU	81.17%	11
9	98.0%	Amsterdam	AMS	81.15%	8
10	92.3%	Barcelona	BCN	79.56%	5
11	95.1%	Budapest	BUD	79.12%	17
12	77.6%	Seoul	SEL	77.97%	15
13	96.0%	Lisbon	LIS	75.98%	12
14	95.5%	Paris	PAR	75.25%	1
15	93.0%	Rome	ROM	73.94%	18
16	96.4%	London	LON	71.50%	6
17	79.3%	Beijing	BJS	70.35%	14
18	93.3%	Istanbul	IST	70.00%	9
19	95.0%	Hong Kong	HKG	64.67%	16
20	71.5%	Taipei	TPE	64.64%	20

Source: ICCA Rank, www.iccaworld.com. Based on number of meetings per city.

The global meetings and events industry is growing fast and the challenge for meeting destinations is to ensure delegates experience a seamless and smooth travel experience. Cities increasingly compete for events on the global stage.

People travelling to meetings and conventions are often only in the city for a few days and they are away from home, friends and family. If they arrive late, they lose part of the value of the event and if they depart late, they miss time with their family and friends. Being on time is always important but when very large numbers are arriving or departing at the same time, it is important for the city that on-time performance is good. The airport experience is a fundamental part of this, and consequently we highlight performance of the Top 20 meeting and events cities.

The top 20 cities are based on the ICCA rankings (www.iccaworld.com) by number of meetings held in 2014. The airports included in each city category are also in Appendix 1. Fifteen of the cities (including Istanbul) are in Europe while the remaining five are in Asia – Singapore, Seoul, Beijing, Taipei and Hong Kong. North American destinations do not feature as prominently on this table as no one city in the US held more than 90 events a year. At a country level however, the United States ranks number one for total numbers of meetings organised in 2014[3]. No city achieves over 90% and there was quite a range in on-time performance here – over 20 percentage points of difference across the Top 20 Airports.

[3] http://www.iccaworld.com/npps/story.cfm?nppage=5194

Table 15: Top US meetings & conventions cities[5]

OTPRank	Coverage	City Name	City Code	Average OTP 2015	Cvent Rank
1	98.4%	Atlanta	ATL	84.38%	5
2	96.8%	Phoenix	PHX	83.31%	10
3	93.1%	San Diego	SAN	83.27%	4
4	94.2%	Minneapolis	MSP	83.23%	12
5	93.5%	San Antonio	SAT	83.04%	15
6	93.1%	Nashville	BNA	82.11%	9
7	92.9%	Las Vegas	LAS	81.40%	2
8	95.1%	Austin	AUS	81.29%	17
9	90.1%	Orlando	ORL	80.79%	1
10	92.7%	Boston	BOS	80.67%	16
11	95.0%	Washington	WAS	80.64%	6
12	96.5%	Houston	HOU	80.15%	19
13	93.0%	Miami	MIA	80.08%	11
14	95.4%	Dallas	DFW	80.03%	8
15	95.4%	Denver	DEN	79.48%	13
16	95.9%	Los Angeles	LAX	79.04%	20
17	94.9%	Chicago	CHI	78.79%	3
18	98.3%	San Francisco	SFO	78.68%	14
19	97.4%	Philadelphia	PHL	78.47%	21
20	95.6%	New York	NYC	76.72%	7

Source: Cvent study, www.cvent.com/en/supplier-network/top-50/2015-top-destinations-us.shtml

Similar to the global city category, no US city achieves over 90% on-time performance, however the degree of variance is less than the global city destination on-time performance. This category has a narrow band of on-time performance ranging from 77%-84%, with Atlanta at the top with 84.4%.

Unsurprisingly the largest cities cluster towards the bottom of this list as they tend to have the airports handling the most capacity and we know from the small, medium and large airport categories, it is large airports that generally find it harder to achieve a very high OTP. Atlanta appears exceptional. It ranks 9th in terms of urban population, first among the US Megahubs and has the best on-time performance of this list of top city destinations for meetings and conventions.

[5] Cities from Cvent study, based on booking activity and number of venues

Conclusion

At a glance

- **Airports keep pushing to improve on-time performance**

  Performance across the airport categories has improved this year, reflecting the hard work on the ground at airports across the globe. We have new leaders in each category and the baseline for our medium and large airport categories has increased – no mean feat for these airports.

- **Japan dominates the airports category**

  Japanese airports have set the bar high in the small and large airport categories with Osaka (ITM) and Tokyo Haneda (HND) ensuring 93.9% and 91.3% of flights arrive and depart on time respectively. Tokyo Haneda (HND) has improved on last year's performance and also tops our Megahub league. Japan's airlines also do well, with both Japan Airlines (JL) and ANA (NH) in the Top 5 carriers for on-time performance globally and are the top two carriers in the Asia Pacific region.

- **Capacity constraints continue to hold the UK back**

  Despite being the world's fifth largest airport by seats in 2015, London Heathrow's (LHR) capacity issues continue to impede on-time performance, meaning it does not make it into our league. Neither do any of the other large UK airports. We can only hope that 2016 will bring progress on the outstanding decisions on new runways.

- **LCCs globally are working hard to improve punctuality**

  Whilst still not achieving the same levels of on-time performance as mainline carriers, this year we see a significant improvement in the baseline of the LCC category, from 58% up to 74%. Due to enhanced coverage, we are also pleased to be able to include some of the world's largest LCCs.

- **Mainline carriers still lead the way**

  With just two LCCs in the Top 20 airlines category, mainline carriers still dominate the rankings with higher average on-time performance. Half of the carriers in the Top 20 are European.

- **Panama and Copa Airlines collectively demonstrate the power of an effective hub**

  Effective hubs work best with carriers and airports pursuing similar goals and it's evident with just over 9 out of 10 flights arriving and leaving on time at Panama City (PTY) that the airport and Copa Airlines work closely to ensure excellent operational performance, making the airport and airline the top performers in Latin America.

- **Infrastructure limitations and development affect notable inputs to the league**

  There are some notable absences again this year. There are, as yet, no Chinese airports or airlines in the league. Performance is improving however and we hope to be able to include some in next year's league. Similarly, none of the major UK airports make it into the Top 20, reflecting the ongoing capacity and infrastructure debate. There are also no Middle East airports in any of our airport categories this year, but for different reasons while these airports wrestle with matching capacity to the fast pace of demand in the region.

Final thoughts

As we enter a new year, on-time performance remains high profile and the subject of a recent debate about how and whether the tracking and measurement of on-time performance influences the scheduling of flights. Air travellers, however, have certain expectations about their journey and the good news for them is that operational performance appears to have improved over the past year, with more flights arriving on time.

Coverage too has improved, with all three airport categories recording average coverage of 94% and 93% for airlines, enabling us to have a better than ever view on performance globally. OAG's geographic coverage has also been enhanced with the acquisition of Flightview and we are delighted to be able to include some of Latin America's most prominent airports and airlines in our 2015 Punctuality League as well as expanding our coverage elsewhere.

To all of the airports and airlines in our leagues we offer our congratulations. Keep up the good work. We acknowledge the efforts being made to ensure passengers' journeys run smoothly. In a world of complex schedules, increasingly congested skies and taxiways and ongoing environmental challenges, continuing to ensure that flights arrive and depart on time is an achievement to be celebrated.

Appendix

1: airports included in city codes

City Name	City Code	Airport Codes
Copenhagen	CPH	CPH, RKE
Berlin	BER	SXF, TXL
Vienna	VIE	VIE
Singapore	SIN	SIN
Stockholm	STO	ARN, BMA, NYO, VST
Prague	PRG	PRG
Madrid	MAD	MAD
Amsterdam	AMS	AMS
Brussels	BRU	BRU, CRL
Barcelona	BCN	BCN
Budapest	BUD	BUD
Lisbon	LIS	LIS
Seoul	SEL	GMP, ICN, SEL
Paris	PAR	CDG, ORY, BVA, XCR
Rome	ROM	CIA, FCO
London	LON	LHR, LGW, STN, LTN, LCY, SEN
Beijing	BJS	PEK
Istanbul	IST	IST, SAW
Taipei	TPE	TPE
Hong Kong	HKG	HKG

2: airports included in US city codes

City Name	City Code	Airport Codes
Atlanta	ATL	ATL, PDK
Phoenix	PHX	PHX
San Diego	SAN	SAN
Minneapolis	MSP	MSP
San Antonio	SAT	SAT
Nashville	BNA	BNA
Las Vegas	LAS	BLD, LAS
Austin	AUS	AUS
Orlando	ORL	MCO, SFB
Boston	BOS	BOS
Washington	WAS	IAD, DCA
Houston	HOU	HOU, IAH
Miami	MIA	MIA
Dallas	DFW	DAL, DFW
Denver	DEN	DEN
Los Angeles	LAX	LAX
Chicago	CHI	MDW, ORD
San Francisco	SFO	SFO
Philadelphia	PHL	PHL, TTN
New York	NYC	EWR, JFK, LGA, SWF

Top 10 EMEA Airports ranked by OTP

Rank	Coverage	Airline Name	Airline Code	Average OTP 2015
1	92.5%	Brussels South Charleroi	CRL	93.61%
2	96.5%	Stavanger	SVG	91.15%
3	97.1%	Bergen	BGO	90.91%
4	92.9%	Cologne Bonn	CGN	90.42%
5	96.5%	Warsaw	WAW	89.87%
6	93.3%	Bristol	BRS	88.64%
7	93.4%	Hannover	HAJ	88.59%
8	96.3%	Copenhagen	CPH	88.53%
9	93.7%	Moscow Sheremetyevo	SVO	88.48%
10	98.0%	Helsinki	HEL	88.43%

All top 10 are located in Europe. If we expanded it to the Top 20, only one non-European airport enters, which is Bahrain at number 17 with 86.5% OTP. There are only 2 African airports in the dataset and these are much lower down the field, with Addis Ababa at 62 and Tunis at 84.

Source: OAG flightiew

Top 10 UK Airports ranked by OTP

Rank	Coverage	Airline Name	Airline Code	Average OTP 2015
1	93.3%	Bristol	BRS	88.64%
2	97.3%	London City	LCY	85.57%
3	93.0%	Birmingham	BHX	84.42%
4	97.6%	Edinburgh	EDI	76.52%
5	97.6%	London Heathrow	LHR	74.63%
6	96.7%	Glasgow	GLA	72.09%
7	94.3%	Manchester	MAN	68.66%
8	96.7%	London Luton	LTN	67.37%
9	94.1%	London Stansted	STN	67.16%
10	96.3%	London Gatwick	LGW	65.03%

Source: OAG flightiew

OAG flightview

OAG flightview products

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Reports – Historical flight status data dating back to 2004 flight leg reports, landing and OTP reports.

For more information, visit www.oag.com/flightview

Key Statistics

- More than 900 Airlines
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- 115 designated LCCs
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