Published: Sep 2017



The World's Most Internationally Connected Airports



#### Contents

About OAG Megahubs International Index 2017	3
Methodology	3
Top 50 International Megahubs	4
Key Highlights	5
Top 25 Low-Cost Megahubs	6
Top Megahubs by Region	8
– Asia Pacific	8
<ul> <li>Europe, Middle East and Africa</li> </ul>	8
<ul> <li>Latin America</li> </ul>	9
– North America	9
Glossary of Codes	10



## About OAG Megahubs International Index 2017

The OAG Megahubs International Index 2017 reveals the 50 most internationally connected airports. Airports are ranked by comparing the number of scheduled connections to and from international flights with the number of destinations served from the airport.

It harnesses the world's most comprehensive schedules database to dynamically build connections through a dedicated analytics platform, Connections Analyser, and is further enhanced by OAG's MCT (Minimum Connection Time) Exceptions Table.

As global hub competition intensifies, OAG Megahubs International Index measures the effectiveness of major hubs on a global and regional basis, providing an authoritative measurement within the industry.

The OAG Megahubs International Index 2017 presents connectivity data as a series of tables based on regional location and airline type.

#### Methodology

OAG has calculated the total number of all possible connections between inbound and outbound flights within a six-hour window, where either the inbound, outbound or both flights are an international service. The analysis uses the busiest day for global aviation, for the 12 months leading to July, at the world's largest airports (based on total international seat capacity for the 12 months to July 2017).

For the purposes of this analysis, in addition to the in-built business rules within OAG's Connections Analyser, the following customisable criteria were chosen for all operating flights:

- Single international connections only to/from the chosen airports
- International connections including domestic to international, international to domestic and international to international connections
- Maximum circuity of 150
- MCT varies by individual airport. OAG holds the MCT information for every commercial airport in operation; at any one time there are typically over 120,000 exceptions globally. These are typically less than published MCTs although there are often cases whereby they are longer than the standard.
- Maximum Connection Window of six hours

<sup>\*</sup> The 2016 Megahubs Index ranked airports based on all connections, both domestic and international, on the busiest day for global aviation in 2016.



#### Top 50 International Megahubs

The Top 50 Megahubs are those airports with the highest ratio of possible scheduled international connections to the number of destinations served by the airport.

Online and interline connections are included and utilising the power of OAG's Connections Analyser, low-cost carrier (LCC) connections are also included.

Rank	Airport	Country	Connectivity Index
1	LHR	United Kingdom	379
2	FRA	Germany	307
3	AMS	Netherlands	299
4	ORD	USA	295
5	YYZ	Canada	271
6	SIN	Singapore	257
7	CGK	Indonesia	256
8	ATL	USA	256
9	KUL	Malaysia	242
10	CDG	France	242
11	LAX	USA	235
12	HKG	Hong Kong	233
13	BKK	Thailand	226
14	MUC	Germany	221
15	IST	Turkey	219
16	MIA	USA	204
17	ICN	South Korea	196
18	JFK	USA	195
19	IAH	USA	184
20	DXB	UAE	183
21	MEX	Mexico	176
22	EWR	USA	170
23	PVG	China	167
24	SYD	Australia	167
25	DEL	India	166

Rank	Airport	Country	Connectivity Index
26	YVR	Canada	165
27	DFW	USA	164
28	HND	Japan	163
29	SFO	USA	153
30	FCO	Italy	145
31	PEK	China	142
32	CAN	China	141
33	вом	India	140
34	MAD	Spain	138
35	NCE	France	133
36	JNB	South Africa	133
37	NRT	Japan	132
38	MNL	Philippines	131
39	SEA	USA	130
40	BOS	USA	128
41	BOG	Colombia	127
42	GRU	Brazil	120
43	YUL	Canada	118
44	ZRH	Switzerland	115
45	svo	Russian Federation	114
46	SJU	Puerto Rico	114
47	PTY	Panama	108
48	VIE	Austria	107
49	MCO	USA	107
50	AKL	New Zealand	106

#### Key Highlights

- London Heathrow (LHR) is the single most connected International Megahub in the world by a clear margin. On a single day in July, there were over 72,000 possible international connections between flights arriving at LHR and flights departing within a sixhour window.
- Frankfurt Airport (FRA) and Amsterdam Airport (AMS) are ranked second and third, respectively, ensuring that the top three places are all leading European hub airports.
- Istanbul (IST), ranked 15th, is second only to Frankfurt (FRA) in the number of destinations, served with routes to 270 places worldwide.
- In North America, Chicago O'Hare Airport (ORD) is the highest ranked International Megahub, followed by Toronto Airport (YYZ). Twelve of the airports in the Top 50 are in the United States, with seven of these making it into the Top 25.
- 16 airports in Asia Pacific appear in the Top 50 International Megahubs, including China's three biggest airports: Beijing (PEK), Shanghai (PVG) and Guangzhou (CAN).
- Singapore (SIN) is Asia Pacific's highest ranked International Megahub with over 35,000 possible international connections on a single day in July, closely followed by Jakarta (CGK).
- With over 30,000 possible connections in a day, and almost as many destinations served as Hong Kong (HKG), Incheon (ICN) is well placed inside the Top 20, at number 17.
- Ranked 20th overall, <u>Dubai Airport (DXB)</u> is the highest ranked airport from Africa
  and the Middle East. Although DXB serves more destinations than LHR, the number of
  international connections was 39,700, slightly over half the number at LHR.
- In Latin America, Mexico City Airport (MEX) ranked highest for international connectivity in 21st place.
- For the first time, an airport in the Caribbean, Puerto Rico (SJU), makes it into the Megahubs Index, at number 46.



## Top 25 Low-Cost Megahubs

With airports and airlines themselves facilitating international connections more and more between low-cost flights, we have compiled the Top 25 Megahubs for low-cost connections, which include the same or different low-cost carriers.

Rank	Airport	Country	Connectivity Index
1	KUL	Malaysia	134
2	CGK	Indonesia	95
3	SIN	Singapore	88
4	DEL	India	76
5	LAX	USA	71
6	JFK	USA	69
7	ВОМ	India	69
8	DMK	Thailand	66
9	мсо	USA	64
10	MEX	Mexico	64
11	BCN	Spain	63
12	MNL	Philippines	62
13	DXB	UAE	61
14	FLL	USA	60
15	ICN	South Korea	60
16	YYZ	Canada	57
17	AMS	Netherlands	54
18	SGN	Vietnam	48
19	SJU	Puerto Rico	45
20	LGW	United Kingdom	45
21	SAW	Turkey	45
22	BOS	USA	43
23	GRU	Brazil	39
24	NRT	Japan	37
25	DPS	Indonesia	36



#### Key Highlights

- Kuala Lumpur Airport (KUL), home of AirAsia, is ranked number 1 for international low-cost connections.
- The next three ranked airports are Jakarta Airport (CGK), Singapore Airport (SIN) and Delhi Airport (DEL). All are located in South Asia and South East Asia, demonstrating the success of LCCs in meeting international travel needs in the region.
- The highest ranked US airport is Los Angeles Airport (LAX) in fifth place. Major US low-cost airports such as Las Vegas Airport, Denver Airport, Chicago Midway Airport, Fort Lauderdale Airport (FLL) and Baltimore Airport are not ranked among the Top 25 Low-Cost International Megahubs due to their markets being primarily domestic.
- Mexico City Airport (MEX) is the highest ranked (10th) airport in Latin America for Low-Cost International connections, and Barcelona Airport (BCN) is the highest ranked (11th) airport in Europe.



## Top International Megahubs by Region

#### Asia Pacific

Rank	Airport	Country	Connectivity Index
1	SIN	Singapore	257
2	CGK	Indonesia	256
3	KUL	Malaysia	242
4	HKG	Hong Kong	233
5	BKK	Thailand	226
6	ICN	South Korea	196
7	PVG	China	167
8	SYD	Australia	167
9	DEL	India	166
10	HND	Japan	163

## Europe, Middle East and Africa

Rank	Airport	Country	Connectivity Index
1	LHR	United Kingdom	379
2	FRA	Germany	307
3	AMS	Netherlands	299
4	CDG	France	242
5	MUC	Germany	221
6	IST	Turkey	219
7	DXB	UAE	183
8	FCO	Italy	145
9	MAD	Spain	138
10	NCE	France	133

#### North America

Rank	Airport	Country	Connectivity Index
1	ORD	USA	295
2	YYZ	Canada	271
3	ATL	USA	256
4	LAX	USA	235
5	MIA	USA	204
6	JFK	USA	195
7	IAH	USA	184
8	EWR	USA	170
9	YVR	Canada	165
10	DFW	USA	164

#### Latin America

Rank	Airport	Country	Connectivity Index
1	MEX	Mexico	176
2	BOG	Colombia	127
3	GRU	Brazil	120
4	SJU	Puerto Rico	114
5	PTY	Panama	108

<sup>\*</sup>Only 5 airports in Latin America meet the criteria for inclusion in the Top 50 International Megahubs.

## Glossary of Codes

Code		Country
AKL	Auckland	New Zealand
AMS	Amsterdam	Netherlands
ATL	Atlanta	USA
BCN	Barcelona	Spain
вкк	Bangkok	Thailand
BOG	Bogota	Colombia
вом	Mumbai	India
BOS	Boston	USA
CAN	Guangzhou	China
CDG	Paris Charles de Gaulle	France
CGK	Jakarta	Indonesia
DEL	Delhi	India
DFW	Dallas	USA
DMK	Don Mueang	Thailand
DPS	Bali Ngurah Rai	Indonesia
DXB	Dubai	UAE
EWR	Newark	USA
FCO	Rome Fiumicino	Italy
FLL	Fort Lauderdale	USA
FRA	Frankfurt	Germany
GRU	Sao Paulo Guarulhos	Brazil
HKG	Hong Kong	Hong Kong
HND	Tokyo Haneda	Japan
IAH	Houston	USA
ICN	Seoul Incheon	South Korea
IST	Istanbul	Turkey
JFK	New York JFK	USA
JNB	Johannesburg	South Africa
KUL	Kuala Lumpur	Malaysia

Code		Country
LAX	Los Angeles	USA
LGW	London Gatwick	United Kingdom
LHR	London Heathrow	United Kingdom
MAD	Madrid	Spain
мсо	Orlando	USA
MEX	Mexico City	Mexico
MIA	Miami	USA
MNL	Manila	Philippines
MUC	Munich	Germany
NCE	Nice	France
NRT	Tokyo Narita	Japan
ORD	Chicago O'Hare	USA
PEK	Beijing Capital	China
PTY	Panama City	Panama
PVG	Shanghai Pudong	China
SAW	Sabiha Gökçen	Turkey
SEA	Seattle-Tacoma	USA
SFO	San Francisco	USA
SGN	Tan Son Nhat	Vietnam
SIN	Singapore Changi	Singapore
SJU	San Juan	Puerto Rico
svo	Moscow Sheremetyevo	Russian Federation
SYD	Sydney	Australia
VIE	Vienna	Austria
YUL	Montreal	Canada
YVR	Vancouver	Canada
YYZ	Toronto	Canada
ZRH	Zurich	Switzerland

# Connections Analyser 2.0

Evaluate airport and airline network connectivity for better decision making





Learn more: www.oag.com/connections







OAG connections analyser



For more information, contact:

#### **Media Enquiries**

Worldwide USA General Enquiries

**Emma Jefferies / Joe Hawke Gil Haylon Caroline Mather** +44 (0)118 909 0909 1 (617) 969-9191 OAG

oag@berkeley.global ghaylon@corporateink.com caroline.mather@oag.com

#### Usage and attribution – OAG, leading global provider of digital flight information

This information can be reproduced in whole or in part, online or in print, for non-commercial purposes only but must include attribution to OAG with the following description 'OAG, the global provider of digital flight information' and a link to www.oag.com.

#### Disclaimer

The intended recipient ("The Customer") acknowledges that all data provided by or available through OAG is owned either by OAG Aviation Worldwide Ltd or by a third party provider ("The Owners") and that the customer shall not acquire any ownership or interest in such data.

OAG data is solely for the benefit and purposes of the intended recipient and may not be disclosed to, used by or copied by anyone other than the intended recipient.

OAG Aviation Worldwide Ltd has used reasonable efforts in collecting and preparing data in the report but cannot and does not warrant that the information contained in this report is complete or accurate. OAG Aviation Worldwide Ltd hereby disclaims liability to any person for any loss or damage caused by errors or omissions in this report.

