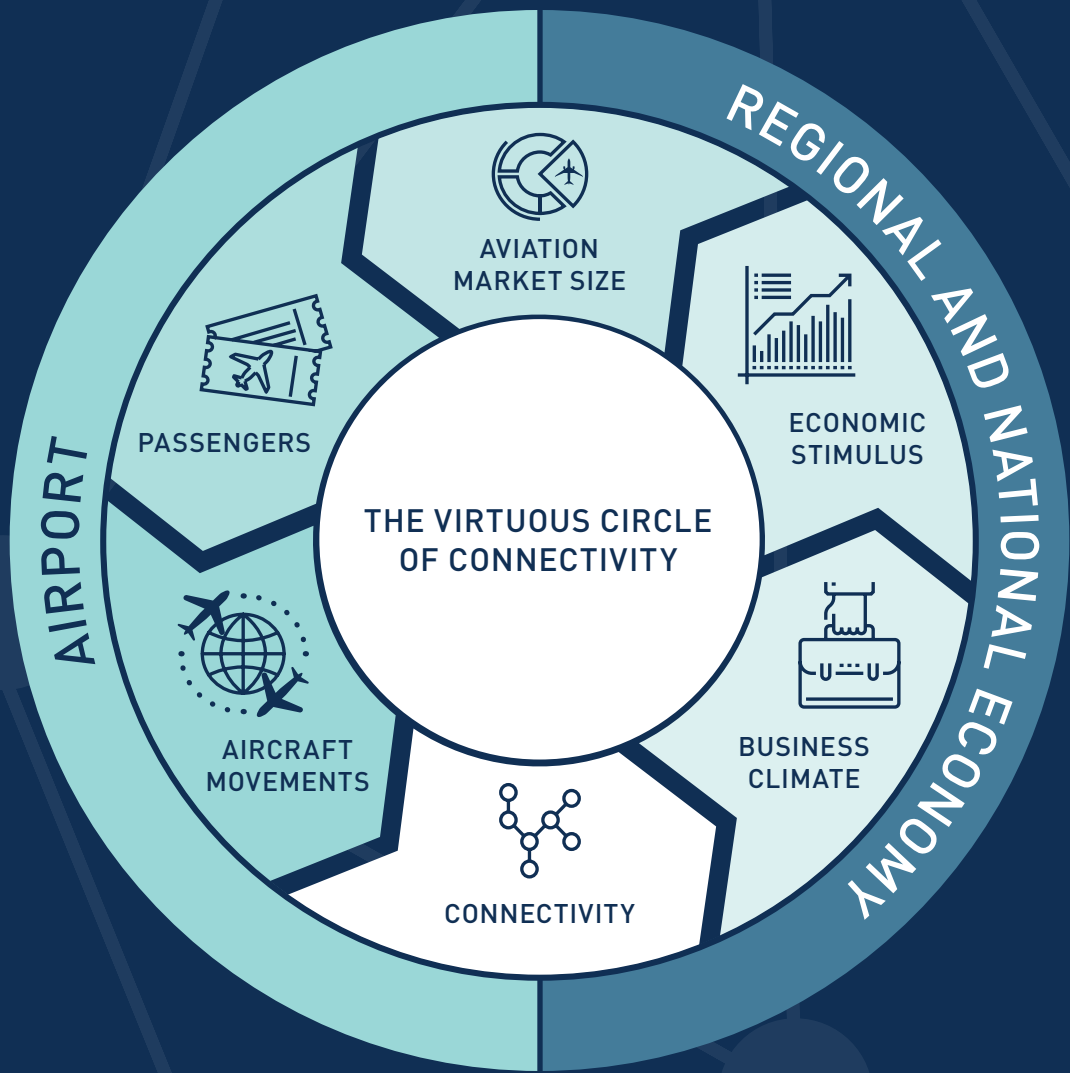




AIRPORT INDUSTRY CONNECTIVITY REPORT 2018





AIRPORT

REGIONAL AND NATIONAL ECONOMY

THE VIRTUOUS CIRCLE OF CONNECTIVITY

AVIATION MARKET SIZE



ECONOMIC STIMULUS



BUSINESS CLIMATE



CONNECTIVITY



AIRCRAFT MOVEMENTS



PASSENGERS

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Additional appendices detailing individual airport data on air connectivity are available in the full version of the report which you can download here:

<https://www.aci-europe.org/policy/connectivity2018.pdf>

INTRODUCTION

What exactly is air connectivity? How can it be measured? Just how many air services are on offer to the air travellers perusing the flight information boards at Europe's airports? And how can you measure which airports are facilitating the most connecting flights? And what do we gain from measuring it?

Citizens' access to air connectivity is part of the EU Aviation Strategy – as the various benefits and externalities are clear. Free movement and the stimulation of mobility are one of the great successes of the European project. Think of the economic and social benefits that air transport brings to your life, the holidays and travel experiences you have had, the business deals facilitates by aviation – it is the real world infrastructure of globalisation.

All of which is summed up in one simple statistic: **A 10% increase in air connectivity, comes with a 0.5% increase in GDP per capita.**

As with previous editions, this year's report comprehensively measures and analyses the way Europe's air connectivity has evolved over the past decade. Using the **SEO NetScan connectivity model**, the report provides the indexes that matter most in analysing air travellers' access to **direct, indirect** and **hub connectivity** based on both quantitative and qualitative metrics. This means that this is not simply a measure of how many city pairs there are, or how many direct services there are. For the purposes of this report, connectivity is a composite measure of the number of destinations, the frequency of services and the quality of the connections (in the case of hubbing or indirect services).

THE PASSENGER PERSPECTIVE OF AIR CONNECTIVITY

Let's begin by outlining **the various types of air connectivity** from the perspective of the air traveller. The one who wants to get from A to B. Or sometimes, from A to B to C.

The following definitions describe them and together they provide a comprehensive picture of connectivity provided by an airport – and how it links its communities to the rest of the world:

DIRECT CONNECTIVITY

These are the direct air services available from the airport – measured not just in terms of destinations, but also factoring in the frequency of flights to the same destination (so for example, an airport with 5 daily flights to another airport, will register a higher score than one with only 4).

INDIRECT CONNECTIVITY

This measures the number of places people can fly to, through a connecting flight at hub airports from a particular airport. For example, if you fly from Cork to a hub airport such as Amsterdam Schiphol, that's a direct flight from A to B. But with the vast choice of onward destinations you can fly to from there – the large number of available onward connections from these airports expands the range of destinations available from the airport of origin. Indirect connections are weighted according to their quality, based on connecting time and detour involved with the indirect routing. For example, a flight from Manchester to Johannesburg via Paris-Charles de Gaulle will register a higher score than an alternative routing via Doha.

AIRPORT CONNECTIVITY

As the name suggests, this is the most comprehensive metric for airport connectivity – taking into account both direct and indirect connectivity from the airport in question. Airport connectivity is defined as the sum of direct and indirect connectivity – thus measuring the overall level to which an airport is connected to the rest of the World, either by direct flights or indirect connections via other airports.

DIRECT CONNECTIVITY

FRANKFURT REPLACES AMSTERDAM-SCHIPHOL IN TOP POSITION

Frankfurt is now the N.1 airport in Europe in terms of direct connectivity (+11.1%), having jumped from 3rd position last year as a result of significant network expansion of both the Lufthansa Group and Low Cost Carriers (Ryanair in particular).

Frankfurt is thus replacing in the top position Amsterdam-Schiphol, where direct connectivity stalled this year (0.0%) due to the airport reaching its capacity limits. **Amsterdam-Schiphol** now holds the 2nd position – still up from the 6th position back in 2008 (+20.8% since then).

London-Heathrow went from the 2nd to the 3rd position, also not making any gains in direct connectivity this year (-0.2%) due to a lack of capacity. London-Heathrow was N.1 in 2016.

Paris-CDG remains N. 4 (+2.5%) followed by **Istanbul-Ataturk** (+1.2%).

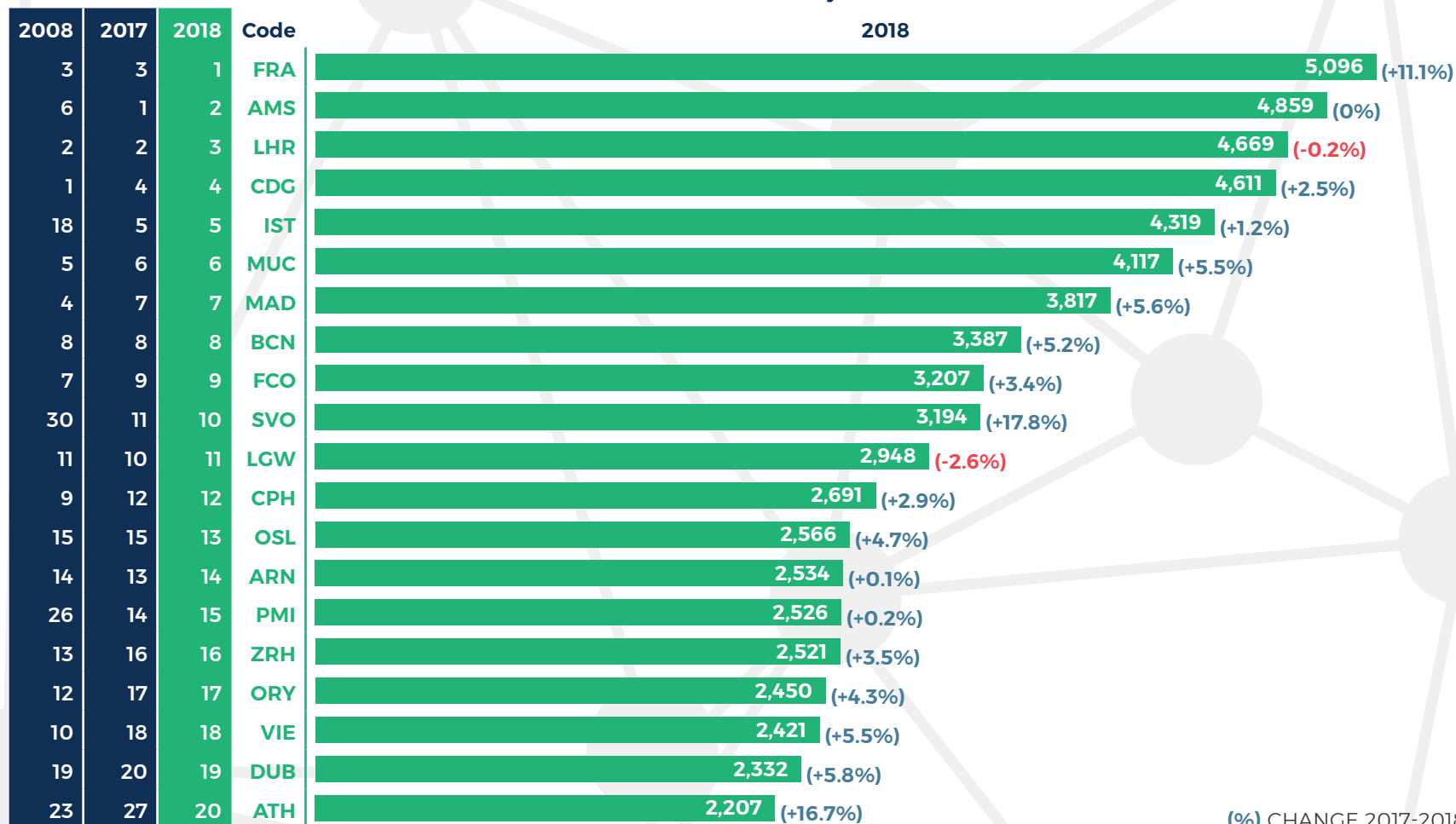
Athens has joined the Top 20 direct connectivity league (+16.7%), replacing **Dusseldorf** (-7.2%) which went down from 20 to 26 in the wake of the bankruptcy of Air Berlin.



Direct Connectivity

GRAPH 1: DIRECT CONNECTIVITY - TOP 20 AIRPORTS IN EUROPE 2018
% GROWTH OVER 2017 & RANKING IN 2017 & 2008

Direct Connectivity



(%) CHANGE 2017-2018

TOP PERFORMERS IN DIRECT CONNECTIVITY BY AIRPORT TRAFFIC CATEGORIES SINCE 2017, 2013 AND 2008

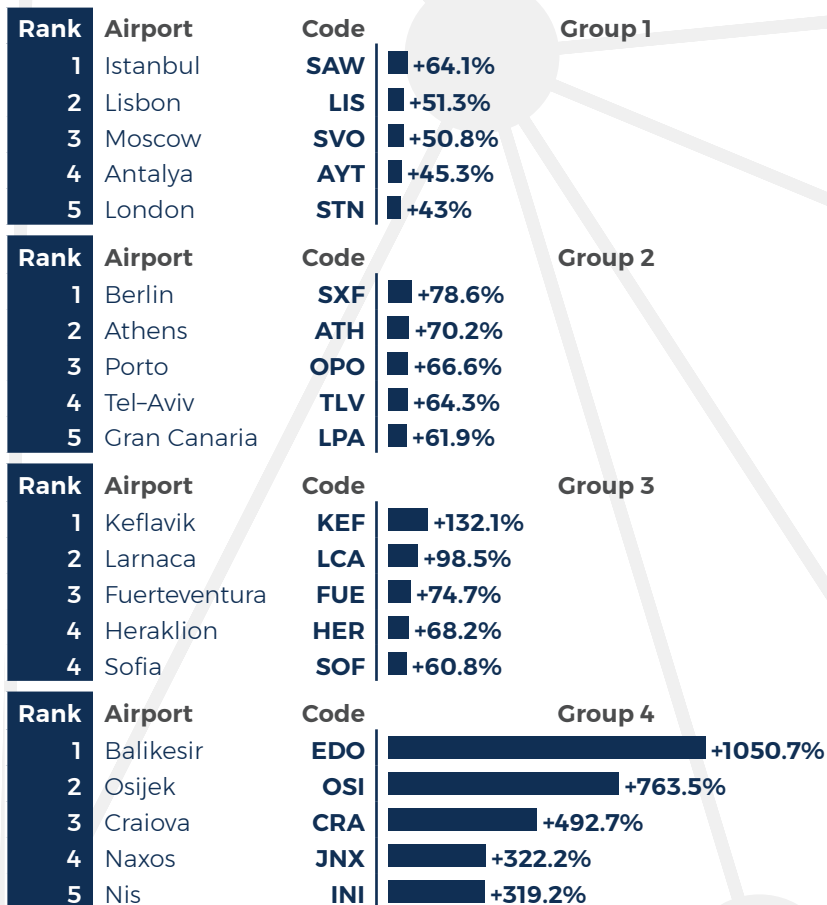
TOP 5s YEAR-ON-YEAR (2018 VS 2017)

Rank	Airport	Code	Group
1	Antalya	AYT	Group 1
2	Moscow	SVO	
3	Moscow	DME	
4	London	STN	
5	Frankfurt	FRA	
1	Izmir	ADB	Group 2
2	Ankara	ESB	
3	Gran Canaria	LPA	
4	St Petersburg	LED	
5	Athens	ATH	
1	Sochi	AER	Group 3
2	Sevilla	SVQ	
3	Larnaca	LCA	
4	Heraklion	HER	
4	Malta	MLA	
5	Palermo	PMO	
1	Sion	SIR	Group 4
2	Kaluga	KLF	
3	Plovdiv	PDV	
4	Sinop	NOP	
5	Pardubice	PED	

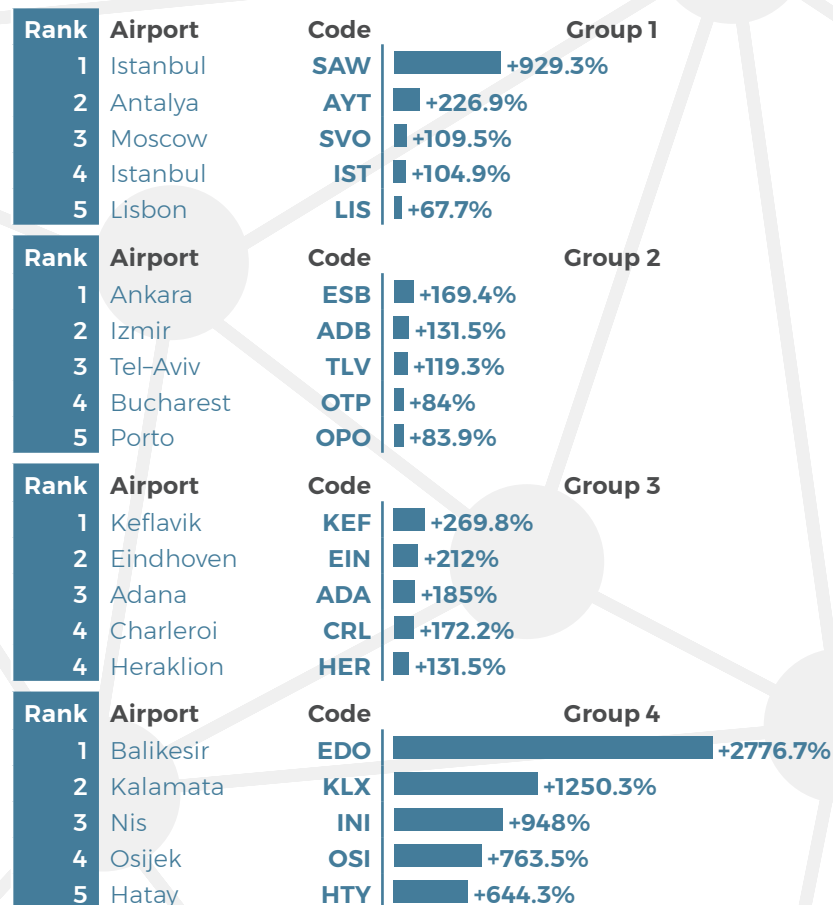


Indirect Connectivity

TOP 5s OVER THE LAST FIVE YEARS (2018 VS 2013)



TOP 5s OVER THE LAST TEN YEARS (2018 VS 2008)



Group 1 | Airports with more than 25 million passengers a year

Group 2 | Airports with between 10 and 25 million passengers a year

Group 3 | Airports with between 5 and 10 million passengers a year

Group 4 | Airports with between 0 and 5 million passengers a year



Hub Connectivity

HUB CONNECTIVITY

Now we move on to a significant metric that many airports judge themselves by: Hub connectivity. This is the key metric for any hub airport big (such as London Heathrow) or smaller (such as Keflavik). Essentially, it measures the number of connecting flights that can be facilitated by the hub airport in question – taking into account a minimum and maximum connecting times, and weighting the quality of the connections by the detour involved and connecting times.

This year's findings confirm that Europe still packs a punch in the global league of hub airports.

GLOBAL HUB CONNECTIVITY: FRANKFURT ON TOP, MUNICH SURPASSING LONDON-HEATHROW & SHANGHAI JOINING THE TOP 20 LEAGUE

In 2018, Frankfurt remains the airport offering the best hub connectivity not just in Europe, but also worldwide – having increased its hub connectivity by an impressive +12.8% over the preceding year.

Amsterdam-Schiphol (+2.2%) also remains Number 2, followed by **Dallas Fort Worth** (+10%), **Paris-CDG** (+2.9%) and the busiest airport in the world, **Atlanta** (-1.1%).

GRAPH 2: HUB CONNECTIVITY - TOP 20 AIRPORTS WORLDWIDE 2018
% GROWTH OVER 2017 & RANKING IN 2017 & 2008

Global Hub Connectivity

2008	2017	2018	Code	2018	
1	1	1	FRA	78,914	(+12.8%)
6	2	2	AMS	57,781	(+2.2%)
4	3	3	DFW	52,483	(+10%)
2	4	4	CDG	48,594	(+2.9%)
3	5	5	ATL	42,222	(-1.1%)
5	7	6	ORD	36,028	(+8.4%)
32	6	7	IST	35,525	(+4.8%)
11	11	8	MUC	35,286	(+23.4%)
9	8	9	LHR	33,643	(+3.7%)
8	13	10	DEN	31,540	(+17.5%)
27	15	11	DXB	29,096	(+28.8%)
14	10	12	YYZ	27,937	(-2.7%)
10	12	13	EWR	27,516	(-0.2%)
15	9	14	CLT	25,248	(-12.8%)
7	16	15	IAH	23,987	(+27.5%)
13	18	16	MAD	20,860	(+16%)
35	17	17	SVO	20,372	(+13.2%)
45	14	18	DOH	18,180	(-20.5%)
18	20	19	ZRH	16,922	(+11.6%)
39	21	20	PVG	16,209	(+10.5%)

(%) CHANGE 2017-2018

Consider some of big movers in the top 20 Global Hub Connectivity league over the past year:

- **Munich** (+23.4%) has jumped to the 8th position from the 11th, surpassing **London-Heathrow** (+3.7%, from 8th to 9th), **Charlotte** (-12.8%, from 9th to 14th), and **Toronto-Pearson** (-2.7%, from N. 10 to N. 12).
- **Shanghai** (+10.5%) became the first Chinese hub to join the Top 20 Global Hub Connectivity league, replacing **Minneapolis-Saint Paul** (-13.4%).
- **Dubai International** (+28.8%, from 15th to 11th) has seen the highest increase in hub connectivity, along with **Houston** (+27.5%), Munich and **Madrid** (+16%).
- **Doha's** hub connectivity has retreated significantly (-20.5%, from N. 14 to N. 18), as geopolitical tensions resulted in the discontinuation of air services between Qatar and the UAE, Saudi Arabia, Bahrain and Egypt.

EUROPEAN HUB DYNAMICS – NICHE & SMALLER HUBS EXPANDING

Beyond the top 20 Global hub connectivity league, the European hub market has gone through significant changes over the past 10 years. Hub connectivity growth has been dynamic at niche & smaller hubs, as well as at a number of other emerging hubs.

This is pointing to an increasingly diversified market where hub connectivity is no longer the preserve of the largest airports. Accordingly, the hub connectivity share of the Majors' (top 6 airports by hub connectivity) has decreased since 2008 from 63.4% to 61.5%, while that of niche & smaller hubs has increased from 31.8% to 33.7%.

GRAPH 3: MAP OF THE MAJOR, SECONDARY AND NICHE & SMALLER HUBS IN EUROPE RANKING IN 2018 & GROWTH BY GROUPS

MAJORS

- 1 FRA
- 2 AMS
- 3 CDG
- 4 IST
- 5 MUC
- 6 LHR



Growth rate
2018 vs 2008

NICHE & SMALLER

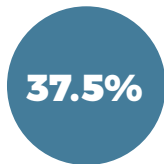
- | | |
|--------|--------|
| 13 BRU | 20 BCN |
| 14 LIS | 21 DME |
| 15 CPH | 22 ARN |
| 16 WAW | 23 ATH |
| 17 KEF | 24 DUS |
| 18 DUB | 25 SAW |
| 19 OSL | 26 PRG |



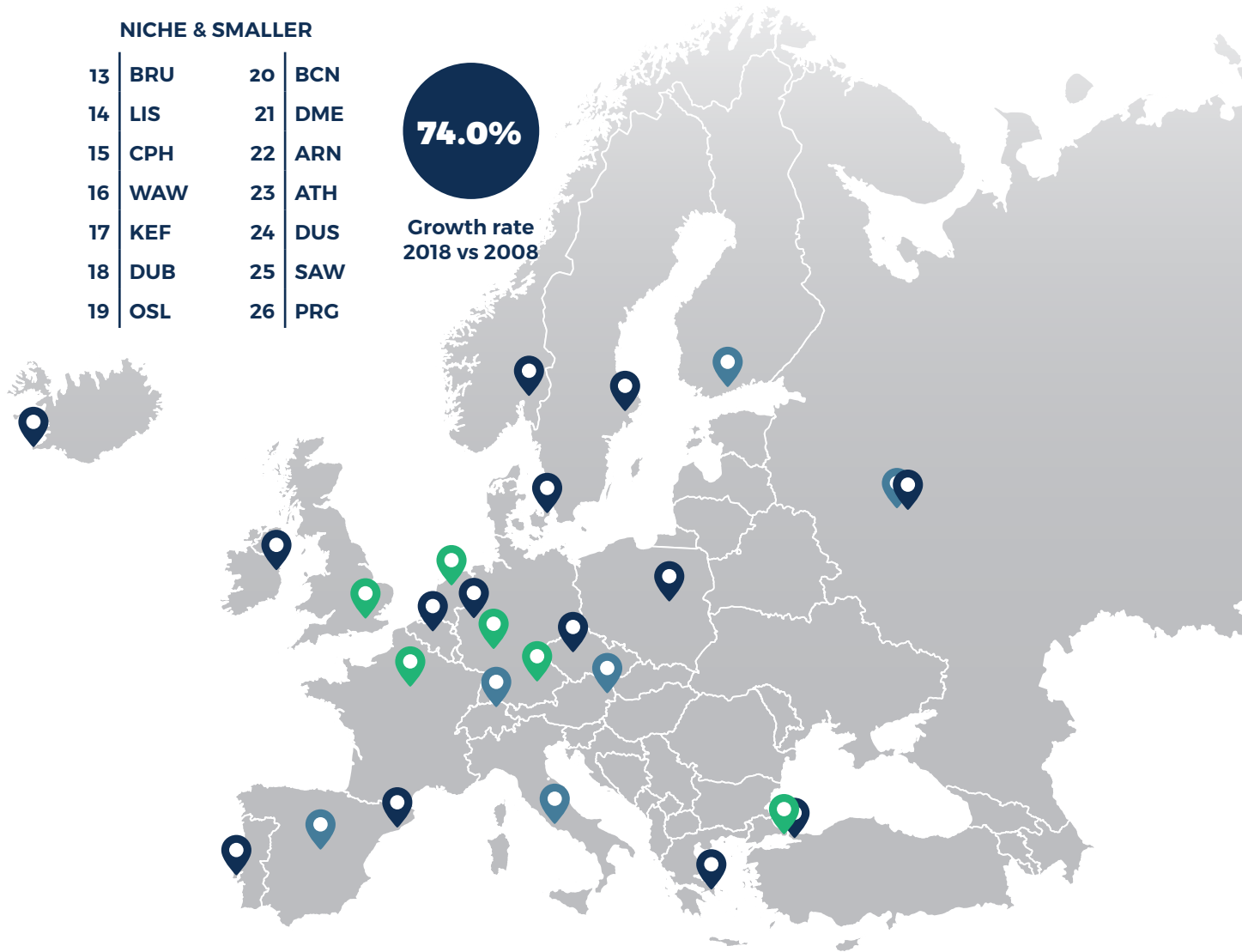
Growth rate
2018 vs 2008

SECONDARY

- 7 MAD
- 8 SVO
- 9 ZRH
- 10 VIE
- 11 FCO
- 12 HEL



Growth rate
2018 vs 2008



Since 2008, the most impressive gains in hub connectivity amongst niche & smaller hubs were achieved by:

- **Istanbul-SAW** (+35120.1% – the airport used to be a purely point-to-point airport),
- **Keflavik** (+1541.1% – now a significant player for transatlantic hub connectivity),
- **Moscow-DME** (+467.5%),
- **Dublin** (+273%),
- **Warsaw** (+236.5%),
- **Athens** (+133%),
- **Lisbon** (+110.9%).

Beyond these niche & smaller hubs, a number of other airports have started developing their hub connectivity, mostly without large network airlines and occasionally in partnership LCCs. These emerging hubs include:

- **Riga** (+361.7%),
- **Kiev** (+337.5%),
- **Koln-Bonn** (+162.4%),
- **Geneva** (+159.7%),
- **London-Gatwick** (+52.9%),
- **London-Stansted** (+41.3%).

GRAPH 4: HUB CONNECTIVITY LEVELS AT THE TOP 26 HUBS IN EUROPE (2018 VS 2017)

Hub Connectivity Levels

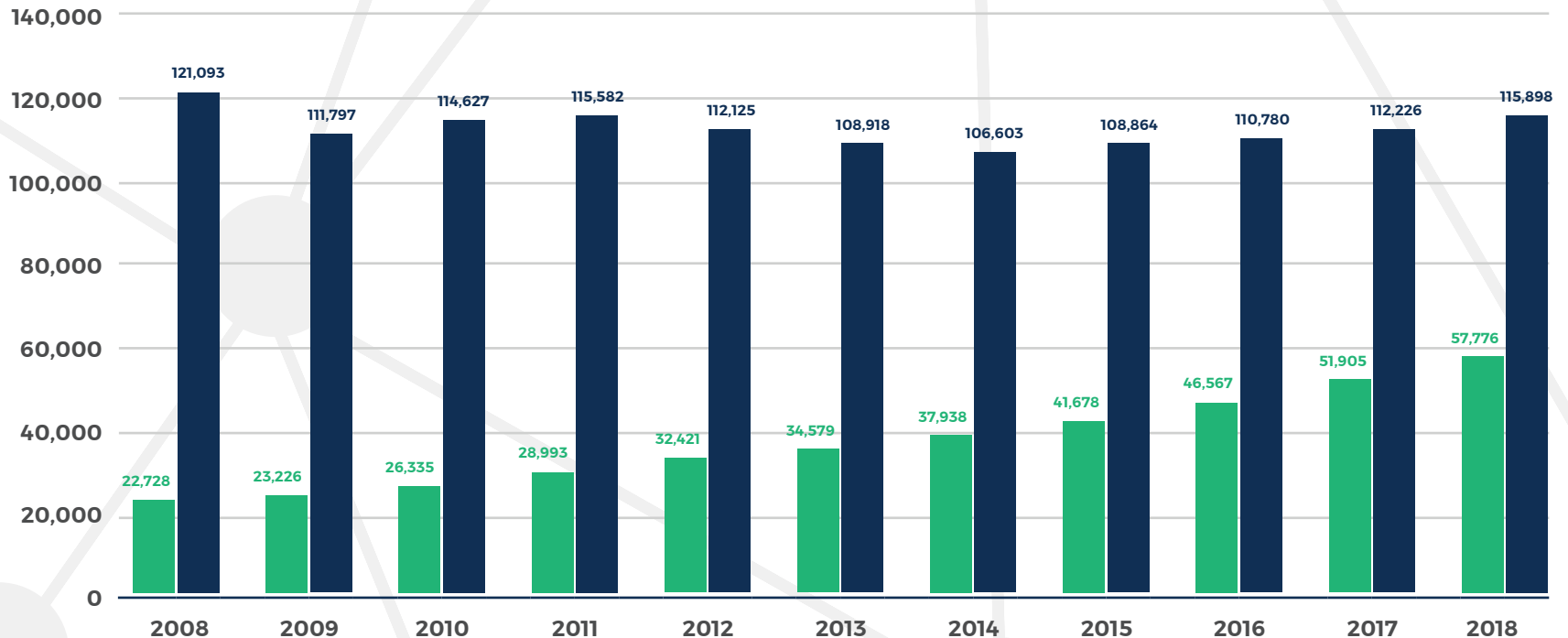
		2017 ▲	2008 ▲			2017 ▲	2008 ▲		
1.	FRA	78,914	12.8%	25.4%	14.	LIS	6,627	14.2%	110.9%
2.	AMS	57,781	2.2%	55.8%	15.	CPH	5,643	4.4%	-27.5%
3.	CDG	48,594	2.9%	-1.9%	16.	WAW	5,282	40.6%	236.5%
4.	IST	35,525	4.8%	492.8%	17.	KEF	4,614	41.1%	1541.1%
5.	MUC	35,286	23.4%	29.9%	18.	DUB	4,187	9.9%	273.0%
6.	LHR	33,643	3.7%	14.1%	19.	OSL	4,168	7.8%	33.0%
7.	MAD	20,860	16.0%	4.9%	20.	BCN	4,104	33.0%	14.6%
8.	SVO	20,372	13.2%	273.5%	21.	DME	3,866	24.3%	467.5%
9.	ZRH	16,922	11.6%	28.0%	22.	ARN	3,458	3.5%	48.6%
10.	VIE	15,206	10.2%	5.0%	23.	ATH	3,195	14.8%	133.0%
11.	FCO	13,829	10.9%	13.9%	24.	DUS	2,990	-32.9%	12.8%
12.	HEL	11,582	16.0%	74.4%	25.	SAW	2,829	15.2%	35120.1%
13.	BRU	6,953	4.3%	94.6%	26.	PRG	2,023	5.5%	-37.0%

● MAJORS ● SECONDARY ● NICHE & SMALLER

AIR CONNECTIVITY & AIRLINE BUSINESS MODELS

Over the past 10 years, Europe's direct connectivity gains (+20.7%) are entirely attributable to Low Cost Carriers (LCCs) as a result of their dynamic expansion and the relative retrenchment of Full Service and Other Carriers (FSOCs).

GRAPH 5: EUROPE DIRECT CONNECTIVITY GROWTH 2008-2018 - LCCs & FSOCs



+154.2%

LCCs growth rate over 10 years

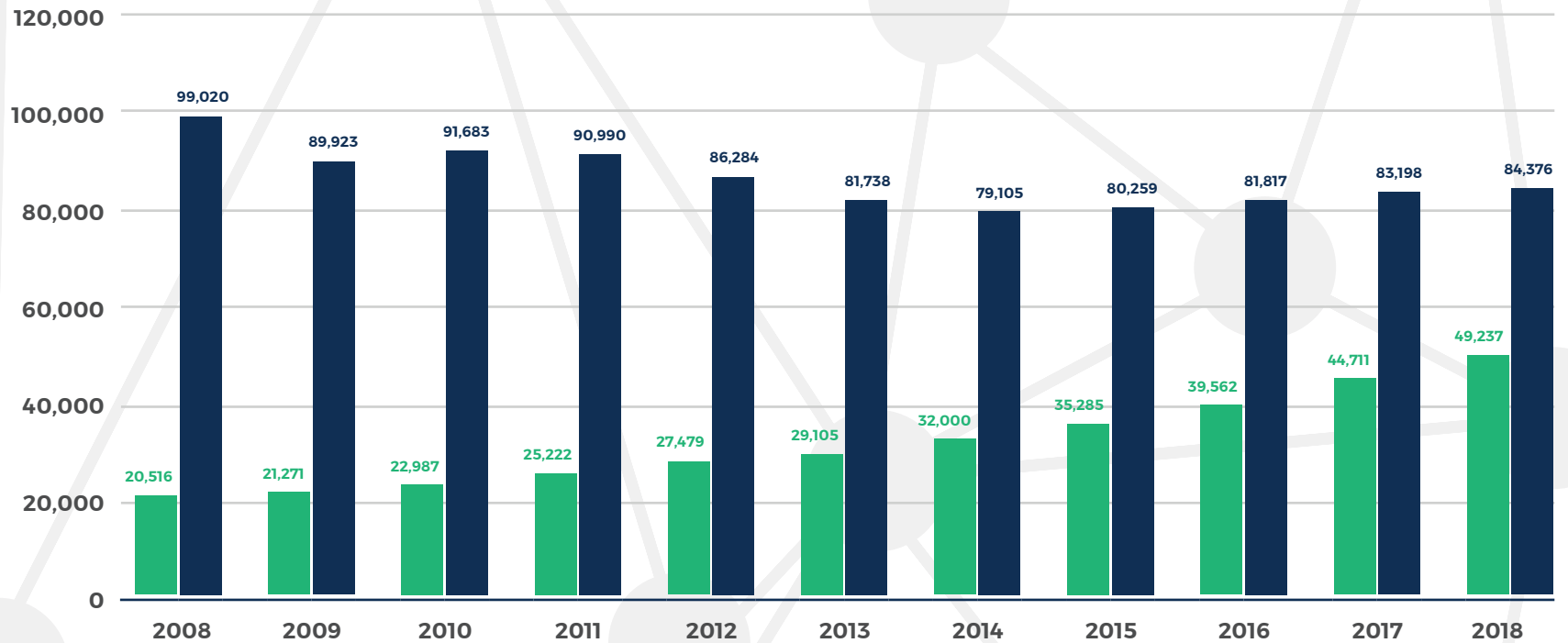
-4.3%

FSOCs growth rate over 10 years

● LCCs

● FSOCs

GRAPH 6: EU DIRECT CONNECTIVITY GROWTH 2008-2018 - LCCs & FSOCs

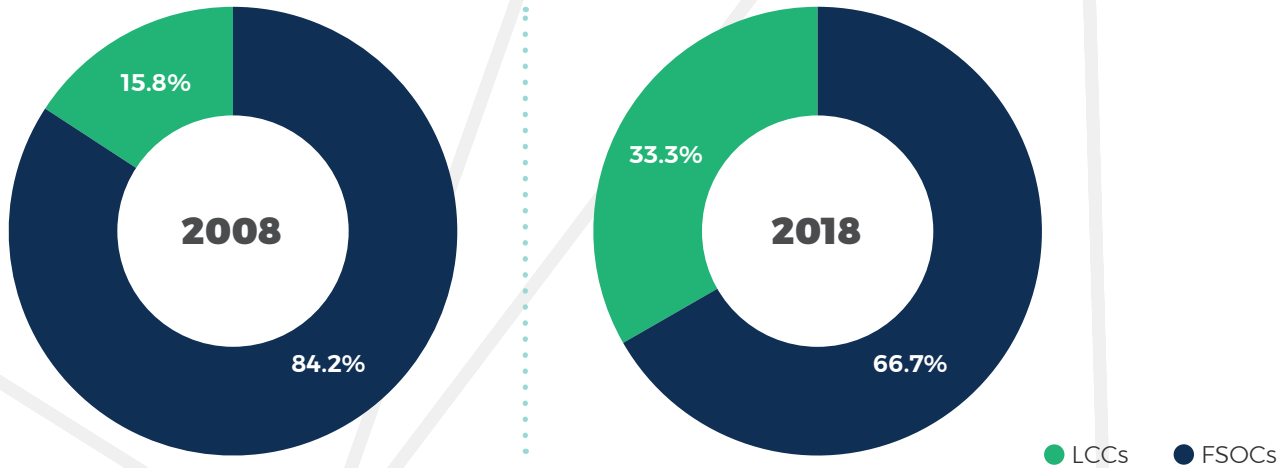


+140.0% LCCs growth rate over 10 years

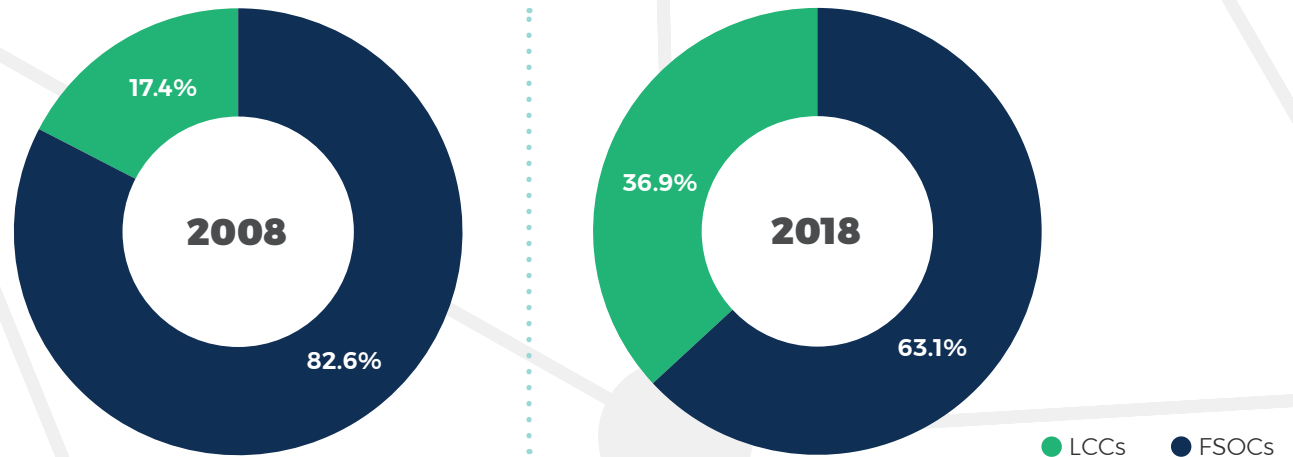
-14.8% FSOCs growth rate over 10 years

● LCCs ● FSOCs

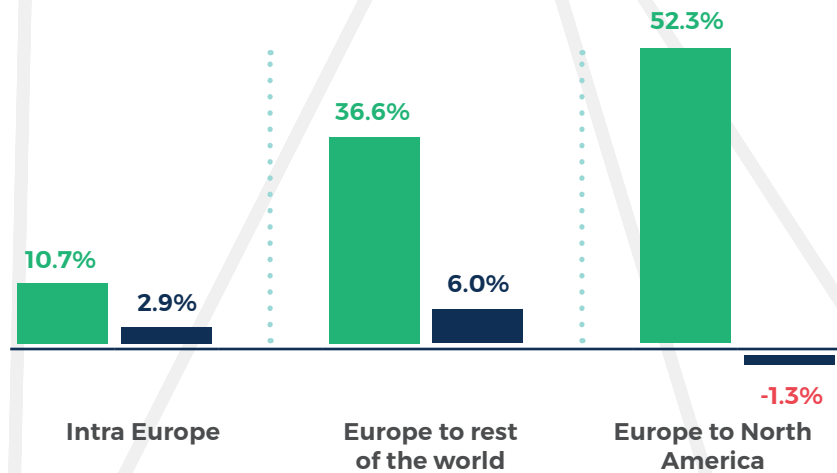
GRAPH 7: EUROPE DIRECT CONNECTIVITY 2008 & 2018



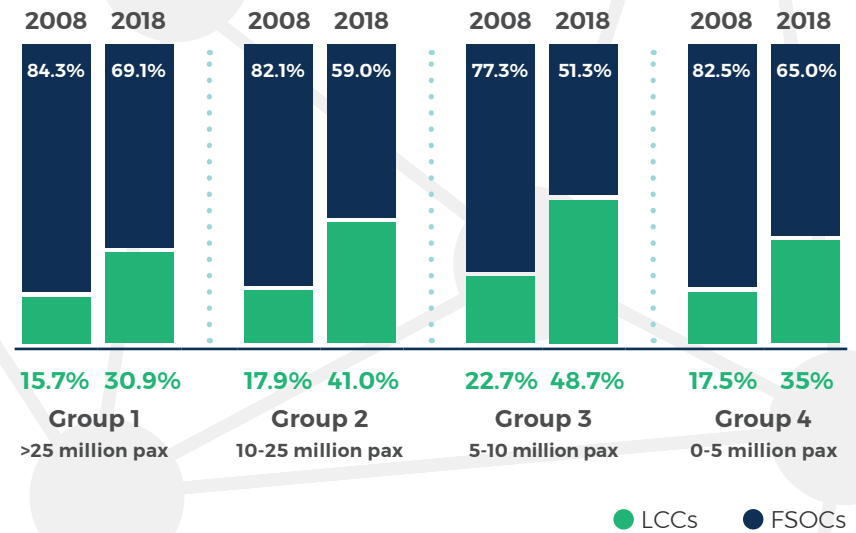
GRAPH 8: EU DIRECT CONNECTIVITY 2008 & 2018



GRAPH 9: DIRECT CONNECTIVITY FROM EUROPEAN AIRPORTS (2018 VS 2017)

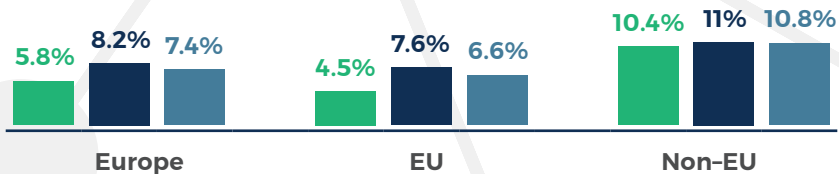


GRAPH 10: EU AIRPORTS DIRECT CONNECTIVITY SHARE 2008/2018 LCCs & FSOCs

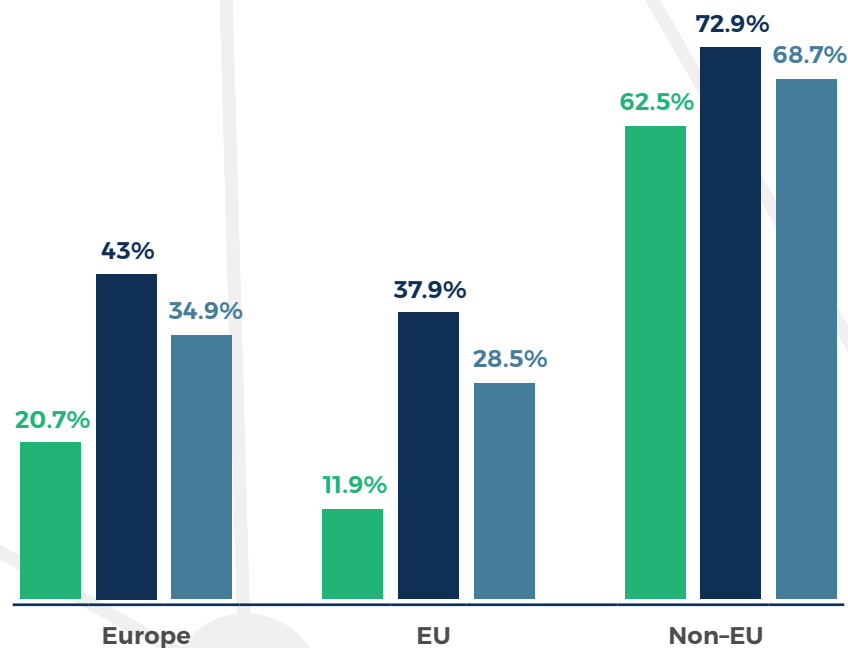


EUROPEAN & EU MARKETS OVERVIEW

GRAPH 11: DIRECT, INDIRECT AND AIRPORT CONNECTIVITY
2018 VS 2017

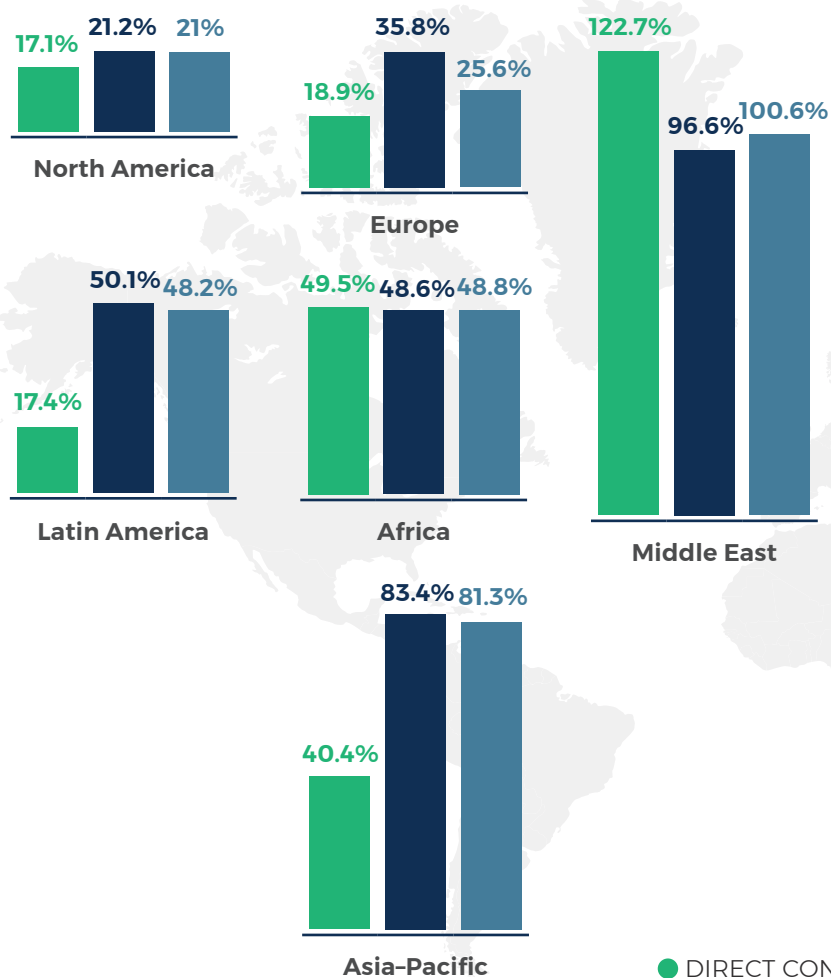


GRAPH 12: DIRECT, INDIRECT AND AIRPORT CONNECTIVITY
2018 VS 2008

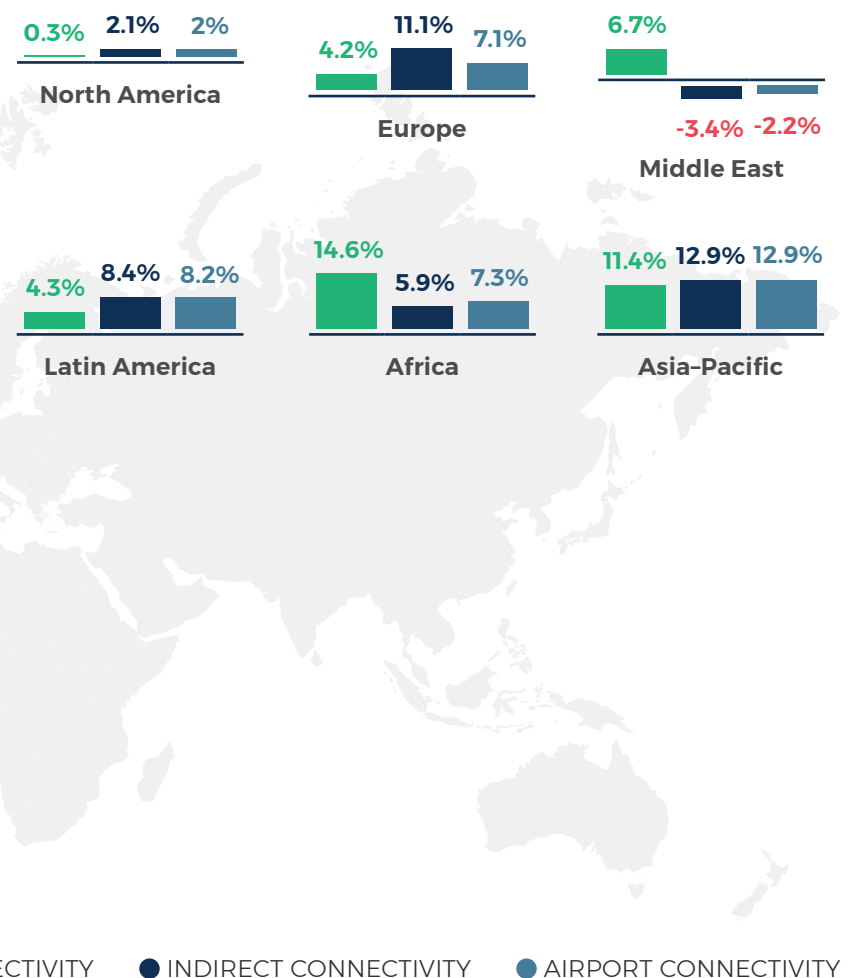


● DIRECT CONNECTIVITY ● INDIRECT CONNECTIVITY ● AIRPORT CONNECTIVITY

GRAPH 13: DIRECT, INDIRECT AND AIRPORT CONNECTIVITY BY WORLD REGION 2018 VS 2008



GRAPH 14: DIRECT, INDIRECT AND AIRPORT CONNECTIVITY FROM EU AIRPORTS BY WORLD REGION 2018 VS 2008



APPENDIX 1: GLOSSARY OF AIRPORT CODES

1.1 AIRPORTS WITHIN EUROPE

Airport code	Airport name	Airport country
FRA	Frankfurt	Germany
AMS	Amsterdam	Netherlands
CDG	Paris	France
IST	Istanbul	Turkey
MUC	Munich	Germany
LHR	London	United Kingdom
MAD	Madrid	Spain
SVO	Moscow	Russian Federation
ZRH	Zurich	Switzerland
VIE	Vienna	Austria
FCO	Rome	Italy
HEL	Helsinki	Finland
BRU	Brussels	Belgium
LIS	Lisbon	Portugal
CPH	Copenhagen	Denmark
WAW	Warsaw	Poland
KEF	Keflavik	Iceland
DUB	Dublin	Ireland
OSL	Oslo	Norway
BCN	Barcelona	Spain
DME	Moscow	Russian Federation

DME	Moscow	Russian Federation
ARN	Stockholm	Sweden
ATH	Athens	Greece
DUS	Düsseldorf	Germany
SAW	Istanbul	Turkey
PRG	Prague	Czech Republic

1.2 AIRPORTS BEYOND EUROPE

Airport code	Airport name	Airport country
DFW	Dallas/Fort Worth	United States
ATL	Atlanta	United States
ORD	Chicago	United States
DEN	Denver	United States
DXB	Dubai	United Arab Emirates
YYZ	Toronto	Canada
EWR	Newark	United States
CLT	Charlotte	United States
IAH	Houston	United States
DOH	Doha	Qatar
PVG	Shanghai	China

APPENDIX 2: LIST OF SELECTED LOW COST CARRIERS (LCC)

2.1 LIST OF SELECTED LOW COST CARRIERS (LCC)

Airline name		
Blue Air	Air Arabia	WOW Air
Albawings	NIKI	TUIfly
Air Arabia Maroc	Thomas Cook Airlines Belgium N.V	SunExpress Deutschland GmbH
germanwings	Transavia.com	SunExpress
Fly One	Jet2.com	Flynas – National Air Services
TUIfly Nordic AB	Thomas Cook Airlines	Monarch Airlines
Onur Air Tasimacilik A.S.	TUI fly Netherlands	Air Manas
Azul Airlines	Pegasus Airlines	Primera air
French Blue	XL Airways France	Primera air
TUIfly Nordic AB	Corsair	Sterling airlines
Blue Panorama Airlines	TUI fly Belgium	SkyEurope
Cobalt Aero	Transavia.com France	
Norwegian	Thomson Airways	
Thomas Cook Scandinavia	Scot	
Pobeda	Easyjet	
Norwegian Air Shuttle	Volotea	
Eurowings	Vueling Airlines	
Ryanair	Wizz Air	
Flydubai	Edelweiss Air	
	Westjet	

APPENDIX 3: CONNECTIVITY BY COUNTRY

Country	Direct connectivity	Indirect connectivity	Airport connectivity	Hub connectivity	GDP 2016 (m€)	Growth 2018 vs 2017				Growth 2018 vs 2013				Growth 2018 vs 2008			
						Direct	Indirect	Airport	Hub	Direct	Indirect	Airport	Hub	Direct	Indirect	Airport	Hub
Spain	19,865	31,056	50,921	25,631	1,319,579	6.2%	10.4%	8.8%	17.6%	31.6%	49.6%	42.0%	62.3%	8.9%	43.8%	27.8%	3.1%
Germany	19,167	53,183	72,351	120,910	3,401,968	3.3%	7.8%	6.6%	12.0%	9.5%	14.7%	13.3%	13.7%	2.2%	33.2%	23.3%	27.3%
United Kingdom	18,290	39,538	57,827	39,306	2,466,984	-0.8%	1.9%	1.0%	3.7%	10.7%	25.2%	20.2%	13.8%	3.9%	29.1%	19.9%	18.5%
France	14,807	30,140	44,947	50,757	2,539,096	2.8%	4.9%	4.2%	2.8%	7.4%	14.5%	12.0%	-4.1%	1.7%	24.1%	15.7%	-3.0%
Turkey	12,653	12,742	25,396	38,675	1,010,781	12.1%	9.3%	10.7%	6.2%	35.0%	23.7%	29.1%	47.1%	191.8%	130.4%	157.4%	534.6%
Italy	12,183	29,296	41,479	16,363	1,876,965	2.9%	5.7%	4.9%	9.9%	14.5%	24.4%	21.3%	11.1%	7.1%	35.1%	25.4%	20.5%
Russian Federation	9,499	12,567	22,066	25,279	1,470,744	21.4%	16.9%	18.8%	15.0%	27.6%	29.8%	28.8%	57.5%	74.0%	85.4%	80.3%	267.8%
Norway	7,509	8,384	15,894	4,535	424,621	1.5%	6.0%	3.8%	6.1%	-4.0%	-0.6%	-2.2%	6.8%	2.4%	28.0%	14.5%	33.2%
Greece	6,259	8,239	14,498	3,302	220,745	16.5%	14.6%	15.4%	14.5%	70.8%	79.7%	75.8%	137.5%	63.3%	77.2%	70.9%	131.6%
Netherlands	5,465	11,540	17,005	57,860	801,205	0.3%	-0.2%	0.0%	2.2%	17.5%	17.1%	17.2%	26.3%	27.4%	19.9%	22.2%	56.0%
Switzerland	4,661	14,967	19,628	18,351	572,755	1.8%	7.2%	5.8%	10.5%	7.0%	15.6%	13.4%	13.9%	15.8%	45.0%	36.8%	33.7%
Sweden	4,545	9,205	13,749	4,011	503,871	0.7%	4.1%	3.0%	2.4%	16.2%	26.2%	22.7%	43.0%	15.2%	39.2%	30.2%	56.1%
Portugal	4,427	10,076	14,503	6,912	208,442	5.9%	28.6%	20.7%	14.9%	51.0%	81.0%	70.6%	74.4%	64.3%	106.0%	91.2%	106.1%
Poland	3,117	7,162	10,279	5,370	515,926	16.8%	20.2%	19.1%	41.0%	49.9%	33.5%	38.0%	188.6%	43.9%	62.7%	56.5%	235.6%
Denmark	3,038	7,735	10,773	5,670	312,047	1.5%	4.1%	3.4%	4.4%	9.7%	22.7%	18.7%	-6.5%	4.5%	46.1%	31.3%	-27.5%
Austria	2,871	8,666	11,537	15,256	376,984	4.6%	9.1%	7.9%	10.2%	1.7%	23.4%	17.2%	20.7%	-11.6%	20.5%	10.5%	5.1%
Ireland	2,822	7,265	10,087	4,229	287,995	5.8%	1.0%	2.3%	9.9%	34.0%	42.1%	39.7%	182.2%	13.0%	64.4%	45.8%	267.0%
Belgium	2,809	6,323	9,132	7,025	464,509	1.4%	6.9%	5.2%	4.3%	14.0%	15.0%	14.7%	31.1%	15.7%	31.8%	26.4%	96.2%
Finland	2,485	6,186	8,672	11,587	226,918	11.4%	9.9%	10.3%	16.0%	13.6%	24.6%	21.2%	70.4%	-0.1%	17.4%	11.8%	74.4%
Romania	1,724	3,455	5,179	343	179,464	1.6%	13.7%	9.4%	12.5%	47.2%	13.4%	22.8%	43.5%	60.7%	31.8%	40.2%	11.3%
Czech Republic	1,650	4,097	5,747	2,025	207,125	7.4%	14.2%	12.1%	5.5%	30.5%	34.9%	33.6%	61.2%	3.3%	38.7%	26.3%	-36.9%
Israel	1,498	5,010	6,508	159	260,861	19.3%	11.6%	13.3%	10.0%	62.2%	54.4%	56.1%	57.2%	90.5%	68.5%	73.1%	190.2%
Croatia	1,307	3,574	4,881	125	54,151	10.5%	21.3%	18.2%	85.7%	55.2%	86.9%	77.2%	1478.9%	96.6%	116.0%	110.4%	1504.7%
Hungary	1,039	3,136	4,175	197	131,631	12.0%	8.8%	9.6%	78.2%	46.5%	39.6%	41.2%	281.6%	2.0%	34.3%	24.5%	-82.1%
Bulgaria	981	1,855	2,836	49	51,062	9.0%	7.2%	7.8%	8.0%	77.5%	48.7%	57.6%	3.0%	83.6%	42.9%	54.8%	-5.0%
Ukraine	941	2,049	2,990	1,195	112,025	7.3%	7.5%	7.4%	2.4%	12.9%	0.6%	4.2%	45.8%	6.4%	11.1%	9.6%	334.0%

Country	Direct connectivity	Indirect connectivity	Airport connectivity	Hub connectivity	GDP 2016 (m€)	Growth 2018 vs 2017				Growth 2018 vs 2013				Growth 2018 vs 2008			
						Direct	Indirect	Airport	Hub	Direct	Indirect	Airport	Hub	Direct	Indirect	Airport	Hub
Cyprus	867	1,443	2,311	56	21,725	26.7%	24.3%	25.2%	45.8%	75.1%	74.3%	74.6%	60.4%	78.3%	103.7%	93.4%	-43.5%
Latvia	799	1,338	2,137	705	26,061	14.6%	4.4%	8.0%	58.2%	25.9%	56.4%	43.4%	142.9%	55.4%	127.4%	93.9%	361.7%
Iceland	728	1,396	2,124	4,614	14,680	9.3%	47.7%	31.8%	41.1%	132.1%	429.4%	267.8%	392.6%	269.8%	1711.8%	675.3%	1541.1%
Serbia	580	1,613	2,193	251	37,312	-0.6%	2.8%	1.9%	-24.3%	43.9%	32.7%	35.5%	571.8%	61.2%	70.5%	67.9%	500.7%
Luxembourg	559	1,970	2,529	80	58,461	9.8%	18.2%	16.2%	20.2%	33.5%	36.3%	35.7%	114.1%	37.1%	63.3%	56.7%	163.0%
Malta	528	1,514	2,042	75	10,491	19.1%	12.1%	13.8%	135.8%	53.6%	169.3%	125.4%	56.4%	83.3%	329.6%	218.8%	149.3%
Lithuania	525	1,122	1,647	6	41,188	5.7%	10.7%	9.1%	0.8%	52.8%	115.9%	90.8%	-14.0%	33.7%	59.6%	50.3%	-77.0%
Georgia	478	986	1,464	12	13,709	41.9%	26.0%	30.8%	135.6%	113.3%	87.7%	95.4%	360.5%	223.7%	236.6%	232.3%	295.0%
Belarus	460	954	1,414	23	53,413	5.9%	26.5%	19.0%	15.9%	82.5%	64.1%	69.7%	103.5%	246.3%	219.8%	227.9%	7697.2%
Estonia	404	1,426	1,830	20	21,234	17.6%	14.2%	14.9%	35.4%	33.5%	64.3%	56.3%	84.2%	24.0%	85.8%	67.3%	186.1%
Moldova	284	542	825	64	6,619	-6.2%	13.4%	5.8%	-7.4%	89.5%	21.6%	38.6%	277.5%	144.3%	256.6%	207.9%	879.0%
Montenegro	281	652	933	4	4,195	15.2%	21.2%	19.3%	133.5%	38.5%	185.0%	116.2%	-61.2%	103.1%	701.1%	324.8%	214.8%
Slovenia	274	1,101	1,375	311	45,436	21.3%	16.6%	17.5%	106.8%	37.6%	32.7%	33.7%	229.8%	-11.7%	17.9%	10.5%	75.8%
Albania	215	604	820	0	12,243	10.6%	5.9%	7.1%	-85.1%	11.9%	49.8%	37.6%	-98.0%	18.0%	74.1%	54.8%	-95.7%
Slovak Republic	181	55	237	11	94,351	44.5%	33.6%	41.8%	113.1%	113.5%	79.0%	104.3%	844.6%	-5.1%	-68.2%	-35.2%	-39.0%
Macedonia FYR	175	396	570	--	9,820	16.7%	21.9%	20.2%	--	80.7%	89.4%	86.7%	--	70.3%	122.9%	103.6%	--
Bosnia and Herzegovina	99	521	620	3	16,857	10.9%	16.1%	15.2%	389.1%	10.2%	49.8%	41.6%	2246.2%	-6.1%	88.4%	62.2%	2426.6%

APPENDIX 4: CONNECTIVITY BY INDIVIDUAL AIRPORTS

Code	Airport	Direct connectivity	Indirect connectivity	Airport connectivity	Growth 2018 vs 2017			Growth 2018 vs 2013			Growth 2018 vs 2008		
					Direct	Indirect	Airport	Direct	Indirect	Airport	Direct	Indirect	Airport
FRA	Frankfurt	5,096	13,933	19,029	11.1%	2.9%	5.0%	9.8%	4.0%	5.5%	10.7%	19.1%	16.7%
AMS	Amsterdam	4,859	11,377	16,236	0.0%	-0.1%	-0.1%	16.2%	19.0%	18.1%	20.8%	18.3%	19.1%
LHR	London	4,669	20,685	25,354	-0.2%	2.5%	2.0%	-0.1%	25.0%	19.4%	-2.3%	42.3%	31.3%
CDG	Paris	4,611	15,047	19,659	2.5%	4.7%	4.2%	4.3%	15.2%	12.4%	-9.0%	27.6%	16.6%
IST	Istanbul	4,319	5,172	9,491	1.2%	7.1%	4.3%	17.2%	8.4%	12.2%	104.9%	65.1%	81.1%
MUC	Munich	4,117	9,519	13,636	5.5%	2.7%	3.5%	9.1%	18.5%	15.5%	-0.2%	40.5%	25.1%
MAD	Madrid	3,817	8,471	12,288	5.6%	6.4%	6.1%	22.7%	27.2%	25.7%	-14.3%	45.6%	19.6%
BCN	Barcelona	3,387	7,360	10,748	5.2%	7.1%	6.5%	21.6%	42.2%	35.0%	9.5%	39.2%	28.2%
FCO	Rome	3,207	8,101	11,308	3.4%	3.2%	3.3%	4.2%	22.2%	16.5%	-8.8%	37.6%	20.2%
SVO	Moscow	3,194	3,373	6,567	17.8%	27.4%	22.5%	50.8%	49.6%	50.2%	109.5%	63.5%	83.1%
LGW	London	2,948	1,741	4,689	-2.6%	14.8%	3.2%	15.6%	85.9%	34.5%	18.4%	-30.5%	-6.1%
CPH	Copenhagen	2,691	6,242	8,933	2.9%	4.1%	3.7%	8.9%	19.6%	16.1%	4.0%	40.9%	27.3%
OSL	Oslo	2,566	4,002	6,568	4.7%	9.4%	7.5%	8.9%	8.0%	8.4%	13.5%	37.1%	26.8%
ARN	Stockholm	2,534	5,727	8,262	0.1%	2.1%	1.5%	16.2%	21.7%	19.9%	11.3%	27.4%	22.0%
PMI	Palma De Mallorca	2,526	1,835	4,361	0.2%	20.7%	7.9%	34.2%	104.1%	56.8%	47.8%	172.9%	83.1%
ZRH	Zurich	2,521	7,965	10,486	3.5%	7.9%	6.8%	10.3%	17.5%	15.7%	10.7%	41.7%	32.8%
ORY	Paris	2,450	1,049	3,499	4.3%	-14.6%	-2.2%	2.3%	-1.3%	1.2%	5.9%	60.8%	18.0%
VIE	Vienna	2,421	5,780	8,201	5.5%	10.5%	8.9%	4.8%	34.7%	24.2%	-5.4%	38.0%	21.5%
DUB	Dublin	2,332	6,042	8,374	5.8%	1.1%	2.4%	41.0%	47.5%	45.6%	25.5%	79.9%	60.5%
ATH	Athens	2,207	4,272	6,479	16.7%	6.3%	9.6%	70.2%	45.1%	52.8%	26.6%	27.8%	27.3%
LIS	Lisbon	2,204	6,354	8,558	9.2%	26.6%	21.6%	51.3%	64.2%	60.7%	67.7%	86.4%	81.2%
DME	Moscow	2,187	2,130	4,317	12.4%	7.3%	9.8%	-2.1%	-13.1%	-7.9%	34.4%	18.1%	25.8%
BRU	Brussels	2,183	6,234	8,417	-0.4%	6.6%	4.7%	13.4%	13.9%	13.7%	-0.1%	30.3%	20.8%
MAN	Manchester	2,128	5,197	7,325	-0.3%	1.5%	1.0%	22.0%	17.5%	18.8%	20.6%	28.6%	26.2%
SAW	Istanbul	2,116	706	2,823	4.5%	32.4%	10.3%	64.1%	337.1%	94.5%	929.3%	1377.1%	1013.8%
DUS	Düsseldorf	2,079	6,031	8,110	-7.2%	10.4%	5.3%	-2.6%	13.3%	8.7%	-4.0%	34.0%	21.6%

Code	Airport	Direct connectivity	Indirect connectivity	Airport connectivity	Growth 2018 vs 2017			Growth 2018 vs 2013			Growth 2018 vs 2008		
					Direct	Indirect	Airport	Direct	Indirect	Airport	Direct	Indirect	Airport
HEL	Helsinki	1,894	3,651	5,545	11.9%	7.9%	9.2%	19.1%	21.4%	20.6%	6.0%	23.3%	16.8%
STN	London	1,857	367	2,224	11.5%	87.4%	19.4%	43.0%	123.2%	52.0%	8.2%	137.9%	19.0%
MXP	Milan	1,852	5,565	7,417	7.8%	4.7%	5.5%	22.0%	44.6%	38.2%	6.3%	31.5%	24.1%
NCE	Nice	1,850	3,244	5,095	1.0%	8.7%	5.7%	12.8%	10.5%	11.3%	4.1%	32.0%	20.3%
TXL	Berlin	1,730	5,944	7,675	-8.8%	10.4%	5.4%	-3.4%	32.4%	22.2%	12.3%	66.1%	49.9%
WAW	Warsaw	1,682	3,752	5,434	14.9%	10.4%	11.7%	38.7%	14.4%	21.0%	32.3%	42.2%	39.0%
LED	St Petersburg	1,521	3,066	4,586	21.0%	13.7%	16.1%	21.1%	50.8%	39.5%	81.0%	94.2%	89.6%
PRG	Prague	1,519	4,013	5,532	6.8%	13.8%	11.8%	30.0%	35.2%	33.8%	0.4%	42.4%	27.7%
HAM	Hamburg	1,484	5,758	7,242	-2.6%	15.2%	11.1%	9.6%	30.2%	25.4%	-5.6%	53.5%	36.0%
VKO	Moscow	1,431	352	1,783	--	--	--	--	--	--	--	--	--
AGP	Malaga	1,428	2,256	3,684	2.2%	5.2%	4.0%	36.3%	52.5%	45.8%	36.7%	77.5%	59.1%
GVA	Geneva	1,405	5,148	6,553	-2.0%	5.3%	3.6%	5.3%	13.6%	11.7%	16.4%	44.6%	37.5%
AYT	Antalya	1,403	790	2,194	44.8%	5.0%	27.4%	45.3%	19.3%	34.7%	226.9%	224.6%	226.1%
TLV	Tel-Aviv	1,298	5,009	6,307	15.7%	11.7%	12.5%	64.3%	55.1%	56.9%	119.3%	68.6%	77.1%
EDI	Edinburgh	1,263	3,064	4,327	1.1%	3.4%	2.7%	18.0%	41.8%	33.9%	14.7%	44.1%	34.1%
STR	Stuttgart	1,184	3,110	4,294	8.6%	7.2%	7.6%	15.7%	13.7%	14.2%	-8.9%	16.8%	8.4%
ESB	Ankara	1,159	1,136	2,295	22.9%	11.6%	17.0%	46.3%	11.5%	26.7%	169.4%	45.8%	89.8%
LYS	Lyon	1,136	2,341	3,477	3.9%	-1.6%	0.1%	-1.7%	0.5%	-0.2%	-7.1%	5.8%	1.2%
OTP	Bucharest	1,118	2,586	3,704	2.5%	11.7%	8.8%	40.3%	9.9%	17.6%	84.0%	24.0%	37.5%
BHX	Birmingham	1,117	2,719	3,836	-9.7%	-5.0%	-6.4%	17.4%	13.7%	14.7%	14.5%	30.6%	25.5%
CGN	Cologne	1,045	1,525	2,570	4.5%	27.4%	17.0%	23.5%	12.9%	17.0%	-1.6%	36.4%	17.9%
BUD	Budapest	1,039	3,136	4,175	12.0%	8.8%	9.6%	46.5%	39.6%	41.2%	2.0%	34.3%	24.5%
LPA	Gran Canaria	1,037	835	1,872	21.4%	23.1%	22.1%	61.9%	76.1%	67.9%	25.0%	25.0%	25.0%
ALC	Alicante	1,027	878	1,904	-1.3%	-6.9%	-4.0%	39.8%	75.7%	54.3%	31.1%	63.2%	44.2%
VCE	Venice	960	3,854	4,813	3.3%	4.4%	4.2%	20.2%	36.1%	32.6%	27.8%	66.6%	57.1%
LIN	Milan	957	2,269	3,227	-3.2%	1.5%	0.0%	3.6%	-11.4%	-7.5%	5.2%	18.0%	13.9%
GLA	Glasgow	927	1,772	2,699	-3.9%	1.4%	-0.5%	17.8%	23.4%	21.4%	7.7%	22.1%	16.7%
TLS	Toulouse	926	2,242	3,168	2.7%	13.5%	10.1%	13.2%	21.9%	19.2%	20.9%	24.8%	23.7%
OPO	Porto	913	2,245	3,158	12.5%	40.5%	31.1%	66.6%	133.9%	109.4%	83.9%	163.9%	134.4%
MRS	Marseille	910	2,080	2,991	5.2%	12.1%	9.9%	-1.0%	7.9%	5.0%	11.6%	42.3%	31.3%
IBZ	Ibiza	873	641	1,514	-0.3%	5.8%	2.2%	47.0%	108.3%	67.9%	80.2%	223.1%	121.7%
SXF	Berlin	869	492	1,361	4.0%	14.7%	7.6%	78.6%	96.2%	84.6%	55.7%	210.3%	89.9%

Code	Airport	Direct connectivity	Indirect connectivity	Airport connectivity	Growth 2018 vs 2017			Growth 2018 vs 2013			Growth 2018 vs 2008		
					Direct	Indirect	Airport	Direct	Indirect	Airport	Direct	Indirect	Airport
NAP	Naples	811	1,274	2,085	5.6%	10.8%	8.7%	59.9%	80.8%	72.0%	34.6%	96.1%	66.5%
LCY	London	810	1,105	1,915	1.4%	16.0%	9.3%	14.9%	21.5%	18.6%	-6.0%	-10.1%	-8.4%
RIX	Riga	799	1,338	2,137	14.6%	4.4%	8.0%	25.9%	56.4%	43.4%	55.4%	127.4%	93.9%
BGY	Milan	796	132	928	10.0%	18.0%	11.1%	30.6%	-8.6%	23.1%	65.0%	14.8%	55.3%
BGO	Bergen	776	990	1,766	-1.0%	6.3%	3.0%	-9.3%	-10.9%	-10.2%	-0.2%	8.4%	4.5%
ADB	Izmir	771	809	1,580	23.0%	0.0%	10.1%	39.7%	-5.2%	12.4%	131.5%	88.0%	107.0%
CTA	Catania	768	1,102	1,869	--	--	--	--	--	--	--	--	--
KBP	Kiev	748	1,520	2,267	4.1%	5.3%	4.9%	10.0%	-5.5%	-0.9%	5.9%	-1.0%	1.2%
BRS	Bristol	746	910	1,656	7.3%	-0.8%	2.7%	21.1%	66.8%	42.6%	24.9%	-2.5%	8.2%
KEF	Keflavik	728	1,396	2,124	9.3%	47.7%	31.8%	132.1%	429.4%	267.8%	269.8%	1711.8%	675.3%
FAO	Faro	714	796	1,510	-4.9%	20.5%	7.0%	43.2%	91.4%	65.1%	69.5%	177.9%	113.4%
GOT	Gothenburg	703	2,443	3,146	1.4%	7.1%	5.8%	25.0%	22.6%	23.1%	12.1%	42.4%	34.3%
HER	Heraklion	699	671	1,370	19.1%	25.9%	22.3%	68.2%	182.2%	109.7%	131.5%	413.9%	216.7%
BOD	Bordeaux	677	1,205	1,882	5.8%	22.3%	15.8%	38.3%	56.3%	49.3%	28.3%	10.2%	16.1%
LCA	Larnaca	674	1,334	2,007	29.4%	22.2%	24.5%	98.5%	73.1%	80.9%	73.6%	105.4%	93.5%
BLQ	Bologna	668	2,210	2,878	1.9%	8.1%	6.6%	14.9%	17.8%	17.1%	34.5%	32.2%	32.8%
BSL	Basel	664	1,853	2,517	5.0%	9.6%	8.4%	9.3%	13.3%	12.2%	29.6%	82.6%	64.8%
NTE	Nantes	657	842	1,499	7.2%	6.7%	6.9%	46.9%	37.5%	41.5%	82.9%	30.7%	49.4%
TFN	Tenerife	641	528	1,169	34.7%	27.2%	31.2%	53.7%	111.6%	75.4%	9.1%	40.9%	21.5%
MCM	Monaco	624	--	624	1.0%	--	--	66.8%	--	--	-14.4%	--	--
TRD	Trondheim	621	711	1,332	-1.1%	2.4%	0.7%	-11.5%	-1.5%	-6.4%	-2.0%	38.5%	16.1%
VLC	Valencia	613	1,600	2,213	12.6%	19.9%	17.8%	43.4%	92.5%	75.8%	-13.5%	63.1%	31.0%
SKG	Thessaloniki	595	780	1,375	12.2%	20.6%	16.8%	51.0%	44.5%	47.2%	30.9%	85.0%	56.9%
HAJ	Hanover	590	2,610	3,200	10.7%	12.1%	11.8%	12.2%	13.2%	13.0%	-10.2%	25.8%	17.1%
BEG	Belgrade	580	1,613	2,193	-0.6%	2.8%	1.9%	43.9%	32.7%	35.5%	61.2%	70.5%	67.9%
LUX	Luxembourg	559	1,970	2,529	9.8%	18.2%	16.2%	33.5%	36.3%	35.7%	37.1%	63.3%	56.7%
PMO	Palermo	551	672	1,223	17.6%	12.3%	14.6%	40.3%	42.8%	41.6%	16.7%	73.0%	42.1%
SOF	Sofia	529	1,607	2,136	5.3%	8.8%	7.9%	60.8%	45.4%	48.9%	34.6%	40.4%	38.9%
MLA	Malta	528	1,514	2,042	19.1%	12.1%	13.8%	53.6%	169.3%	125.4%	83.3%	329.6%	218.8%
ACE	Lanzarote	524	252	777	7.4%	11.7%	8.8%	51.9%	154.9%	74.9%	62.2%	87.4%	69.6%
BMA	Stockholm	523	215	738	3.4%	33.7%	10.7%	10.6%	151.4%	32.1%	47.9%	350.3%	83.9%
AER	Sochi	521	482	1,003	44.8%	24.5%	34.2%	--	--	--	--	--	--

Code	Airport	Direct connectivity	Indirect connectivity	Airport connectivity	Growth 2018 vs 2017			Growth 2018 vs 2013			Growth 2018 vs 2008		
					Direct	Indirect	Airport	Direct	Indirect	Airport	Direct	Indirect	Airport
TOS	Tromsøe	509	295	805	4.5%	23.9%	10.9%	12.5%	16.1%	13.8%	19.3%	32.8%	23.9%
CRL	Charleroi	507	86	593	3.9%	39.9%	8.0%	7.2%	430.8%	21.3%	172.2%	850.2%	203.7%
KRK	Krakow	502	1,495	1,997	11.5%	17.8%	16.1%	43.8%	56.8%	53.3%	52.8%	107.3%	90.3%
SVC	Stavanger	502	827	1,329	-5.0%	-6.6%	-6.0%	-20.0%	-27.0%	-24.5%	-8.8%	-1.7%	-4.5%
NCL	Newcastle	500	1,122	1,622	-3.5%	-8.9%	-7.3%	--	--	--	--	--	--
BIO	Bilbao	495	1,935	2,430	9.0%	8.7%	8.7%	30.5%	40.3%	38.2%	-6.2%	45.1%	30.5%
OVB	Novosibirsk	494	499	993	21.7%	71%	13.9%	64.4%	19.6%	38.4%	117.0%	139.8%	127.9%
TFS	Tenerife	485	364	849	-7.9%	12.3%	-0.2%	41.5%	75.6%	54.3%	71.9%	62.3%	67.7%
BOO	Bodo	462	183	645	0.8%	9.6%	3.1%	-2.9%	29.4%	4.5%	-7.0%	3.5%	-4.2%
SVX	Ekaterinburg	461	643	1,104	41.2%	26.4%	32.2%	17.5%	19.3%	18.5%	88.6%	96.9%	93.3%
MSQ	Minsk	460	954	1,414	5.9%	26.5%	19.0%	82.5%	64.1%	69.7%	246.3%	219.8%	227.9%
RHO	Rhodes	454	326	780	2.4%	7.9%	4.6%	49.5%	120.0%	72.7%	81.7%	146.2%	104.0%
NUE	Nuremberg	448	1,748	2,195	-0.1%	-0.4%	-0.4%	9.8%	-1.6%	0.6%	-5.3%	13.2%	8.9%
ABZ	Aberdeen	442	1,157	1,599	-8.9%	-18.6%	-16.1%	-20.2%	-23.4%	-22.5%	-25.9%	2.7%	-7.2%
SVQ	Sevilla	442	659	1,102	29.5%	49.2%	40.6%	44.5%	62.4%	54.7%	-5.0%	42.9%	18.9%
FUE	Fuerteventura	432	182	614	17.1%	20.6%	18.1%	74.7%	117.1%	85.5%	37.9%	50.4%	41.4%
EMA	East Midlands	429	49	478	-2.4%	-12.3%	-3.5%	-4.5%	-68.9%	-21.2%	0.5%	103.7%	6.0%
ZAG	Zagreb	427	2,048	2,475	8.1%	11.5%	10.9%	31.9%	77.4%	67.4%	26.2%	67.2%	58.4%
VNO	Vilnius	413	1,004	1,417	4.0%	10.3%	8.4%	57.9%	118.8%	96.7%	21.0%	56.2%	44.0%
TLL	Tallinn	404	1,426	1,830	17.6%	14.2%	14.9%	33.5%	64.3%	56.3%	24.0%	85.8%	67.3%
TRN	Turin	385	1,411	1,797	-3.2%	9.7%	6.6%	18.7%	9.6%	11.4%	-19.9%	4.5%	-1.9%
EIN	Eindhoven	378	41	419	3.1%	22.8%	4.8%	43.7%	101.8%	47.9%	212.0%	496.5%	227.4%
MAH	Menorca	373	277	650	5.2%	36.9%	16.7%	46.0%	137.2%	74.6%	57.0%	138.7%	83.8%
BRI	Bari	373	598	971	--	--	--	--	--	--	--	--	--
SOU	Southampton	366	442	808	-16.9%	20.0%	-0.1%	-0.8%	178.7%	53.2%	-23.7%	55.0%	5.6%
LPL	Liverpool	365	67	432	-1.0%	124.3%	8.4%	--	--	--	--	--	--
CFU	Kerkyra	355	225	580	25.7%	23.2%	24.7%	94.4%	245.2%	134.0%	184.4%	322.5%	225.7%
DLM	Mugla	349	290	640	31.7%	-1.9%	14.0%	24.4%	66.6%	40.5%	225.7%	400.4%	287.0%
TBS	Tbilisi	347	884	1,231	45.3%	25.5%	30.5%	100.3%	92.4%	94.5%	168.5%	226.6%	207.8%
BLL	Billund	347	1,493	1,840	-8.1%	4.4%	1.8%	16.4%	37.9%	33.2%	8.4%	72.1%	54.9%
CAG	Cagliari	345	517	863	-4.2%	37.3%	17.0%	4.6%	157.3%	62.4%	5.1%	127.7%	55.2%
SPU	Split	343	580	923	14.0%	24.4%	20.4%	78.8%	84.4%	82.3%	153.6%	183.2%	171.4%

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ADA	Adana	337	406	743	-8.2%	17.7%	4.3%	29.9%	26.2%	27.8%	185.0%	206.1%	196.1%
VRN	Verona	337	699	1,035	4.1%	13.6%	10.3%	34.2%	-22.4%	-10.0%	1.6%	-19.1%	-13.4%
OLB	Olbia	331	342	673	-3.3%	37.8%	14.0%	33.1%	307.5%	102.4%	45.9%	1206.4%	166.1%
CIA	Rome	324	67	391	2.2%	14.0%	4.0%	1.6%	139.7%	12.7%	-1.7%	33.8%	3.0%
FLR	Florence	318	1,857	2,175	-6.4%	1.3%	0.1%	9.7%	13.9%	13.2%	0.5%	33.2%	27.2%
BJV	Bodrum	314	278	592	24.6%	-10.1%	5.5%	18.5%	34.6%	25.6%	187.6%	249.2%	213.6%
DBV	Dubrovnik	311	724	1,034	12.7%	54.9%	39.3%	77.4%	101.1%	93.3%	172.7%	235.5%	213.8%
KIV	Chisinau	284	542	825	-6.2%	13.4%	5.8%	89.5%	21.6%	38.6%	144.3%	256.6%	207.9%
TZX	Trabzon	284	325	609	18.6%	11.0%	14.4%	66.3%	103.1%	84.1%	312.3%	429.8%	367.7%
ROV	Rostov	281	328	609	64.7%	33.5%	46.3%	--	--	--	--	--	--
LJU	Ljubljana	274	1,101	1,375	21.3%	16.6%	17.5%	37.6%	32.7%	33.7%	-11.7%	17.9%	10.5%
JTR	Santorini/Thira	273	303	577	31.6%	54.4%	42.7%	240.8%	184.5%	208.7%	263.3%	379.1%	316.2%
KUF	Samara	264	417	682	55.8%	41.1%	46.5%	43.4%	39.1%	40.7%	22.6%	52.6%	39.4%
KTW	Katowice	263	403	666	38.3%	55.8%	48.4%	61.4%	31.5%	41.8%	42.5%	35.7%	38.3%
WRO	Wroclaw	263	770	1,033	26.0%	77.1%	60.5%	35.5%	60.0%	52.9%	42.8%	99.7%	81.3%
KZN	Kazan	261	375	636	47.4%	20.1%	30.0%	45.6%	137.8%	88.8%	217.9%	464.3%	328.1%
JER	Jersey	260	95	355	2.9%	17.3%	6.4%	-25.6%	56.6%	-13.5%	-43.6%	49.7%	-32.4%
BOJ	Bourgas	260	113	373	4.9%	-8.1%	0.6%	88.7%	63.1%	80.1%	366.4%	162.9%	277.8%
BRE	Bremen	259	1,528	1,786	9.0%	23.5%	21.2%	-2.4%	8.3%	6.7%	-16.4%	18.8%	12.0%
PDL	Ponta Delgada	253	173	426	-1.8%	-2.2%	-1.9%	82.2%	182.9%	112.9%	85.4%	117.8%	97.3%
MMX	Malmo	253	146	399	2.1%	23.4%	9.0%	11.1%	75.7%	28.4%	32.0%	156.7%	60.7%
KGS	Kos	247	175	422	24.2%	41.0%	30.7%	56.1%	182.9%	91.7%	147.7%	219.7%	173.2%
LIL	Lille	231	50	282	-2.3%	-46.2%	-14.7%	13.0%	87.2%	21.6%	47.9%	-22.8%	27.1%
KGD	Kaliningrad	229	381	610	28.6%	25.4%	26.6%	52.4%	55.7%	54.4%	-14.4%	418.3%	78.8%
CHQ	Chania	229	244	474	9.7%	36.4%	22.0%	95.5%	141.1%	116.6%	139.9%	190.0%	163.4%
ORK	Cork	229	530	759	4.9%	8.2%	7.2%	10.7%	45.1%	32.7%	-22.0%	32.8%	9.6%
TRF	Sandefjord	227	217	443	--	--	--	--	--	--	--	--	--
FNC	Funchal	226	435	661	-0.5%	31.4%	18.4%	19.9%	88.5%	57.6%	17.6%	86.1%	55.2%
CLJ	Cluj	223	309	532	-0.5%	33.8%	16.9%	119.2%	109.7%	113.6%	114.2%	97.7%	104.3%
VVO	Vladivostok	222	361	583	36.2%	4.5%	14.7%	50.7%	36.3%	41.5%	92.8%	327.7%	192.1%
TIA	Tirana	215	604	820	10.6%	5.9%	7.1%	11.9%	49.8%	37.6%	18.0%	74.1%	54.8%
SXB	Strasbourg	203	295	498	-9.2%	-13.8%	-12.0%	-16.6%	-10.4%	-13.0%	-38.7%	-46.8%	-43.7%

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TSF	Treviso	200	21	221	3.6%	12.0%	4.3%	27.9%	234.2%	35.9%	56.4%	-30.7%	39.8%
JMK	Mikonos	199	311	510	27.7%	76.5%	53.6%	176.1%	258.1%	220.9%	211.6%	668.3%	388.6%
SPC	La Palma	196	85	281	44.0%	65.6%	49.9%	81.6%	600.8%	134.3%	28.2%	124.8%	47.4%
ZTH	Zakynthos Island	195	142	337	19.4%	9.1%	14.8%	149.9%	722.1%	253.4%	345.2%	909.5%	482.1%
SCQ	Santiago de Compostela	194	374	567	5.6%	37.2%	24.4%	32.0%	84.8%	62.6%	12.1%	40.9%	29.5%
PFO	Paphos	194	110	303	18.2%	56.2%	29.6%	24.1%	89.4%	41.7%	96.6%	85.6%	92.4%
VAR	Varna	185	135	320	26.1%	3.4%	15.4%	128.8%	93.2%	112.3%	116.7%	21.9%	63.3%
WMI	Warsaw	184	54	238	7.0%	1.9%	5.8%	--	--	--	--	--	--
RTM	Rotterdam	183	45	228	-4.6%	-59.4%	-24.7%	0.3%	-83.6%	-50.0%	39.4%	591.0%	65.4%
BDS	Brindisi	183	344	527	--	--	--	--	--	--	--	--	--
AJA	Ajaccio	183	45	228	3.7%	-52.7%	-16.1%	15.7%	25.0%	17.5%	66.3%	-20.6%	36.7%
BTS	Bratislava	181	55	237	44.5%	33.6%	41.8%	113.5%	79.0%	104.3%	-5.1%	-68.2%	-35.2%
GRO	Girona	181	38	219	7.7%	-37.1%	-4.0%	-31.0%	-37.3%	-32.1%	-55.0%	-30.6%	-52.1%
GOA	Genoa	179	811	990	--	--	--	--	--	--	--	--	--
MRV	Mineralnye Vody	173	218	392	24.4%	26.3%	25.5%	78.3%	4.8%	28.2%	98.5%	442.1%	206.9%
BIA	Bastia	169	74	243	10.7%	-28.9%	-5.3%	--	--	--	--	--	--
POZ	Poznan	169	584	752	38.4%	28.1%	30.2%	38.3%	84.3%	71.5%	4.4%	69.6%	48.7%
SKP	Skopje	163	394	557	18.7%	21.7%	20.8%	80.1%	89.0%	86.3%	74.9%	129.3%	110.2%
GZT	Gaziantep	160	261	422	21.6%	15.9%	18.0%	26.8%	80.8%	55.6%	234.5%	207.5%	217.2%
NYO	Stockholm	158	67	225	3.9%	16.4%	7.4%	--	--	--	--	--	--
SNN	Shannon	155	607	762	10.7%	-3.5%	-0.9%	13.6%	2.9%	4.9%	-34.6%	-0.3%	-9.9%
UME	Umeå	147	206	352	0.7%	0.4%	0.5%	4.9%	80.1%	38.8%	14.4%	229.5%	84.9%
TIV	Tivat	146	259	405	13.4%	30.2%	23.6%	44.9%	308.0%	146.8%	133.7%	1236.5%	395.4%
KRS	Kristiansand	145	456	601	8.4%	7.4%	7.6%	-16.3%	18.9%	7.9%	-13.5%	38.5%	21.0%
GRZ	Graz	144	995	1,139	10.8%	11.4%	11.3%	-1.5%	37.3%	30.8%	-26.3%	27.8%	17.0%
GOJ	Nizhny Novgorod	143	262	405	64.6%	17.1%	30.4%	37.5%	16.0%	22.8%	177.1%	209.3%	197.1%
IOM	Isle Of Man	142	76	218	-22.4%	-4.0%	-16.8%	-35.5%	-9.5%	-28.3%	-44.8%	132.8%	-24.7%
SZG	Salzburg	140	678	818	-15.3%	-2.4%	-4.9%	-9.4%	4.3%	1.7%	-13.8%	2.5%	-0.7%
AES	Aalesund	138	321	459	-4.0%	5.1%	2.2%	2.1%	-10.0%	-6.7%	29.9%	123.2%	83.6%
INV	Inverness	137	156	292	-5.7%	-54.1%	-39.6%	17.3%	82.0%	44.7%	-9.3%	290.6%	53.4%
LLA	Luleå	137	149	285	0.0%	11.6%	5.7%	7.5%	17.9%	12.7%	-1.8%	19.9%	8.4%
BES	Brest	135	241	376	0.5%	6.1%	4.0%	3.9%	-13.1%	-7.6%	5.8%	-2.9%	0.0%

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TGD	Podgorica	135	393	528	17.1%	16.0%	16.3%	32.2%	137.8%	97.4%	78.0%	533.7%	283.0%
ASR	Kayseri	135	265	399	8.3%	-3.4%	0.3%	12.4%	7.4%	9.1%	315.0%	255.0%	273.2%
RNS	Rennes	133	406	539	-4.0%	5.4%	2.9%	43.0%	25.6%	29.5%	7.9%	78.0%	53.4%
DIY	Diyarbakir	132	190	323	43.5%	11.6%	22.8%	30.2%	18.3%	22.9%	232.0%	605.0%	382.5%
PRN	Pristina	132	535	667	9.0%	1.2%	2.7%	--	--	--	--	--	--
ODS	Odessa	131	350	481	20.3%	8.9%	11.8%	19.7%	15.4%	16.5%	6.2%	58.8%	39.9%
CEK	Chelyabinsk	127	284	411	42.8%	3.1%	12.8%	26.9%	142.0%	88.9%	52.2%	187.6%	125.5%
BIQ	Biarritz	122	228	351	-5.5%	-18.1%	-14.1%	21.5%	383.2%	137.0%	1.5%	181.7%	73.9%
OVD	Asturias	121	313	434	-1.9%	12.3%	7.9%	58.2%	77.2%	71.4%	-28.5%	26.5%	4.2%
TSR	Timisoara	120	184	304	-6.7%	8.8%	2.1%	24.7%	-21.7%	-8.1%	-42.8%	-19.7%	-30.8%
HFT	Hammerfest	120	10	130	0.0%	-2.0%	-0.1%	-12.9%	440.7%	-7.2%	-4.5%	1529.3%	2.6%
ETH	Eilath	116	1	117	50.6%	-52.8%	48.7%	47.0%	-95.2%	25.1%	2.9%	-78.7%	0.6%
LEI	Almería	115	193	308	-1.4%	37.1%	19.6%	47.7%	88.0%	70.6%	-3.7%	-32.7%	-24.2%
FMO	Muenster	113	633	747	5.6%	27.2%	23.3%	22.4%	11.5%	13.0%	-43.7%	12.4%	-2.4%
VDS	Vadso	109	7	116	-0.1%	-10.1%	-0.7%	-9.9%	2231.4%	-4.4%	2.2%	--	--
REU	Reus	109	20	129	-1.1%	32.5%	3.0%	11.7%	62.8%	17.5%	86.7%	-7.3%	61.0%
IAS	Iasi	107	106	213	-6.9%	-0.3%	-3.7%	117.2%	27.0%	60.5%	236.1%	134.7%	176.6%
SZF	Samsun	105	135	240	3.5%	15.3%	9.9%	15.2%	-15.7%	-4.5%	269.3%	128.9%	174.6%
PUF	Pau	101	254	355	0.9%	-6.0%	-4.1%	6.0%	-7.7%	-4.2%	-5.9%	-27.0%	-22.0%
MJV	Murcia	100	37	136	4.3%	126.1%	22.0%	-12.1%	-46.3%	-25.0%	-42.7%	-77.4%	-59.5%
VGO	Vigo	99	301	401	7.0%	19.4%	16.1%	28.1%	14.4%	17.5%	-28.5%	-39.7%	-37.3%
SJJ	Sarajevo	99	521	620	10.9%	16.1%	15.2%	10.2%	49.8%	41.6%	-6.1%	88.4%	62.2%
PUY	Pula	98	115	214	11.2%	23.4%	17.5%	72.9%	170.8%	114.8%	214.2%	6559.1%	546.9%
LCG	A Coruna	98	360	458	-0.2%	8.4%	6.5%	8.9%	55.5%	42.4%	-15.5%	11.9%	4.6%
VBV	Visby	98	79	177	2.1%	-2.4%	0.0%	6.5%	72.9%	28.6%	25.7%	231.1%	74.0%
NQY	Newquay	97	78	175	27.1%	8.1%	17.9%	--	--	--	--	--	--
XRY	Jerez	96	234	329	6.7%	6.0%	6.2%	33.9%	55.8%	48.7%	-11.2%	-3.9%	-6.1%
GRX	Granada	95	282	377	18.9%	41.5%	35.0%	37.7%	43.4%	41.9%	-24.5%	18.1%	3.4%
EVE	Harstad	94	106	200	-10.5%	-4.1%	-7.2%	23.5%	-11.9%	1.7%	40.5%	-2.2%	14.0%
OUL	Oulunsalo	94	380	474	3.2%	16.6%	13.7%	-8.7%	33.1%	22.0%	-3.1%	11.3%	8.1%
FMM	Memmingen	92	7	99	39.5%	47.7%	40.0%	32.4%	-19.6%	26.2%	96.1%	172.4%	100.3%
EFL	Kefallinia	90	52	142	36.6%	28.0%	33.3%	100.3%	231.8%	134.6%	181.0%	141.5%	165.0%

Code	Airport	Direct connectivity	Indirect connectivity	Airport connectivity	Growth 2018 vs 2017			Growth 2018 vs 2013			Growth 2018 vs 2008		
					Direct	Indirect	Airport	Direct	Indirect	Airport	Direct	Indirect	Airport
ALF	Alta	89	59	148	-4.3%	-17.9%	-10.2%	-11.3%	-23.9%	-16.8%	-9.5%	23.5%	1.3%
VAN	Van	88	124	212	22.1%	31.7%	27.5%	40.6%	104.6%	72.1%	204.0%	186.1%	193.3%
SDR	Santander	88	167	255	-2.1%	-5.1%	-4.1%	-17.1%	28.6%	8.1%	-38.7%	-27.1%	-31.6%
VOG	Volgograd	88	159	247	49.1%	6.1%	18.2%	31.5%	39.3%	36.4%	103.5%	167.0%	140.3%
KKN	Kirkenes	88	45	132	0.0%	-14.5%	-5.4%	-10.8%	-10.5%	-10.7%	-25.4%	-8.7%	-20.5%
TRS	Trieste	85	273	358	-8.5%	1.8%	-0.9%	-27.2%	-7.7%	-13.2%	-40.9%	-39.4%	-39.7%
BUS	Batumi	84	79	163	39.4%	34.0%	36.7%	228.6%	38.5%	97.6%	618.2%	275.9%	398.9%
ERZ	Erzurum	84	96	180	25.4%	31.5%	28.6%	50.5%	54.1%	52.4%	148.2%	270.7%	201.3%
SDV	Tel-Aviv	84	--	84	47.4%	--	--	53.3%	--	--	2.8%	--	--
ZAD	Zadar	82	72	154	3.5%	34.6%	16.0%	15.1%	130.6%	50.2%	163.8%	4727.7%	371.9%
HTY	Hatay	82	134	216	5.5%	10.0%	8.2%	30.0%	-1.2%	8.7%	644.3%	385.6%	459.4%
KYA	Konya	81	151	232	-4.1%	-4.6%	-4.4%	27.1%	-18.7%	-7.0%	238.0%	454.8%	353.3%
TKU	Turku	77	252	329	4.1%	12.6%	10.5%	-4.3%	-3.8%	-3.9%	12.6%	-5.0%	-1.4%
SDL	Sundsvall	75	89	164	-2.6%	0.3%	-1.0%	--	--	--	--	--	--
OSD	Ostersund	75	119	194	-2.8%	-11.4%	-8.3%	52.7%	87.1%	72.1%	2.3%	235.5%	78.5%
TLN	Toulon	72	--	72	7.6%	--	--	28.4%	--	--	10.6%	--	--
INN	Innsbruck	71	592	663	5.8%	5.1%	5.2%	1.1%	6.2%	5.6%	-38.4%	8.7%	0.4%
BRN	Bern	71	--	71	-4.9%	--	--	-45.2%	--	--	153.1%	--	--
AGH	Angelholm	71	53	124	1.4%	-16.5%	-7.1%	--	--	--	--	--	--
KSC	Kosice	71	160	231	--	--	--	--	--	--	--	--	--
NOC	Knock	71	39	110	-3.0%	-9.9%	-5.6%	-0.4%	20.0%	6.0%	36.4%	58.2%	43.4%
LKN	Leknes	71	4	74	-5.4%	-45.5%	-8.8%	33.7%	45.9%	34.3%	46.8%	2893.2%	54.2%
KSU	Kristiansund	71	59	130	8.6%	14.9%	11.4%	2.5%	2.3%	2.4%	6.9%	5.7%	6.3%
CFE	Clermont-Ferrand	70	300	371	-9.6%	-1.6%	-3.2%	-14.4%	-16.7%	-16.3%	-64.8%	-11.5%	-31.3%
SVJ	Svolvaer	68	3	71	-6.9%	-51.8%	-10.4%	60.2%	-57.6%	43.4%	45.5%	419.1%	50.0%
GZP	Gazipasa	67	154	221	38.6%	28.0%	31.1%	209.3%	360.7%	300.8%	--	--	--
BRQ	Brno	66	61	128	5.4%	58.4%	25.6%	36.2%	299.8%	99.4%	87.4%	66.7%	76.9%
KUN	Kaunas	66	41	107	18.9%	165.7%	50.5%	8.6%	119.6%	34.5%	147.5%	335.4%	196.2%
MLN	Melilla	66	123	189	1.5%	15.3%	10.1%	-20.9%	134.5%	39.2%	1.1%	36.3%	21.5%
ANR	Antwerp	65	--	65	60.5%	--	--	77.2%	--	--	88.5%	--	--
SBZ	Sibiu	64	214	277	12.3%	20.5%	18.5%	63.6%	2.6%	12.2%	39.4%	148.7%	110.7%
EZS	Elazig	63	72	135	20.7%	17.7%	19.1%	5.5%	19.4%	12.5%	351.9%	864.7%	530.5%

Code	Airport	Direct connectivity	Indirect connectivity	Airport connectivity	Growth 2018 vs 2017			Growth 2018 vs 2013			Growth 2018 vs 2008		
					Direct	Indirect	Airport	Direct	Indirect	Airport	Direct	Indirect	Airport
HRK	Kharkiv	62	180	242	23.7%	26.6%	25.9%	39.3%	43.7%	42.5%	13.3%	103.6%	69.1%
SOG	Sogndal	62	2	64	4.7%	10193.8%	8.3%	1.9%	1.3%	1.9%	-0.6%	29.8%	0.2%
OSR	Ostrava	61	16	77	27.4%	-12.9%	16.0%	58.7%	61.7%	59.3%	45.1%	-78.4%	-34.4%
FDH	Friedrichshafen	61	344	404	-19.8%	6.4%	1.4%	-27.3%	17.4%	7.5%	-54.0%	55.0%	14.3%
SKN	Stokmarknes	61	5	66	-1.0%	-55.2%	-9.4%	-7.0%	162.4%	-2.2%	-1.3%	196.5%	4.0%
TMP	Tampere	60	253	313	4.9%	15.1%	13.0%	-25.1%	35.6%	17.4%	-46.6%	-34.7%	-37.4%
FRO	Floro	59	1	60	-13.1%	-89.1%	-18.5%	-23.1%	-53.2%	-23.6%	10.6%	--	--
HOR	Horta	59	33	91	0.0%	0.3%	0.1%	24.8%	25.6%	25.1%	-6.1%	34.1%	5.2%
LNZ	Linz	58	392	450	16.0%	19.0%	18.6%	-40.7%	-32.1%	-33.3%	-57.9%	-44.2%	-46.5%
HOV	Orsta	58	1	58	24.0%	-10.7%	23.3%	8.6%	82.2%	9.2%	22.0%	-11.5%	21.4%
EDO	Balikesir	58	54	112	38.1%	45.0%	41.4%	1050.7%	--	--	2776.7%	--	--
MLX	Malatya	56	85	142	14.4%	24.3%	20.2%	31.9%	-0.5%	10.3%	135.5%	460.6%	261.6%
JKH	Chios	55	61	116	26.1%	13.8%	19.4%	57.2%	78.7%	67.8%	30.5%	102.5%	60.4%
SMI	Samos	55	67	122	19.7%	30.9%	25.6%	30.2%	94.3%	58.8%	-12.3%	17.0%	1.6%
MOL	Molde	55	68	123	-21.2%	10.0%	-6.6%	-28.8%	-3.7%	-16.8%	-11.3%	68.6%	20.2%
HAU	Haugesund	55	80	135	10.0%	1.4%	4.7%	-32.1%	-29.1%	-30.3%	-30.4%	-22.2%	-25.7%
CFR	Caen	55	15	70	37.8%	-2.3%	26.6%	128.4%	140.1%	130.8%	138.7%	-37.1%	48.8%
VAA	Vaasa	54	229	283	0.0%	-1.0%	-0.8%	-31.7%	31.8%	11.9%	-33.4%	3.2%	-6.6%
MJT	Mytilene	54	57	111	3.8%	1.1%	2.4%	49.8%	74.5%	61.6%	-23.6%	47.7%	1.7%
JSI	Skiathos	53	53	106	-1.6%	116.4%	35.1%	159.5%	1210.6%	332.4%	324.8%	970.9%	507.5%
GNV	Sanliurfa	53	149	202	41.8%	34.5%	36.3%	61.8%	165.1%	127.0%	279.2%	1315.8%	724.1%
LRH	La Rochelle	52	14	67	5.5%	-3.2%	3.5%	-6.6%	65.9%	3.1%	1.3%	19.1%	4.7%
MEH	Mehamn	52	--	52	0.0%	--	--	-6.4%	--	--	-7.6%	--	--
PAS	Paros	52	88	140	26.8%	0.5%	8.9%	92.6%	368.8%	205.6%	188.9%	383.7%	286.6%
ANX	Andoya	52	7	59	0.0%	-48.4%	-10.3%	43.4%	-50.1%	16.5%	32.7%	48.1%	34.4%
KLR	Kalmar	51	50	101	-1.9%	11.6%	4.3%	--	--	--	--	--	--
TPS	Trapani	51	31	82	-51.3%	105.1%	-31.3%	-71.7%	-32.3%	-63.6%	-33.6%	79.2%	-12.5%
RNB	Ronneby	50	58	108	0.0%	-0.1%	-0.1%	19.0%	107.2%	54.2%	0.0%	237.4%	60.6%
TOF	Tomsk	50	210	260	-7.5%	4.3%	1.8%	40.2%	40.1%	40.1%	132.2%	1649.2%	677.7%
BAX	Barnaul	49	261	310	38.6%	28.2%	29.8%	101.5%	56.7%	62.4%	-1.2%	207.4%	130.1%
BJF	Batsfjord	49	--	49	0.0%	--	--	-9.6%	--	--	-4.0%	--	--
OER	Ornskoldsvik	48	39	87	124.7%	35.5%	73.9%	--	--	--	--	--	--

Code	Airport	Direct connectivity	Indirect connectivity	Airport connectivity	Growth 2018 vs 2017			Growth 2018 vs 2013			Growth 2018 vs 2008		
					Direct	Indirect	Airport	Direct	Indirect	Airport	Direct	Indirect	Airport
EAS	San Sebastian	48	182	230	2.9%	-1.8%	-0.8%	9.6%	47.4%	37.4%	-29.2%	-4.1%	-10.7%
PVK	Preveza/Lefkas	48	49	97	4.9%	11.5%	8.1%	138.8%	904.5%	289.2%	122.8%	3251.9%	323.0%
JKG	Jönköping	48	154	202	0.0%	15.8%	11.6%	--	--	--	--	--	--
SFT	Skellefteå	48	81	129	-4.0%	2.7%	0.1%	--	--	--	--	--	--
CLY	Calvi	48	23	71	4.4%	3.5%	4.1%	--	--	--	--	--	--
BOH	Bournemouth	48	2	50	-2.0%	32.7%	-0.8%	-20.1%	-29.5%	-20.6%	-40.1%	-32.1%	-39.7%
KOK	Kronoby	48	162	209	23.8%	18.4%	19.6%	49.0%	27.9%	32.1%	22.3%	-2.4%	2.3%
MQN	Mo i Rana	48	1	49	0.0%	-57.0%	-2.9%	-37.9%	200.4%	-36.8%	-39.9%	1.9%	-39.3%
PGF	Perpignan	48	23	70	0.2%	12.8%	4.0%	6.7%	-1.5%	3.9%	-2.0%	7.8%	1.0%
LIG	Limoges	46	10	56	-12.9%	-29.6%	-16.4%	-20.1%	-10.0%	-18.5%	-34.9%	-90.0%	-67.1%
MQM	Mardin	46	101	147	18.0%	11.0%	13.1%	60.3%	309.9%	175.0%	371.0%	691.2%	551.6%
KUT	Kutaisi	46	23	69	24.4%	20.9%	23.2%	85.0%	160.2%	104.9%	604.8%	1621.2%	779.8%
PLQ	Palanga	46	78	123	4.4%	-11.7%	-6.4%	117.2%	82.7%	94.1%	86.2%	52.6%	63.5%
KVA	Kavala	46	61	107	2.1%	17.7%	10.5%	76.0%	144.4%	109.7%	52.7%	125.1%	87.3%
GRQ	Groningen	45	77	122	56.3%	142.4%	101.7%	86.9%	5486.5%	381.8%	214.6%	--	--
AOK	Karpathos	45	37	82	4.6%	12.2%	8.0%	11.7%	118.0%	43.6%	5.4%	144.7%	42.3%
BNN	Bronnoysund	45	4	49	9.9%	73.5%	13.3%	-52.4%	118.9%	-49.1%	-45.2%	585.4%	-40.8%
HVG	Honningsvag	44	--	44	0.0%	--	--	-15.3%	--	--	-9.6%	--	--
JCU	Ceuta	44	--	44	--	--	--	--	--	--	--	--	--
VXO	Vaxjo	43	79	122	38.1%	361.2%	153.2%	--	--	--	--	--	--
ASF	Astrakhan	43	110	153	30.5%	6.3%	12.1%	4.7%	-6.1%	-3.3%	205.7%	27973.3%	962.0%
HTA	Chita	43	78	121	37.4%	19.0%	24.9%	8.3%	-10.3%	-4.5%	202.0%	1113.1%	487.8%
KUO	Kuopio	42	245	287	0.0%	-2.4%	-2.1%	-10.6%	13.6%	9.2%	-34.1%	-2.7%	-9.0%
VDE	Hierro	42	6	48	44.8%	316.1%	58.0%	23.5%	--	--	10.5%	--	--
KSD	Karlstad	42	113	154	-0.1%	15.9%	11.1%	--	--	--	--	--	--
SSJ	Sandnessjoen	42	6	48	27.0%	52.0%	29.7%	-48.4%	471.9%	-41.8%	-47.9%	1526.9%	-40.9%
VAW	Vardo	42	--	42	0.0%	--	--	-9.1%	--	--	0.5%	--	--
FDE	Forde	41	0	41	0.0%	-80.6%	-1.2%	-4.7%	-84.0%	-6.0%	2.5%	-39.1%	2.3%
OST	Ostend	40	1	41	1.1%	-34.1%	-0.2%	187.0%	-24.6%	168.9%	349.5%	--	--
BAL	Batman	39	109	149	49.2%	-1.5%	8.2%	36.9%	62.0%	54.5%	262.5%	1099.6%	644.9%
LUZ	Lublin	39	51	89	0.5%	11.7%	6.5%	205.5%	989.6%	415.3%	--	--	--
JNX	Naxos	38	60	98	52.0%	9.9%	23.2%	322.2%	8188.1%	904.4%	375.0%	601.7%	491.8%

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MLO	Milos	38	40	78	52.0%	246.2%	113.3%	216.7%	270.5%	242.1%	192.3%	565.4%	310.1%
DNZ	Çardak	38	95	133	-6.3%	-10.6%	-9.4%	52.3%	-1.0%	9.9%	174.3%	171.1%	172.0%
ZAZ	Zaragoza	38	8	46	36.4%	5.1%	29.5%	22.9%	337.6%	41.0%	-39.8%	-85.4%	-61.4%
KLX	Kalamata	38	57	95	-15.5%	-11.9%	-13.4%	100.3%	233.0%	163.7%	1250.3%	4594.3%	2267.4%
SDN	Sandane	38	--	38	1.1%	--	--	3.4%	--	--	0.4%	--	--
VAS	Sivas	38	68	105	2.7%	-1.4%	0.1%	44.5%	27.5%	33.1%	241.5%	134.9%	164.4%
AXD	Alexandroupolis	37	21	57	74.7%	-19.1%	23.0%	83.4%	40.1%	65.0%	16.7%	9.2%	13.8%
KLU	Klagenfurt	36	230	266	0.0%	-1.6%	-1.4%	-14.3%	4.1%	1.2%	-52.3%	-27.0%	-31.9%
KIR	Kerry	36	46	82	5.9%	-12.5%	-5.3%	-5.6%	63.6%	24.0%	-36.6%	67.9%	-2.3%
GIB	Gibraltar	36	77	113	-25.0%	5.0%	-6.8%	--	--	--	--	--	--
KSY	Kars	35	58	93	21.0%	15.0%	17.2%	5.8%	194.6%	76.9%	81.6%	301.5%	176.7%
MHQ	Maarianhamina	34	42	76	0.0%	25.0%	12.6%	24.5%	312.6%	104.0%	-1.1%	--	--
BCM	Bacau	33	24	58	0.0%	--	--	6.0%	--	--	99.4%	182.4%	127.7%
HAA	Hasvik	33	5	38	0.0%	-34.4%	-5.9%	57.4%	100.8%	61.6%	79.3%	--	--
BVG	Berlevag	33	--	33	0.0%	--	--	-3.4%	--	--	-15.1%	--	--
PNA	Pamplona	33	161	194	13.5%	40.1%	34.7%	18.7%	174.6%	124.6%	-56.0%	-24.4%	-32.6%
LDE	Lourdes	33	16	49	2.6%	-0.8%	1.5%	21.7%	45.5%	28.5%	56.0%	56.0%	56.0%
ERC	Erzincan	33	68	101	29.6%	62.7%	50.2%	81.9%	61.1%	67.3%	232.4%	401.5%	330.5%
RVK	Rorvik	32	--	32	9.5%	--	--	-18.2%	--	--	18.4%	--	--
ORB	Orebro	32	44	76	0.0%	17.6%	9.5%	--	--	--	--	--	--
MJF	Mosjoen	32	7	38	-5.9%	301.1%	8.2%	-59.2%	5724.0%	-50.8%	-53.7%	536.1%	-45.0%
RVN	Rovaniemi	32	231	263	-0.2%	11.8%	10.2%	-0.2%	42.0%	35.1%	-6.3%	24.9%	20.1%
JOE	Joensuu	31	116	147	0.0%	17.6%	13.4%	10.7%	49.2%	39.0%	0.0%	24.7%	18.5%
FLW	Flores	30	1	31	0.0%	-43.9%	-2.0%	102.0%	24.1%	98.9%	47.9%	415.5%	50.6%
OSY	Namsos	30	--	30	50.7%	--	--	-26.7%	--	--	-23.3%	--	--
CRA	Craiova	30	0	30	0.1%	0.0%	0.1%	492.7%	-99.3%	367.3%	228.8%	-99.5%	177.0%
OMR	Oradea	28	4	32	27.2%	-59.1%	2.9%	130.0%	-24.5%	87.1%	59.2%	8.1%	51.2%
RJK	Rijeka	28	29	58	3.7%	8.9%	6.3%	35.4%	240.6%	95.4%	117.9%	526.8%	226.5%
KEM	Kemi-Tornio	28	137	165	78.2%	122.4%	113.4%	69.0%	80.8%	78.6%	-11.8%	1537.5%	310.2%
AEI	Algeciras	28	--	28	--	--	--	--	--	--	--	--	--
HAD	Halmstad	28	25	52	16.3%	-22.6%	-5.9%	--	--	--	--	--	--
PIS	Poitiers	28	8	36	0.0%	-13.9%	-3.5%	-29.0%	50.5%	-19.4%	-8.7%	97.3%	3.8%

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MZH	Amasya	11	17	28	1.0%	-69.9%	-58.5%	12.1%	-60.9%	-47.6%	--	--	--
KSJ	Kasos	10	--	10	-9.0%	--	--	-47.2%	--	--	-58.7%	--	--
BJZ	Badajoz	10	37	47	0.0%	-23.7%	-19.7%	-60.6%	--	--	-61.0%	-41.0%	-46.8%
DNR	Dinard	10	6	16	-23.1%	-18.3%	-21.3%	-43.9%	14.0%	-30.0%	-58.3%	-33.0%	-51.1%
KFS	Kastamonu	9	49	58	41.5%	-3.8%	1.5%	--	--	--	--	--	--
PED	Pardubice	9	2	11	125.0%	--	--	--	--	--	--	--	--
SNR	Saint-Nazaire	9	--	9	0.0%	--	--	-1.5%	--	--	-1.5%	--	--
BWK	Brac	9	2	11	121.1%	--	--	--	--	--	--	--	--
VST	Stockholm	8	13	21	-67.3%	-88.0%	-84.3%	--	--	--	--	--	--
SKU	Skiros	8	3	11	33.3%	-24.2%	8.3%	166.7%	0.4%	77.3%	33.3%	-38.8%	-1.9%
CDT	Castellon	8	2	10	--	--	--	--	--	--	--	--	--
ISE	Süleyman Demirel-Isp	8	55	62	12.9%	6.5%	7.2%	150.6%	312.2%	282.5%	--	--	--
KTT	Kittilä	7	57	64	0.0%	18.7%	16.4%	0.0%	-16.0%	-14.5%	-7.4%	125.5%	95.0%
TEQ	Çorlu	7	--	7	0.0%	--	--	0.0%	--	--	--	--	--
PDV	Plovdiv	7	--	7	133.0%	--	--	41.4%	--	--	--	--	--
VOL	Volos	6	1	7	34.7%	253.8%	46.5%	-40.2%	-79.6%	-52.2%	218.5%	10.4%	155.8%
MBX	Maribor	6	--	6	--	--	--	--	--	--	--	--	--
RJL	Logroño	6	34	40	0.0%	6.0%	5.1%	0.0%	11.7%	9.7%	-65.9%	-27.6%	-38.1%
URO	Rouen	6	4	10	--	--	--	--	--	--	-74.4%	-26.8%	-65.7%
VIT	Vitoria	6	2	8	50.0%	150.5%	65.5%	--	--	--	-66.1%	-97.3%	-90.9%
KZS	Kastelorizo	6	0	6	0.0%	177.7%	2.2%	-14.3%	--	--	0.0%	--	--
JSY	Syros Island	6	--	6	-33.3%	--	--	0.0%	--	--	500.0%	--	--
PMF	Parma	6	--	6	-50.0%	--	--	-66.5%	--	--	-85.3%	--	--
JTY	Astypalaia	6	--	6	0.0%	--	--	-49.6%	--	--	-48.7%	--	--
DLE	Dole	6	--	6	-0.8%	--	--	-44.5%	--	--	--	--	--
KAO	Kuusamo	6	65	71	0.0%	1.0%	1.0%	0.0%	30.3%	27.2%	-4.1%	26.0%	22.9%
OMO	Mostar	5	2	7	-11.5%	--	--	--	--	--	-7.9%	--	--
LEN	Leon	5	14	19	--	--	--	0.0%	163.7%	85.1%	-89.3%	-69.2%	-79.3%
KZI	Kozani	4	--	4	-1.0%	--	--	--	--	--	32.5%	--	--
KLV	Karlovy Vary	4	6	10	0.0%	17.3%	9.7%	-55.6%	-86.4%	-81.1%	-42.1%	-74.6%	-67.2%
KCO	Kocaeli	4	--	4	32.4%	--	--	--	--	--	--	--	--
KSO	Kastoria	4	--	4	-1.8%	--	--	-27.0%	--	--	23.4%	--	--

Code	Airport	Direct connectivity	Indirect connectivity	Airport connectivity	Growth 2018 vs 2017			Growth 2018 vs 2013			Growth 2018 vs 2008		
					Direct	Indirect	Airport	Direct	Indirect	Airport	Direct	Indirect	Airport
RGS	Burgos	3	4	7	--	--	--	-40.0%	422.3%	22.4%	--	--	--
SIR	Sion	3	--	3	197.3%	--	--	--	--	--	--	--	--
GNB	Grenoble	3	2	5	--	--	--	--	--	--	-51.6%	15.6%	-35.8%
CHR	Chateroux	3	--	3	--	--	--	--	--	--	--	--	--
EPL	Vosges	3	--	3	--	--	--	181.9%	--	--	--	--	--
RKE	Copenhagen	2	--	2	--	--	--	129.3%	--	--	--	--	--
ILD	Lleida	2	1	3	-1.9%	83.7%	14.5%	-1.9%	11.6%	1.9%	--	--	--
AVN	Avignon	2	1	2	-61.2%	-71.2%	-64.4%	-33.9%	-37.6%	-34.9%	-93.8%	-95.5%	-94.3%
TGM	Targu Mures	1	--	1	--	--	--	-96.8%	--	--	-93.7%	--	--

APPENDIX 5: HUB CONNECTIVITY

Code	Airport	Hub connectivity	Growth 2018 vs 2017	Growth 2018 vs 2013	Growth 2018 vs 2008
FRA	Frankfurt	78,914	12.8%	12.4%	25.4%
AMS	Amsterdam	57,781	2.2%	26.3%	55.8%
CDG	Paris	48,594	2.9%	-4.5%	-1.9%
IST	Istanbul	35,525	4.8%	43.2%	492.8%
MUC	Munich	35,286	23.4%	24.7%	29.9%
LHR	London	33,643	3.7%	8.3%	14.1%
MAD	Madrid	20,860	16.0%	65.5%	4.9%
SVO	Moscow	20,372	13.2%	60.4%	273.5%
ZRH	Zurich	16,922	11.6%	14.5%	28.0%
VIE	Vienna	15,207	10.2%	20.7%	5.0%
FCO	Rome	13,830	10.9%	7.5%	13.9%
HEL	Helsinki	11,582	16.0%	70.5%	74.4%
BRU	Brussels	6,953	4.3%	31.2%	94.6%
LIS	Lisbon	6,627	14.2%	72.4%	110.9%
CPH	Copenhagen	5,643	4.4%	-6.8%	-27.5%
WAW	Warsaw	5,282	40.6%	187.4%	236.5%
KEF	Keflavik	4,614	41.1%	392.6%	1541.1%
DUB	Dublin	4,187	9.9%	185.1%	273.0%
OSL	Oslo	4,168	7.8%	7.3%	33.0%
BCN	Barcelona	4,104	33.0%	101.3%	14.6%
DME	Moscow	3,866	24.3%	57.7%	467.5%
ARN	Stockholm	3,458	3.5%	39.8%	48.6%
ATH	Athens	3,195	14.8%	140.6%	133.0%
DUS	Düsseldorf	2,990	-32.9%	-18.4%	12.8%
SAW	Istanbul	2,829	15.2%	104.6%	35120.1%
PRG	Prague	2,023	5.5%	61.2%	-37.0%
STN	London	1,577	15.4%	101.8%	41.3%

Code	Airport	Hub connectivity	Growth 2018 vs 2017	Growth 2018 vs 2013	Growth 2018 vs 2008
LGW	London	1,555	19.9%	46.4%	52.9%
MAN	Manchester	1,210	-12.4%	42.8%	39.2%
KBP	Kiev	1,194	2.4%	46.6%	337.5%
GVA	Geneva	1,173	-2.3%	0.6%	159.7%
ORY	Paris	1,144	-5.4%	-8.0%	7.4%
CGN	Cologne	1,058	137.3%	189.8%	162.4%
MLX	Milan	1,020	12.6%	26.4%	19.8%
STR	Stuttgart	940	107.5%	86.5%	67.8%
LED	St Petersburg	876	13.6%	2.2%	102.2%
HAM	Hamburg	795	48.5%	25.3%	26.2%
RIX	Riga	705	58.2%	142.9%	361.7%
TXL	Berlin	646	-80.7%	-74.4%	79.8%
VKO	Moscow	531	--	--	--
LIN	Milan	518	-13.2%	29.0%	98.8%
LYS	Lyon	448	4.1%	29.7%	-57.5%
BMA	Stockholm	435	-8.3%	96.2%	1155.1%
LCY	London	425	6.8%	31.4%	136.9%
VCE	Venice	369	0.9%	27.2%	118.6%
OTP	Bucharest	332	14.2%	50.1%	51.9%
LJU	Ljubljana	311	106.8%	229.8%	75.8%
BRS	Bristol	282	7.3%	52.5%	160.5%
BGY	Milan	271	15.9%	79.1%	981.3%
BEG	Belgrade	251	-24.3%	571.8%	500.7%
BSL	Basel	248	3.7%	83.2%	398.3%
OPO	Porto	216	44.6%	142.4%	22.0%
BHX	Birmingham	203	-11.8%	94.0%	175.9%
BUD	Budapest	197	78.2%	281.6%	-82.1%
PMI	Palma De Mallorca	173	-52.1%	-80.4%	-83.1%
EDI	Edinburgh	163	-9.3%	599.2%	1121.6%
NCE	Nice	160	-8.6%	31.9%	38.5%
TLV	Tel-Aviv	159	10.0%	57.2%	190.2%
MRS	Marseille	156	-4.0%	-15.6%	-50.2%
AYT	Antalya	143	493.9%	794.1%	1036.6%

Code	Airport	Hub connectivity	Growth 2018 vs 2017	Growth 2018 vs 2013	Growth 2018 vs 2008
BCO	Bergen	137	6.0%	-4.7%	9.1%
ADB	Izmir	131	1047.1%	730.9%	189.3%
BLQ	Bologna	128	11.8%	57.3%	383.5%
GOT	Gothenburg	115	20.9%	11.7%	-42.5%
HAJ	Hanover	112	71.5%	60.8%	42.9%
ZAG	Zagreb	108	86.3%	--	--
LPL	Liverpool	107	2.5%	--	--
KLV	Karlovy Vary	107	2.5%	--	--
GLA	Glasgow	102	-24.6%	277.0%	140.9%
AGP	Malaga	91	-13.4%	59.9%	111.2%
SVX	Ekaterinburg	86	73.8%	268.2%	394.9%
BOD	Bordeaux	85	5.6%	233.8%	-48.4%
SOU	Southampton	84	-44.2%	4.8%	-41.1%
LPA	Gran Canaria	81	117.2%	977.1%	1285.1%
LUX	Luxembourg	80	20.2%	114.1%	163.0%
TOS	Tromsoe	80	-40.5%	108.5%	173.4%
SVG	Stavanger	79	-0.4%	-42.0%	-6.6%
SKG	Thessaloniki	77	7.0%	64.1%	59.8%
MLA	Malta	75	135.8%	56.4%	149.3%
SXF	Berlin	74	14.8%	164.9%	81.2%
EIN	Eindhoven	73	9.1%	17.8%	588.5%
CRL	Charleroi	71	4.8%	19.4%	1084.6%
NTE	Nantes	69	109.4%	366.2%	1069.1%
TLS	Toulouse	68	21.1%	38.2%	153.5%
KIV	Chisinau	64	-7.4%	277.5%	879.0%
NUE	Nuremberg	60	14.4%	54.8%	-54.2%
NAP	Naples	60	13.1%	121.9%	202.1%
OVB	Novosibirsk	57	50.0%	1336.2%	819.3%
VLC	Valencia	56	16.7%	89.9%	-26.6%
LCA	Larnaca	55	45.9%	57.9%	-42.5%
BOO	Bodo	54	11.8%	105.1%	454.8%
TFN	Tenerife	51	147.3%	--	--
BIO	Bilbao	50	38.9%	13.9%	-34.4%

Code	Airport	Hub connectivity	Growth 2018 vs 2017	Growth 2018 vs 2013	Growth 2018 vs 2008
EMA	East Midlands	50	13.4%	14.4%	-42.8%
SOF	Sofia	47	9.2%	2.6%	-8.7%
PDL	Ponta Delgada	47	-3.6%	141.9%	452.8%
NCL	Newcastle	44	-21.8%	--	--
SVQ	Sevilla	44	154.3%	51.6%	-10.0%
IBZ	Ibiza	43	-12.6%	12.5%	762.0%
KTW	Katowice	40	68.4%	587.2%	545.7%
CIA	Rome	39	16.9%	1.8%	1135.4%
TRN	Turin	39	4.8%	129.9%	-22.0%
ALC	Alicante	39	22.0%	169.6%	154.2%
ESB	Ankara	39	108.4%	-35.1%	25.0%
FLR	Florence	37	14.0%	69.7%	164.9%
SNN	Shannon	36	-6.8%	47.3%	43.3%
TSF	Treviso	29	14.6%	238.7%	1540.8%
BLL	Billund	27	-1.7%	149.2%	-12.5%
BRE	Bremen	26	22.5%	13.3%	-18.2%
SZG	Salzburg	26	18.9%	81.6%	252.7%
MSQ	Minsk	23	15.9%	103.5%	7697.2%
WRO	Wroclaw	23	48.0%	81.2%	146.2%
TLL	Tallinn	20	35.4%	84.2%	186.1%
CTA	Catania	20	--	--	--
TRD	Trondheim	18	1.2%	-0.6%	-10.8%
SXB	Strasbourg	17	4.4%	11.0%	-73.6%
FAO	Faro	16	37.2%	249.7%	83.9%
AER	Sochi	15	7.8%	--	--
VVO	Vladivostok	14	-6.9%	174.4%	170.7%
LIL	Lille	13	152.8%	539.2%	87.8%
GRZ	Graz	12	71.1%	-22.1%	11.7%
HER	Heraklion	12	9.3%	228.3%	3021.0%
TBS	Tbilisi	11	133.7%	979.0%	291.9%
TRF	Sandefjord	11	--	--	--
ABZ	Aberdeen	11	-14.1%	-28.3%	-32.2%
BTS	Bratislava	11	113.1%	844.6%	-39.0%

Code	Airport	Hub connectivity	Growth 2018 vs 2017	Growth 2018 vs 2013	Growth 2018 vs 2008
SPU	Split	11	53.5%	62.2%	78.9%
ACE	Lanzarote	11	639.0%	634.2%	115.6%
WMI	Warsaw	10	10.8%	--	--
PMO	Palermo	10	-21.4%	165.7%	-35.0%
KRK	Krakow	9	151.0%	372.3%	-23.6%
GRO	Girona	9	-12.2%	-75.1%	-89.8%
ROV	Rostov	8	31.5%	--	--
BRN	Bern	8	-27.7%	-77.2%	--
POR	Pori	7	--	--	--
CLJ	Cluj	7	-33.1%	--	4426.7%
VRN	Verona	7	16.0%	205.7%	126.9%
FNC	Funchal	7	133.5%	11.1%	-58.7%
POZ	Poznan	6	797.7%	95.6%	83.0%
SCQ	Santiago de Compostela	6	-22.7%	58.4%	340.8%
VNO	Vilnius	6	7.4%	14.3%	-77.9%
LNZ	Linz	6	108.9%	-36.1%	-22.9%
DBV	Dubrovnik	6	137.5%	3403.8%	1930.1%
FMO	Muenster	6	144.7%	600.1%	-58.7%
TZX	Trabzon	6	725.6%	--	--
CAG	Cagliari	5	8.1%	-6.7%	197.8%
RTM	Rotterdam	5	-24.1%	--	--
INN	Innsbruck	5	69.6%	377.1%	151.2%
ORK	Cork	5	222.0%	10.0%	0.7%
MHQ	Maarianhamina	4	10.3%	30.7%	--
JSI	Skiathos	4	0.1%	--	--
RHO	Rhodes	4	-5.9%	73.9%	2348.3%
MMX	Malmo	4	16.8%	52.4%	-55.7%
KUF	Samara	4	227.9%	56.4%	-47.5%
TFS	Tenerife	4	-42.7%	-19.2%	-67.7%
CHQ	Chania	4	-5.0%	4.6%	--
SJJ	Sarajevo	3	389.1%	2246.2%	2426.6%
FUE	Fuerteventura	3	257.8%	84.5%	80.1%
NYO	Stockholm	3	-0.3%	--	--

Code	Airport	Hub connectivity	Growth 2018 vs 2017	Growth 2018 vs 2013	Growth 2018 vs 2008
OLB	Olbia	3	-20.3%	-42.8%	309.1%
IAS	Iasi	3	-22.8%	249.4%	--
FMM	Memmingen	3	803.4%	351.6%	-27.5%
VAR	Varna	2	239.4%	108.9%	1270.8%
BAX	Barnaul	2	--	--	--
MAH	Menorca	2	65.0%	53.3%	--
JMK	Mikonos	2	64.0%	--	133.8%
KZN	Kazan	2	208.3%	-24.0%	-2.8%
BRI	Bari	2	--	--	--
GRX	Granada	2	--	--	--
GOA	Genoa	2	--	--	--
TIV	Tivat	2	771.9%	-61.8%	129.1%
TGD	Podgorica	2	31.6%	-60.5%	421.2%
PRN	Pristina	1	60.2%	--	--
ADA	Adana	1	13.3%	77.6%	--
OSR	Ostrava	1	79.8%	232.0%	--
CRA	Craiova	1	--	--	--
CFU	Kerkyra	1	-28.5%	189.3%	-69.5%
TSR	Timisoara	1	--	-92.9%	-98.6%
ODS	Odessa	1	0.0%	-77.8%	-55.6%
OVD	Asturias	1	21.1%	--	--
JTR	Santorini/Thira	1	66.6%	-39.5%	--
KOK	Kronoby	1	--	--	--
NOC	Knock	1	0.0%	40.0%	--
KVA	Kavala	1	117.1%	--	--
PFO	Paphos	1	37.9%	1130.1%	-70.5%
FDH	Friedrichshafen	1	-15.1%	--	--
MRV	Mineralnye Vody	1	--	-66.1%	33.1%
PGF	Perpignan	1	--	--	--
LCG	A Coruna	1	123.3%	105.1%	--
BRQ	Brno	1	8.9%	67.9%	--
FNI	Nimes	1	266.5%	--	--
OST	Ostend	1	-47.0%	194.0%	--

Code	Airport	Hub connectivity	Growth 2018 vs 2017	Growth 2018 vs 2013	Growth 2018 vs 2008
VXO	Vaxjo	1	--	--	--
BJV	Bodrum	1	326.5%	-67.4%	11.3%
SDR	Santander	1	-69.8%	--	--
CEK	Chelyabinsk	1	16.5%	--	--
RNS	Rennes	1	69.7%	-15.3%	--
LCJ	Lodz	0	--	--	--
GZT	Gaziantep	0	-42.7%	--	--
TPS	Trapani	0	-14.3%	-88.3%	--
ZAD	Zadar	0	--	--	--
BOH	Bournemouth	0	-8.5%	-77.6%	-52.2%
LUZ	Lublin	0	--	--	--
HRK	Kharkiv	0	--	13.7%	--
UME	Umeå	0	-84.6%	-94.8%	--
BIA	Bastia	0	--	--	--
PUY	Pula	0	--	-76.7%	-82.4%
KUN	Kaunas	0	-60.7%	-88.2%	--
SZF	Samsun	0	--	--	--
HOR	Horta	0	0.0%	-10.4%	240.1%
GOJ	Nizhniy Novgorod	0	--	-32.7%	--
HTY	Hatay	0	--	--	--
TIA	Tirana	0	-85.1%	-98.0%	-95.7%
KYA	Konya	0	-82.2%	-74.4%	--
KUT	Kutaisi	0	--	-89.8%	--
HTA	Chita	0	-70.4%	--	--
INV	Inverness	0	--	--	--
BDS	Brindisi	0	--	--	--
DLM	Mugla	0	--	-98.8%	-99.3%
KIR	Kerry	0	-89.8%	-81.2%	--
JER	Jersey	0	-97.3%	-95.8%	-91.6%
KGD	Kaliningrad	0	--	-99.4%	-100.0%
ANR	Antwerp	0	-70.2%	--	--
MCM	Monaco	0	--	--	--
BOJ	Bourgas	0	--	--	--

Code	Airport	Hub connectivity	Growth 2018 vs 2017	Growth 2018 vs 2013	Growth 2018 vs 2008
KGS	Kos	0	--	--	--
SPC	La Palma	0	--	--	--
ZTH	Zakynthos Island	0	--	--	--
AJA	Ajaccio	0	--	--	--
SKP	Skopje	0	--	--	--
KRS	Kristiansand	0	--	--	--
IOM	Isle Of Man	0	--	--	--
AES	Aalesund	0	--	--	--
LLA	Luleå	0	--	--	--
BES	Brest	0	--	--	--
ASR	Kayseri	0	--	--	--
DIY	Diyarbakir	0	--	--	--
BIQ	Biarritz	0	--	--	--
HFT	Hammerfest	0	--	--	--
ETH	Eilath	0	--	--	--
LEI	Almería	0	--	--	--
VDS	Vadso	0	--	--	--
REU	Reus	0	--	--	--
PUF	Pau	0	--	--	--
MJV	Murcia	0	--	--	--
VGO	Vigo	0	--	--	--
VBY	Visby	0	--	--	--
NQY	Newquay	0	--	--	--
XRY	Jerez	0	--	--	--
EVE	Harstad	0	--	--	--
OUL	Oulunsalo	0	--	--	--
EFL	Kefallinia	0	--	--	--
ALF	Alta	0	--	--	--
VAN	Van	0	--	--	--
VOG	Volgograd	0	--	--	--
KKN	Kirkenes	0	--	--	--
TRS	Trieste	0	--	--	--
BUS	Batumi	0	--	--	--

Code	Airport	Hub connectivity	Growth 2018 vs 2017	Growth 2018 vs 2013	Growth 2018 vs 2008
ERZ	Erzurum	0	--	--	--
SDV	Tel-Aviv	0	--	--	--
TKU	Turku	0	--	--	--
SDL	Sundsvall	0	--	--	--
OSD	Ostersund	0	--	--	--
TLN	Toulon	0	--	--	--
AGH	Angelholm	0	--	--	--
KSC	Kosice	0	--	--	--
LKN	Leknes	0	--	--	--
KSU	Kristiansund	0	--	--	--
CFE	Clermont-Ferrand	0	--	--	--
SVJ	Svolvaer	0	--	--	--
GZP	Gazipasa	0	--	--	--
MLN	Melilla	0	--	--	--
SBZ	Sibiu	0	--	--	--
EZS	Elazig	0	--	--	--
SOG	Sogndal	0	--	--	--
SKN	Stokmarknes	0	--	--	--
TMP	Tampere	0	--	--	--
FRO	Floro	0	--	--	--
HOV	Orsta	0	--	--	--
EDO	Balikesir	0	--	--	--
MLX	Malatya	0	--	--	--
JKH	Chios	0	--	--	--
SMI	Samos	0	--	--	--
MOL	Molde	0	--	--	--
HAU	Haugesund	0	--	--	--
CFR	Caen	0	--	--	--
VAA	Vaasa	0	--	--	--
MJT	Mytilene	0	--	--	--
GNV	Sanliurfa	0	--	--	--
LRH	La Rochelle	0	--	--	--
MEH	Mehamn	0	--	--	--

Code	Airport	Hub connectivity	Growth 2018 vs 2017	Growth 2018 vs 2013	Growth 2018 vs 2008
PAS	Paros	0	--	--	--
ANX	Andoya	0	--	--	--
KLR	Kalmar	0	--	--	--
RNB	Ronneby	0	--	--	--
TOF	Tomsk	0	--	--	--
BJF	Batsfjord	0	--	--	--
OER	Ornskoldsvik	0	--	--	--
EAS	San Sebastian	0	--	--	--
PVK	Preveza/Lefkas	0	--	--	--
JKG	Jönköping	0	--	--	--
SFT	Skellefteå	0	--	--	--
CLY	Calvi	0	--	--	--
MQN	Mo i Rana	0	--	--	--
LIG	Limoges	0	--	--	--
MQM	Mardin	0	--	--	--
PLQ	Palanga	0	--	--	--
GRQ	Groningen	0	--	--	--
AOK	Karpathos	0	--	--	--
BNN	Bronnoysund	0	--	--	--
HVG	Honningsvag	0	--	--	--
JCU	Ceuta	0	--	--	--
ASF	Astrakhan	0	--	--	--
KUO	Kuopio	0	--	--	--
VDE	Hierro	0	--	--	--
KSD	Karlstad	0	--	--	--
SSJ	Sandnessjoen	0	--	--	--
VAW	Vardo	0	--	--	--
FDE	Forde	0	--	--	--
BAL	Batman	0	--	--	--
JNX	Naxos	0	--	--	--
MLO	Milos	0	--	--	--
DNZ	Çardak	0	--	--	--
ZAZ	Zaragoza	0	--	--	--

Code	Airport	Hub connectivity	Growth 2018 vs 2017	Growth 2018 vs 2013	Growth 2018 vs 2008
KLX	Kalamata	0	--	--	--
SDN	Sandane	0	--	--	--
VAS	Sivas	0	--	--	--
AXD	Alexandroupolis	0	--	--	--
KLU	Klagenfurt	0	--	--	--
GIB	Gibraltar	0	--	--	--
KSY	Kars	0	--	--	--
BCM	Bacau	0	--	--	--
HAA	Hasvik	0	--	--	--
BVG	Berlevag	0	--	--	--
PNA	Pamplona	0	--	--	--
LDE	Lourdes	0	--	--	--
ERC	Erzincan	0	--	--	--
RVK	Rorvik	0	--	--	--
ORB	Orebro	0	--	--	--
MJF	Mosjoen	0	--	--	--
RVN	Rovaniemi	0	--	--	--
JOE	Joensuu	0	--	--	--
FLW	Flores	0	--	--	--
OSY	Namsos	0	--	--	--
OMR	Oradea	0	--	--	--
RJK	Rijeka	0	--	--	--
KEM	Kemi-Tornio	0	--	--	--
AEI	Algeciras	0	--	--	--
HAD	Halmstad	0	--	--	--
PIS	Poitiers	0	--	--	--
MSR	Mus	0	--	--	--
SOJ	Sorkjosen	0	--	--	--
KAJ	Kajaani	0	--	--	--
NKT	Sirnak	0	--	--	--
KCM	Kahramanmaras	0	--	--	--
KRN	Kiruna	0	--	--	--
BLE	Borlänge	0	--	--	--

Code	Airport	Hub connectivity	Growth 2018 vs 2017	Growth 2018 vs 2013	Growth 2018 vs 2008
LKL	Lakselv	0	--	--	--
NAV	Neveshir	0	--	--	--
BDU	Bardufoss	0	--	--	--
LYC	Lycksele	0	--	--	--
UIP	Quimper	0	--	--	--
THN	Trollhättan	0	--	--	--
INI	Nis	0	--	--	--
ADF	Adiyaman	0	--	--	--
JYV	Tikkakoski	0	--	--	--
GEV	Gällivare	0	--	--	--
HFS	Hagfors	0	--	--	--
SVL	Savonlinna	0	--	--	--
AJR	Arvidsjaur	0	--	--	--
LYR	Longyearbyen	0	--	--	--
JIK	Ikaria	0	--	--	--
LPI	Linköping	0	--	--	--
TYF	Torsby	0	--	--	--
LXS	Limnos	0	--	--	--
CND	Constanta	0	--	--	--
IGD	Igdir	0	--	--	--
AJI	Agri	0	--	--	--
VHM	Vilhelmina	0	--	--	--
OSI	Osijek	0	--	--	--
FOG	Foggia	0	--	--	--
KIT	Kithira	0	--	--	--
KLF	Kaluga	0	--	--	--
IOA	Ioannina	0	--	--	--
SMA	Santa Maria	0	--	--	--
NAL	Nalchik	0	--	--	--
RET	Rost	0	--	--	--
NOP	Sinop	0	--	--	--
YEI	Yenisehir	0	--	--	--
JSH	Sitia	0	--	--	--

Code	Airport	Hub connectivity	Growth 2018 vs 2017	Growth 2018 vs 2013	Growth 2018 vs 2008
BGG	Bingöl	0	--	--	--
LGG	Liege	0	--	--	--
GMZ	La Gomera	0	--	--	--
CKZ	Çanakkale	0	--	--	--
YKO	Yüksekova	0	--	--	--
IVL	Ivalo	0	--	--	--
VLL	Valladolid	0	--	--	--
TUF	Tours	0	--	--	--
GPA	Araxos/Patras	0	--	--	--
HMV	Hemavan	0	--	--	--
NRK	Norrköping	0	--	--	--
PXO	Porto Santo	0	--	--	--
RRS	Roeros	0	--	--	--
VRY	Vaeroy	0	--	--	--
LRS	Leros	0	--	--	--
EVG	Sveg	0	--	--	--
KID	Kristianstad	0	--	--	--
OHD	Ohrid	0	--	--	--
SUJ	Satu Mare	0	--	--	--
KRF	Kramfors	0	--	--	--
PJA	Pajala	0	--	--	--
MZH	Amasya	0	--	--	--
KSJ	Kasos	0	--	--	--
BJZ	Badajoz	0	--	--	--
DNR	Dinard	0	--	--	--
KFS	Kastamonu	0	--	--	--
PED	Pardubice	0	--	--	--
SNR	Saint-Nazaire	0	--	--	--
BWK	Brac	0	--	--	--
VST	Stockholm	0	--	--	--
SKU	Skiros	0	--	--	--
CDT	Castellon	0	--	--	--
ISE	Süleyman Demirel-Isp	0	--	--	--

Code	Airport	Hub connectivity	Growth 2018 vs 2017	Growth 2018 vs 2013	Growth 2018 vs 2008
KTT	Kittilä	0	--	--	--
TEQ	Çorlu	0	--	--	--
PDV	Plovdiv	0	--	--	--
VOL	Volos	0	--	--	--
MBX	Maribor	0	--	--	--
RJL	Logroño	0	--	--	--
URO	Rouen	0	--	--	--
VIT	Vitoria	0	--	--	--
KZS	Kastelorizo	0	--	--	--
JSY	Syros Island	0	--	--	--
PMF	Parma	0	--	--	--
JTY	Astypalaia	0	--	--	--
DLE	Dole	0	--	--	--
KAO	Kuusamo	0	--	--	--
OMO	Mostar	0	--	--	--
LEN	Leon	0	--	--	--
KZI	Kozani	0	--	--	--
KCO	Kocaeli	0	--	--	--
KSO	Kastoria	0	--	--	--
RGS	Burgos	0	--	--	--
SIR	Sion	0	--	--	--
GNB	Grenoble	0	--	--	--
CHR	Chateroux	0	--	--	--
EPL	Vosges	0	--	--	--
RKE	Copenhagen	0	--	--	--
ILD	Lleida	0	--	--	--
AVN	Avignon	0	--	--	--
TGM	Targu Mures	0	--	--	--

Want to know more about YOUR airport's connectivity performance?
Additional appendices detailing individual airport data on air connectivity are available to download.
Simply scan the QR code below:



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For the fifth year running, ACI EUROPE issues its annual Airport Industry Connectivity Report – a comprehensive industry-wide snapshot of airport connectivity. This year's report lays out the evolution of direct, indirect and total airport connectivity between 2008 and 2018, enriched by analysis based on SEO's NetScan connectivity methodology.



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EVERY FLIGHT BEGINS AT THE AIRPORT.

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