Network Manager
nominated by
the European Commission

EUROCONTROL

Monthly Network Operations Report

Analysis – July 2016

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- **Traffic and Delay Comparisons**

All traffic and delay comparisons are between report month and equivalent month of previous year, unless otherwise stated.

- **NM Area**

All figures presented in this report are for the geographical area that is within Network Manager's responsibility (NM area).

- **Regulation Reason Groupings**

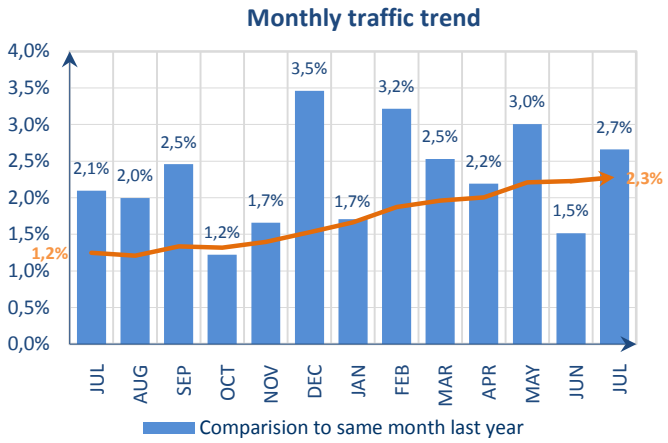
The table below shows the colour coding used in the report charts.

	EN-ROUTE CAPACITY (ATC)		AIRPORT CAPACITY (ATC)
	EN-ROUTE STAFFING (ATC)		AIRPORT STAFFING (ATC)
	EN-ROUTE DISRUPTIONS (ATC)		AIRPORT DISRUPTIONS (ATC)
	EN-ROUTE CAPACITY		AIRPORT CAPACITY
	EN-ROUTE DISRUPTIONS		AIRPORT DISRUPTIONS
	EN-ROUTE EVENTS		AIRPORT EVENTS
	EN-ROUTE WEATHER		AIRPORT WEATHER

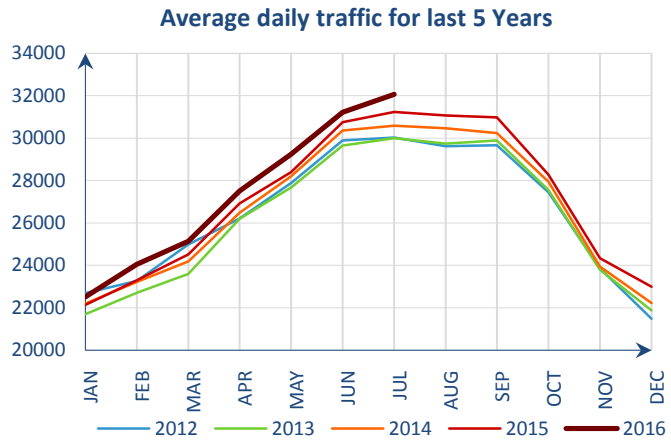
- **Reporting Assumptions and Descriptions**

For further information on the NM Area and the regulation reason groupings, go to the Reporting Assumptions and Descriptions document available on the EUROCONTROL website at **http://www.eurocontrol.int/articles/network-operations-monitoring-and-reporting**.

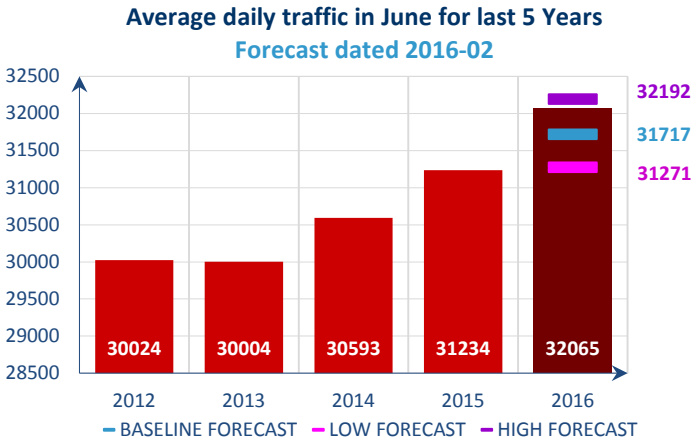
1. TOTAL TRAFFIC



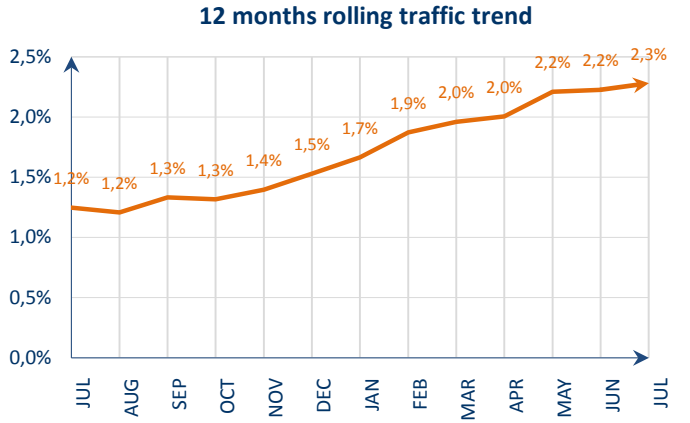
Traffic increased by 2.7 % in July 2016[i].



Average daily traffic in July 2016 was the highest ever for the month of July.



The traffic increase of 2.7% for July was close to the high forecast updated in February 2016.



This graph shows the variation in average daily traffic for the last 12-month period relative to previous 12-months. The average daily traffic from Aug 2015 to July 2016 was 2.3% higher than the average from Aug 2014 to July 2015. The trend shows a continuous recovery in traffic.

A sustained growth of European flights led to a 2.7% increase in total traffic in July.

Spain and UK were the top contributors to growth of local traffic[ii] in Europe adding each 343 and 324 flights per day respectively due to a dynamic international departure/arrival flow. Italy was third and added 188 flights per day and was followed by France (126 flts/day), Greece (118 flts/day), Portugal (106 flts/day) and the Netherlands (96 flts/day). Canary Islands (91 flts/day), Bulgaria (66 flts/day), Cyprus (58 flts/day), Croatia (54 flts/day) and Romania (52 flts/day) somewhat also benefited from the downturn in summer destination traffic to Turkey and showed a significant increase in their local traffic. Ireland contributed to 62 extra daily flights. In all twelve states contributed to more than 50 additional flights to the network in July.

At the other end of the scale, Turkey continued to see a decline in its local traffic and saw 310 fewer daily flights resulting from terrorist attacks and security concerns affecting the tourism industry, with flights shifting mostly to Spain. Charter flights to/from Turkey declined 53% in July. Norway had 68 fewer daily flights due to a weak domestic flow.

The top three extra-European partners in average daily flights on flows in both directions were the United States (1,126 flights, up 6.1%), the Russian Federation (858 flights, down 21.3%) and Israel (355 flights, up 7.3%). Flows between Morocco and Europe showed signs of recovery with 340 flights per day, an increase of 2.8% on July last year. Traffic flows between Europe and Tunisia improved and went from an average decrease of 25% since January to a decrease of 9% and 145 flights per day in both directions.

For more information on EUROCONTROL Forecasts, go to http://www.eurocontrol.int/statfor/sid.

Seven of the top ten airports had positive traffic growth. Overall, the largest traffic increases in July 2016 were at Birmingham, Malaga, Palma de Mallorca, Venice, Ibiza, Manchester, Lisbon, Athens and Bucharest airports. The largest traffic decreases were at Antalya, Stuttgart, Helsinki, Frankfurt and Brussels airports. The increase at Birmingham airport is explained by a high demand on charter destinations and the opening of new direct routes to the Middle East and the Caribbean. The decrease of traffic at Antalya airport is directly linked to a drop of holidaymakers in Turkey due to recent terrorist attacks and the ongoing political situation.

Seven of the top ten aircraft operators had more traffic compared to July 2015. The operators with the highest traffic growth were Olympic, Volotea, Qatar, LOT/Polish airlines, Transavia, Jet2, Emirates, Ukraine International and Wizz Air airlines. Germanwings, Norwegian Air Shuttle, Aegean and Air France recorded the highest traffic decrease. The decrease of Air France is mainly due to the strike action started on 27 July. The traffic variation of Germanwings is associated with a decline in flights to Turkey.

The traffic variation of Olympic and Aegean is due to Aegean flights operated with Olympic callsign. Volotea and LOT/Polish airline increases of traffic are due to the opening of new routes inside Europe. Ryanair's increase is due to an increase in fleet size, which is due to continue throughout 2016, although it slowed down during summer schedule. The traffic variation of Norwegian Air Shuttle and Norwegian Air International is due to the transfer of flights between the aircraft operators.

N°	ADEP	ADEP NAME	201607	%
1	EHAM	AMSTERDAM/SCHIPHOL	748	6,6%
2	LFPG	PARIS CH DE GAULLE	707	-1,0%
3	EDDF	FRANKFURT MAIN	685	-2,8%
4	EGLL	LONDON/HEATHROW	674	-0,3%
5	LTBA	ISTANBUL-ATATURK	664	0,3%
6	EDDM	MUENCHEN	572	3,8%
7	LEMD	ADOLFO SUAREZ MADRID-BARAJA	557	1,9%
8	LEBL	BARCELONA/EL PRAT	499	5,0%
9	LIRF	ROMA/FIUMICINO	494	2,3%
10	EGKK	LONDON/GATWICK	449	3,5%
11	LEPA	PALMA DE MALLORCA	444	12,5%
12	LSZH	ZURICH	397	2,4%
13	EKCH	KOBENHAVN/KASTRUP	372	4,5%
14	LOWW	WIEN SCHWECHAT	359	-1,1%
15	LFPO	PARIS ORLY	355	0,9%
16	EBBR	BRUSSELS NATIONAL	344	-2,8%
17	LTFJ	ISTANBUL/SABIHA GOKCEN	338	0,1%
18	EIDW	DUBLIN	335	8,4%
19	LGAV	ATHINAI/ELEFTHERIOS VENIZELOS	332	10,2%
20	EDDL	DUESSELDORF	328	4,0%
21	ENGM	OSLO/GARDERMOEN	316	0,2%
22	EGCC	MANCHESTER	311	11,0%
23	ESSA	STOCKHOLM-ARLANDA	294	6,4%
24	LPPT	LISBOA	287	10,3%
25	LFMN	NICE-COTE D'AZUR	270	2,4%
26	EGSS	LONDON/STANSTED	266	7,0%
27	EDDT	BERLIN-TEGEL	263	-0,3%
28	LTAI	ANTALYA	262	-32,5%
29	LSGG	GENEVA	261	2,0%
30	LIMC	MILANO MALPENSA	255	2,4%
31	EPWA	CHOPINA W WARSZAWIE	232	9,5%
32	LEMG	MALAGA/COSTA DEL SOL	225	12,9%
33	EDDH	HAMBURG	222	0,9%
34	EFHK	HELSINKI-VANTAA	213	-4,3%
35	LKPR	PRAHA RUZYNE	212	5,4%
36	EGGW	LONDON/LUTON	208	9,6%
37	EDDK	KOELN-BONN	202	6,9%
38	LLBG	TEL AVIV/BEN GURION	201	7,7%
39	LEIB	IBIZA	198	11,4%
40	EGPH	EDINBURGH	190	6,0%
41	LIML	MILANO LINATE	180	0,7%
42	EDDS	STUTTGART	178	-5,2%
43	EGBB	BIRMINGHAM	173	13,7%
44	LFLL	LYON SAINT-EXUPERY	165	3,4%
45	LROP	BUCURESTI/HENRI COANDA	160	10,2%
46	LEAL	ALICANTE	159	0,0%
47	LIPZ	VENEZIA TESSERA	156	11,5%
48	LFML	MARSEILLE PROVENCE	147	-0,3%
49	LHBP	BUDAPEST LISZT FERENC INT.	147	1,4%
50	EGPF	GLASGOW	145	5,9%
	TOTALS and % TOTAL TRAFFIC		16151	56,1%

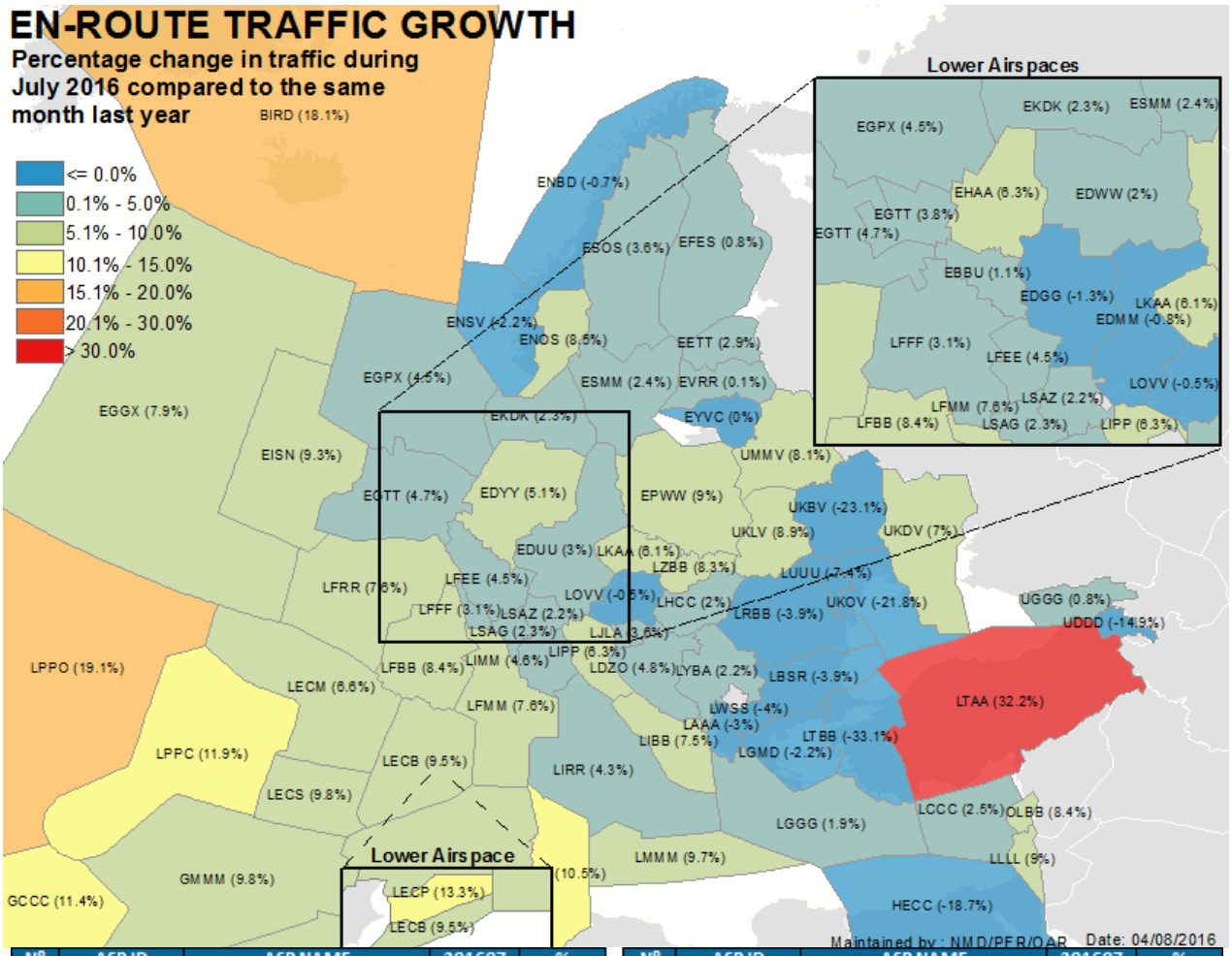
Top 50 Departure Airports with average daily traffic and percentage compared to same period of previous year

N°	ICAO	AIR OPERATOR	201607	%
1	RYR	RYANAIR	2026	10,2%
2	DLH	DEUTSCHE LUFTHANSA	1428	-3,3%
3	THY	TURKISH AIRLINES	1397	2,4%
4	EZY	EASYJET	1382	5,5%
5	AFR	AIR FRANCE	902	-6,7%
6	SAS	SCANDINAVIAN AIRLINES SYSTEM	773	3,4%
7	BAW	BRITISH AIRWAYS	740	3,1%
8	VLG	VUELING AIRLINES SA	692	5,8%
9	KLM	KLM ROYAL DUTCH AIRL	673	4,4%
10	AZA	ALITALIA	636	-1,5%
11	BER	AIR BERLIN, INC.	627	-0,4%
12	PGT	PEGASUS HAVA TASI.	454	4,2%
13	BEE	JERSEY EUROPEAN T/A FLYBE	445	7,9%
14	SWR	SWISS INTERNATIONAL	432	0,5%
15	WZZ	WIZZ AIR	432	12,9%
16	GWI	GERMAN WINGS	372	-26,8%
17	NAX	NORWEGIAN AIR SHUTTLE	372	-27,2%
18	AUA	AUSTRIAN AIRLINES	370	3,3%
19	TAP	TAP/AIR PORTUGAL	339	1,4%
20	WIF	WIDEROE	324	-4,2%
21	AEE	AEGEAN AIRLINES	276	-21,8%
22	FIN	FINNAIR O/Y	275	-4,3%
23	AFL	AEROFLOT-RUSSIAN	266	2,6%
24	IBE	IBERIA	258	1,7%
25	AEA	AIR EUROPA	250	-0,9%
26	ANE	AIR NOSTRUM	243	1,0%
27	RAM	ROYAL AIR MAROC	243	9,9%
28	LOT	LOT-POLISH AIRLINES	238	20,5%
29	TOM	THOMSON FLY LTD	235	3,7%
30	EIN	AER LINGUS TEORANTA	233	-0,3%
31	BEL	BRUSSELS AIRLINES	232	5,5%
32	HOP	HOP (MERGE OF BZH + RAE + RLA)	224	-2,2%
33	EXS	JET2.COM	222	15,3%
34	TRA	TRANSAVIA.COM	215	20,0%
35	UAE	EMIRATES	198	13,6%
36	QTR	QATAR AIRWAYS COMP.	182	25,9%
37	IBK	NORWEGIAN AIR INTERNATIONAL	182	
38	NJE	NETJETS	180	9,2%
39	VOE	VOLOTEA	174	26,5%
40	TVS	TRAVEL SERVIS	170	11,0%
41	DAL	DELTA AIR LINES INC.	166	1,2%
42	UAL	UNITED AIRLINES INC.	160	0,1%
43	OAL	OLYMPIC	155	152,1%
44	AUI	UKRAINE INTERNATIONA	154	13,5%
45	EWG	EUROWINGS AG	153	0,0%
46	EZS	EASY JET SWITZERLAND	151	-5,3%
47	SXS	SUNEXPRESS AIRLINES	149	-1,3%
48	TCX	THOMAS COOK AIT LTD	146	8,5%
49	BCS	EUROPEAN AIR TRANSP.	143	-4,9%
50	MON	MONARCH AIRLINES LTD	137	3,4%
	TOTALS and % TOTAL TRAFFIC		20826	64,9%

Top 50 Air Operators with average daily traffic and percentage compared to same period of previous year

N°	ICAO	AIR OPERATOR	201607	%
		Unidentified	2415	-4,5%

Average daily traffic and percentage compared to same period of previous year for all flights where Air Operators can't be identified

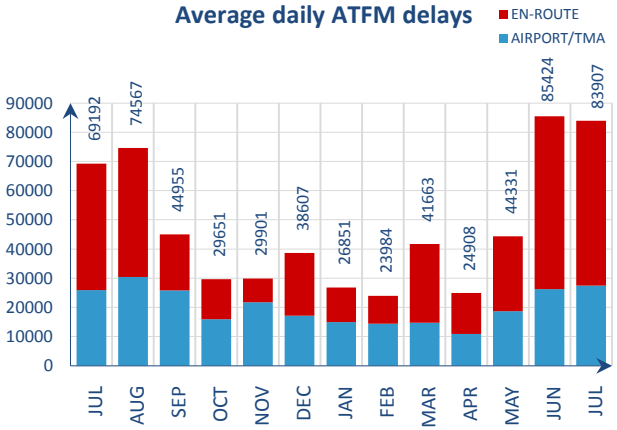


Nº	ASP ID	ASP NAME	201607	%
1	BIRDACC	REYKJAVIK ACC	464	18,1%
2	DAAAACC	ALGERS ACC	503	5,2%
3	DTTCACC	TUNIS ACC	336	10,5%
4	EBBUACC	BRUSSELS CANAC	1858	1,1%
5	EDGGALL	LANGEN ACC_FIR	3677	-1,3%
6	EDMMACC	MUNCHEN ACC	3259	-0,8%
7	EDUUUAC	KARLSRUHE UAC	5654	3,0%
8	EDWWACC	BREMEN ACC	1889	2,0%
9	EDYYUAC	MAASTRICHT UAC	5452	5,1%
10	EETTACC	TALLIN ACC	609	2,9%
11	EFESACC	TAMPERE ACC	390	0,8%
12	EGGXOCA	SHANWICK OACC	1516	7,9%
13	EGPXALL	SCOTTISH ACC	2968	4,5%
14	EGTTACC	LONDON ACC	6288	4,7%
15	EGTTTC	LONDON TMA TC	4200	3,8%
16	EHAAACC	AMSTERDAM ACC(245-)	1760	6,3%
17	EIDWACC	DUBLIN ACC	740	10,6%
18	EISNACC	SHANNON ACC	1437	9,3%
19	EKDKACC	COPENHAGEN ACC	1666	2,3%
20	ENBDACC	BODO ACC	583	-0,7%
21	ENOSACC	OSLO ATCC	997	8,5%
22	ENSVACC	STAVANGER ATCC	655	-2,2%
23	EPWWACC	WARSZAWA ACC	2441	9,0%
24	ESMMACC	MALMO ACC	1527	2,4%
25	ESOSACC	STOCKHOLM ACC	1006	3,6%
26	EVRRACC	RIGA ACC	769	0,1%
27	EYVCACC	VILNIUS ACC	705	0,0%
28	GCCCACC	CANARIAS ACC/FIC	840	11,4%
29	GMMMACC	CASABLANCA ACC	1115	10,0%
30	HECCACC	CAIROACC	602	-18,4%
31	LAAAACC	TIRANA ACC	795	-3,1%
32	LBSRACC	SOFIA ACC	2645	-3,9%
33	LCCCACC	NICOSIA ACC	1078	2,5%
34	LDZOACC	ZAGREB ACC	2037	4,8%
35	LECBACC	BARCELONA ACC	3179	9,5%
36	LECMALL	MADRID ALL ACC	3162	6,6%
37	LECPACC	PALMA ACC	1456	13,3%
38	LECSACC	SEVILLA ACC	1173	9,8%

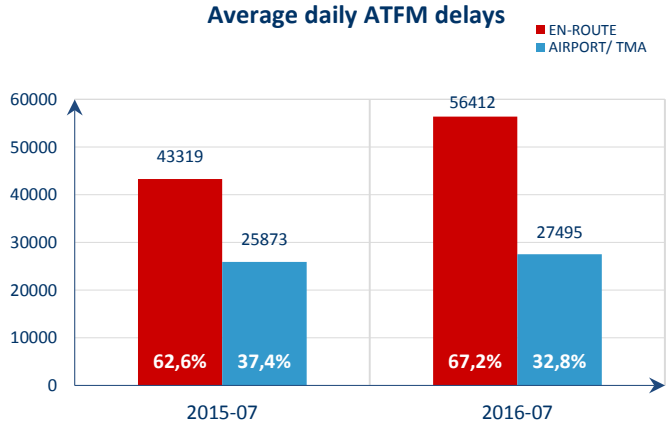
Nº	ASP ID	ASP NAME	201607	%
39	LFBBALL	BORDEAUX ALL ACC	3167	8,4%
40	LFEEACC	REIMS U/ACC	3198	4,5%
41	LFFFALL	PARIS ALL ACC	3738	3,2%
42	LFMMACC	MARSEILLE ACC	3855	7,6%
43	LFMMAPP	MARSEILLE TMA	1152	3,0%
44	LFRRACC	BREST U/ACC	3401	7,6%
45	LGGGACC	ATHINAI CONTROL	2113	1,9%
46	LGMDACC	MAKEDONIA CONTROL	1643	-2,2%
47	LHCCACC	BUDAPEST ACC	2679	2,0%
48	LIBBACC	BRINDISI ACC	1069	7,6%
49	LIMMACC	MILANO ACC	2820	4,6%
50	LIPPACC	PADOVA ACC	2479	6,3%
51	LIRRACC	ROMA ACC	2891	4,3%
52	LJLAACC	LJUBLJANA ACC	1036	3,6%
53	LKAAACC	PRAGUE ACC	2561	6,1%
54	LLLLACC	TEL AVIV ACC	487	9,2%
55	LMMMACC	MALTA ACC	351	9,7%
56	LOVVACC	WIEN ACC	2657	-0,5%
57	LPPCACC	LISBOA ACC/UAC	1602	12,0%
58	LPPOOAC	SANTA MARIA OACC	425	19,1%
59	LQSBACC	BOSNIA-HERZEGOVINA	147	4,3%
60	LRBBACC	BUCURESTI ACC	2101	-4,0%
61	LSAGACC	GENEVA ACC	2027	2,3%
62	LSAZACC	ZURICH ACC	2440	2,2%
63	LTAAACC	ANKARA ACC	4021	32,3%
64	LTBBACC	ISTANBUL ACC	2253	-33,0%
65	LUUUACC	CHISINAU ACC	149	-7,5%
66	LWSSACC	SKOPJE ACC	646	-4,0%
67	LYBAACC	BEOGRADE ACC	2395	2,2%
68	LZBBACC	BRATISLAVA ACC	1806	8,3%
69	OLBBACC	BEIRUT ACC	193	8,4%
70	UDDDACC	YEREVAN ACC	103	-14,9%
71	UGGGACC	TBILISI ACC	372	1,1%
72	UKBVACC	KIEV ACC	417	-23,1%
73	UKDVACC	DNIPROPETROVSK ACC	61	7,0%
74	UKLVACC	L'VIV ACC	355	8,9%
75	UKOVACC	ODESSA ACC	269	-21,8%
76	UMMVACC	MINSK ACC	867	8,1%

The highest traffic increases in July 2016 were in Ankara, Santa Maria, Reykjavik, Palma, Lisbon, Canarias, Dublin and Tunis ACCs. Airspace realignment in Ankara and Istanbul ACCs accounts for the variation. Reykjavik ACCs increase is due to increased international arrivals/departures as well as unseasonable weather patterns which resulted in transatlantic flights adopting more northerly routes. The Santa Maria and Lisbon ACCs variation is due to increased traffic to/from the Canary Islands and the Azores, and South American destinations. Increased usage of more southerly routes for traffic routing to/from Turkey accounts for the increase in Malta ACC. There was significant traffic increase in Tunis, Casablanca, Tel Aviv and Beirut ACCs.

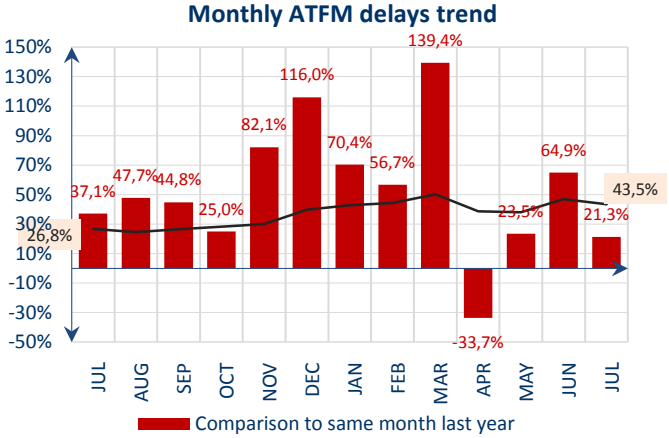
2. ATFM DELAY AND ATTRIBUTIONS



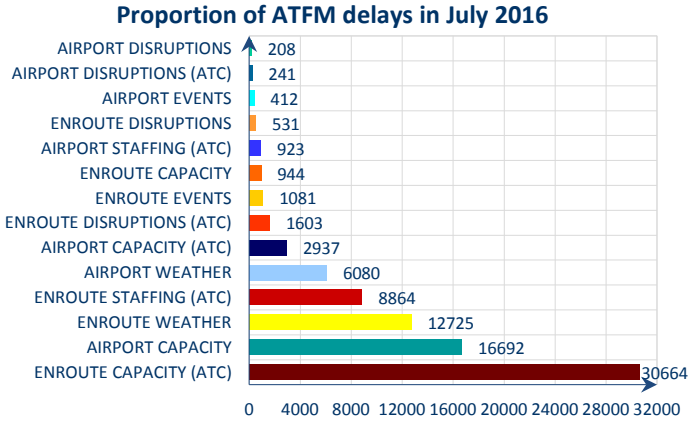
Total ATFM delays increased by 21.3% in July 2016[i].



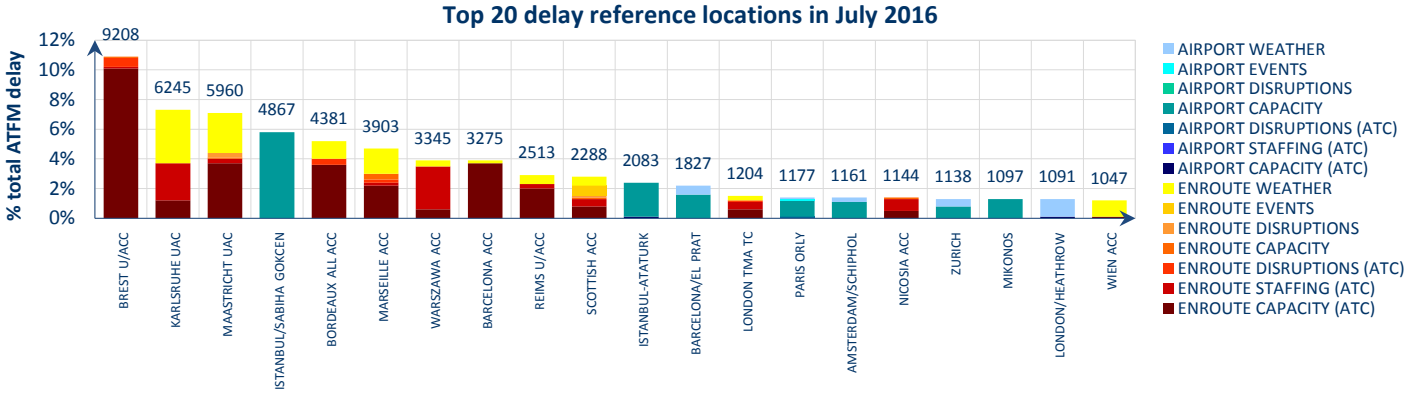
En-route ATFM delays increased by 30.2% and airport ATFM delays increased by 6.3%.



The rolling 12-month trend shows that ATFM delay was 43.5% higher during the period Aug 2015 – July 2016 compared to Aug 2014 – July 2015.



En-route ATC capacity (36.5%), airport capacity (19.9%) and en-route weather (15.2%) were the main causes of ATFM delays in July 2016.

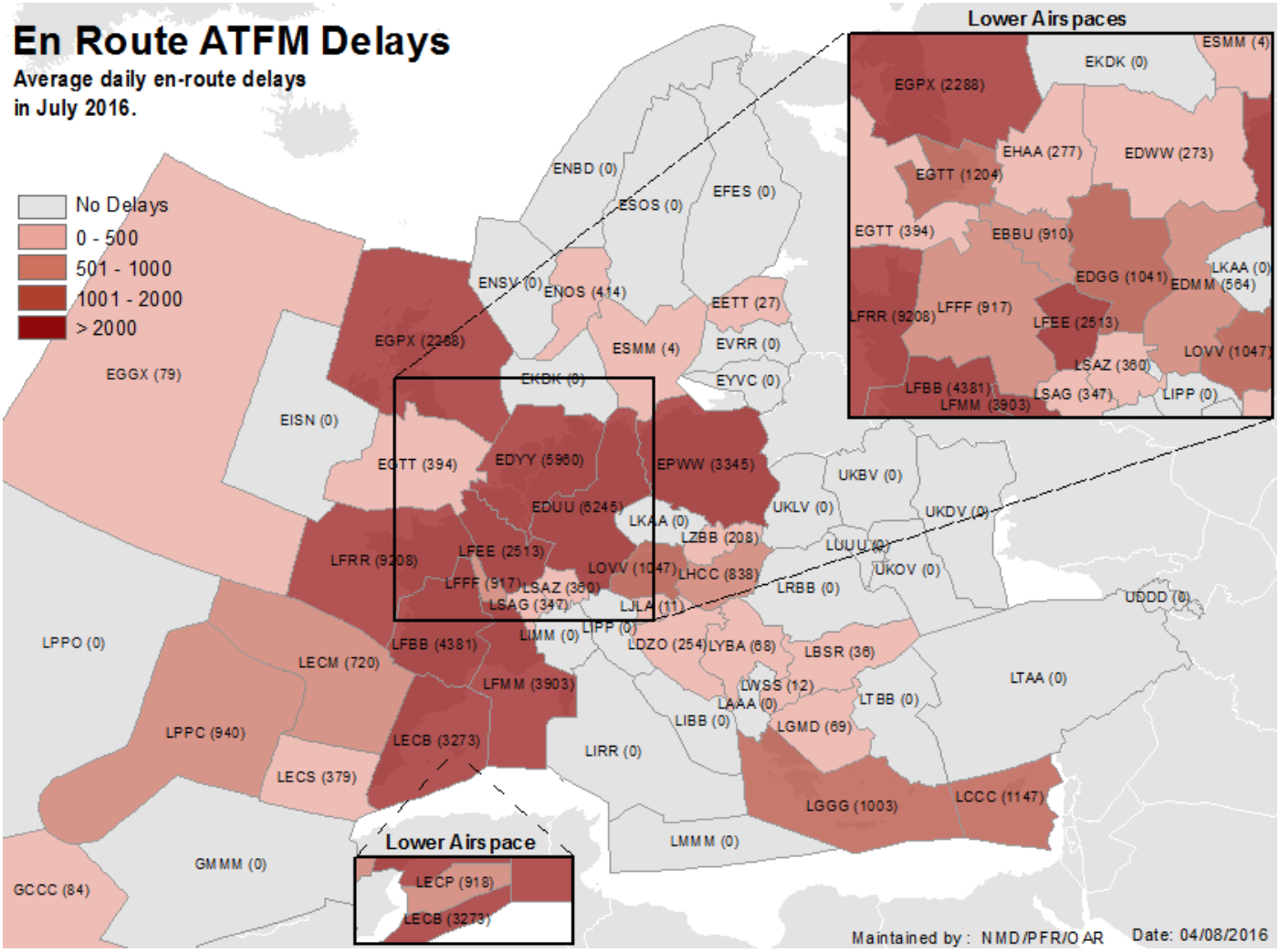


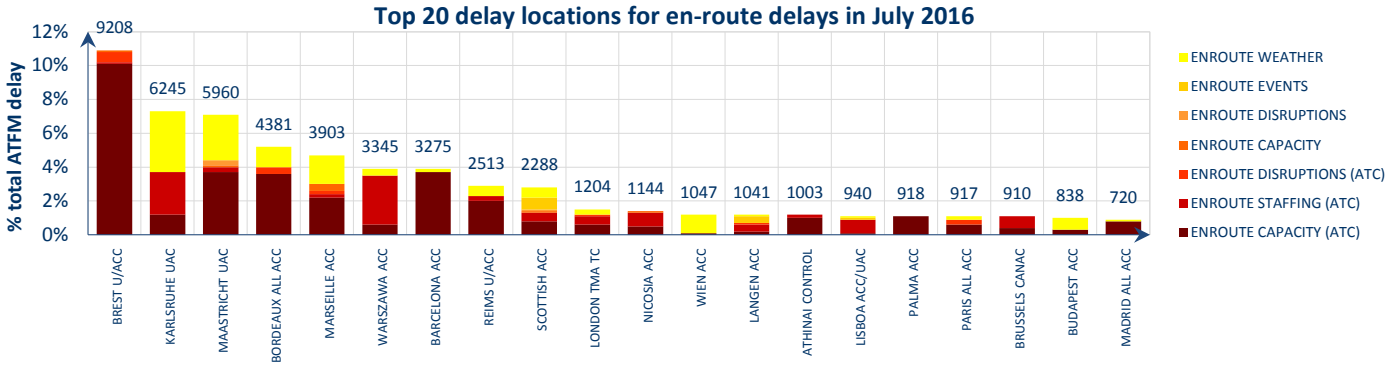
These are the top 20 delay generating locations for the reporting month with respect to total ATFM delays. Figures are the average daily delays in minutes for the individual locations.

- En-route ATC capacity delays in Brest, Maastricht, Bordeaux, Marseille, Barcelona, Reims, Scottish and London TMA ACCs;
- En-route weather generated delays in Karlsruhe, Maastricht, Bordeaux, Marseille and Vienna ACCs;
- En-route staffing issues in Karlsruhe, Warsaw, Scottish, London TMA and Nicosia ACCs;
- Aerodrome capacity issues generated delays at Istanbul/Sabiha Gökcen airport and to a lesser extent at Istanbul/Ataturk Barcelona, Paris/Orly, Amsterdam/Schiphol, Zurich and Mikonos airports;
- French industrial action on 05 July resulted in delays for Brest, Bordeaux and Marseille ACCs;
- Capacity reductions in Scottish ACC due to iTec[iii] system training and familiarisation combined with unseasonable weather patterns resulting in transatlantic flights adopting more northerly routes resulted in en-route ATC capacity and staffing delays;
- Seasonal weather impacted operations at London/Heathrow, Zurich, Amsterdam/Schiphol and Barcelona airports;
- Military exercise Bellerophon on 01 July generated ATFM delay in Brest.

3. EN-ROUTE ATFM DELAYS

EN-ROUTE ATFM DELAY PER LOCATION

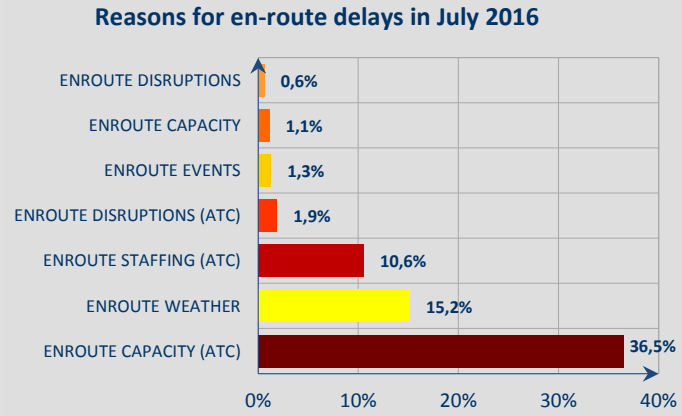




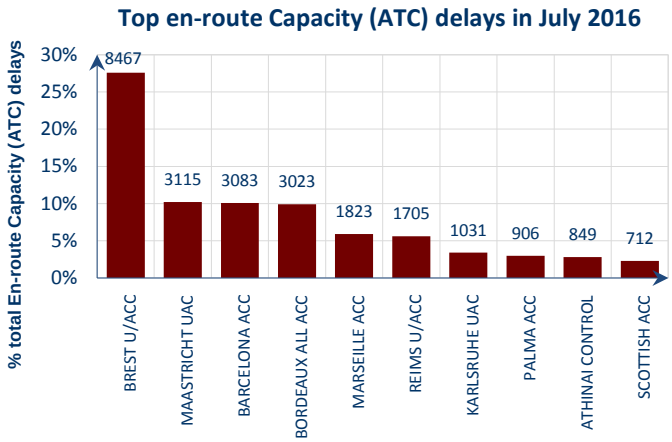
These are the top 20 en-route ATFM delay generating locations for the reporting month with respect to total ATFM delays. Figures are the average daily delays in minutes for the individual locations.

The top 20 en-route ATFM delay locations generated **61.5%** of the monthly total (network) ATFM delay.
The top 5 en-route ATFM delay locations generated **35.2%** of the monthly total (network) ATFM delay.

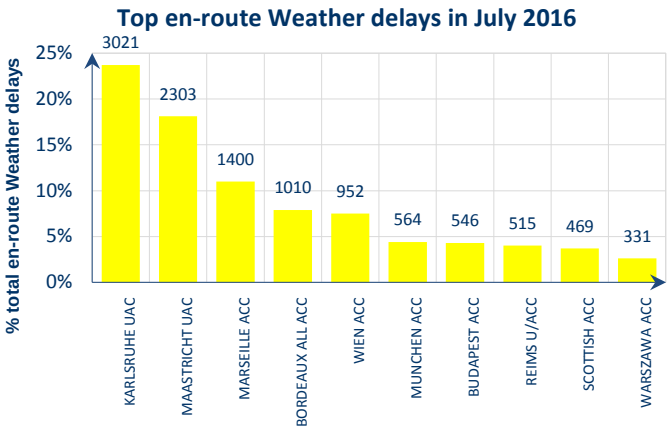
EN-ROUTE ATFM DELAY PER DELAY GROUP



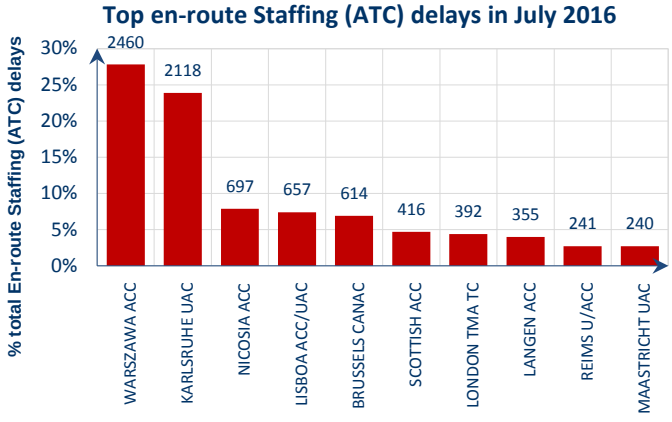
En-route ATFM delays accounted for 67.2% of all ATFM delays. Most of this delay was caused by en-route ATC capacity, en-route weather and en-route ATC staffing as explained in detail below. The other causes were:
En-route ATC disruptions; Brest, Paris, Bordeaux and Marseille ACCs generated delays due to the French ATC Industrial action on 05 July; Various equipment failures in Brest, Bordeaux, Langen and London TMA ACCs;
En-route events; Scottish ACC carried out iTec[iii] Implementation; Langen ACC recorded delays to the on-going PSS implementation; Marseille TMA generated delays due to extra traffic during the semi-final EURO2016 football tournament;
En-route capacity; Military exercise Bellerophon generated ATFM delay in Brest ACC on 01 July; Marseille and Reims ACCs affected by French military exercises;
En-route disruptions; Maastricht and Karlsruhe ACCs generated delays due to the application of ATFM protective measures during the French ATC industrial action; Some ATFM delays in Maastricht ACC due to technical issues in London TMA on 14 July.



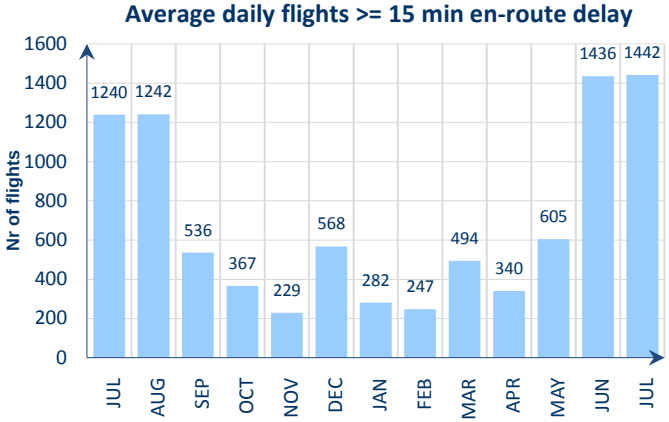
Brest ACC was the biggest generator of en-route ATC capacity delays. Brest delays increased from 3,061 mins/day in June to 8,746 mins/day. En-route ATC capacity delays increased in Maastricht, Barcelona and Bordeaux ACCs. Marseille, Palma and Athens entered the top 10.



Thunderstorms generated delays in several ACCs. Karlsruhe and Maastricht ACCs were the most impacted throughout the month.

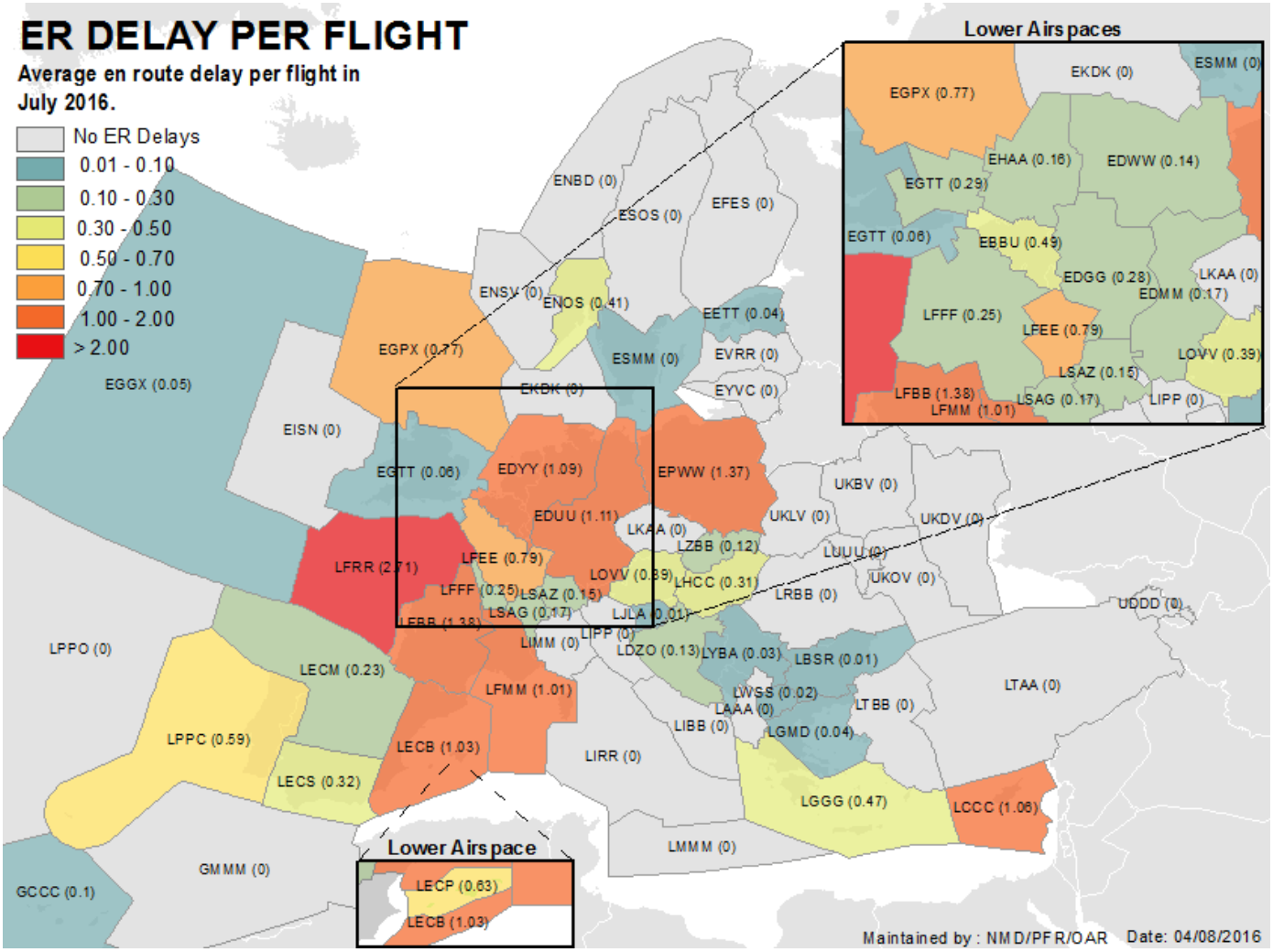


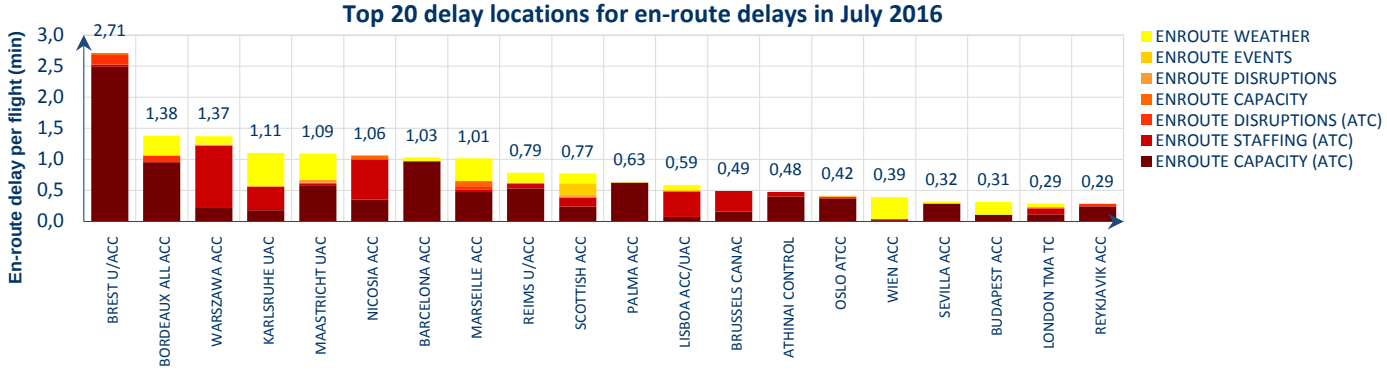
Warsaw and Karlsruhe ACCs were the biggest generator of en-route ATC staffing delays in July. En-route ATC staffing increased in Nicosia ACC from 108 mins/day to 697 mins/day compared to June. Langen ACC delays decreased from 1110 mins/day to 355 mins/day.



An average of 1442 flights/day received an en-route ATFM delay of at least 15 minutes in July 2016. The corresponding figure for July 2015 was 1240 flights/day.

EN-ROUTE ATFM DELAY PER FLIGHT





These are the top 20 average en-route ATFM delay per flight generating locations for the reporting month. Figures are the average en-route ATFM delay per flight in minutes for the individual locations.

With a smaller impact of en-route weather throughout the month compared to June 2016, Karlsruhe, Maastricht, Brussels and London TMA ACCs average ATFM delay per flight decreased.

Brest ACC average en-route ATFM delay/flight increased from 2.11 min/flt in June 2016 to 2.71 min/flt in July 2016 (mainly due to en-route ATC capacity).

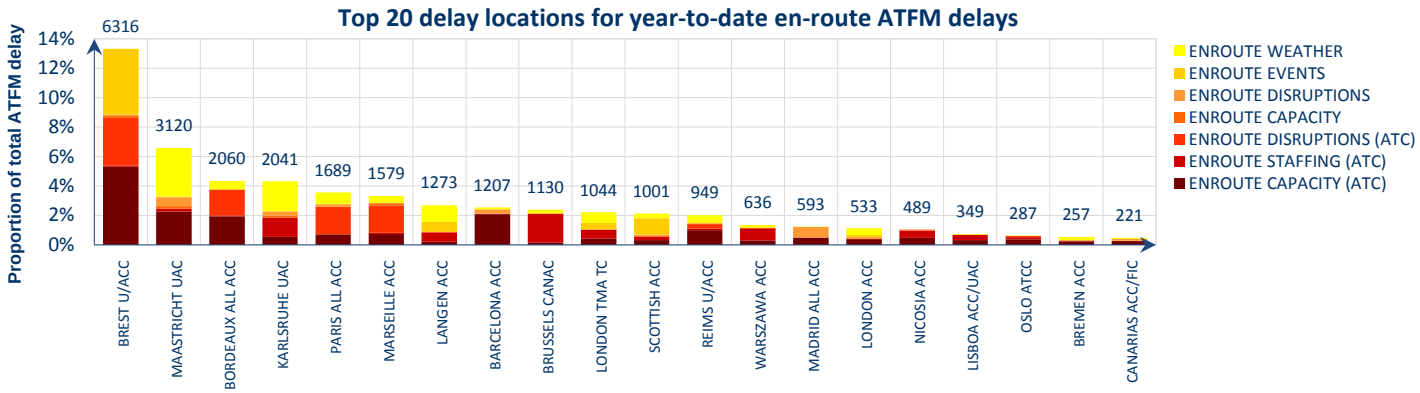
Bordeaux ACC average en-route ATFM delay/flight increased from 0.91 min/flt in June 2016 to 1.38 min/flt in July 2016.

Warsaw ACC average en-route ATFM delay/flight increased from 0.33 min/flt in June 2016 to 1.37 min/flt in July 2016.

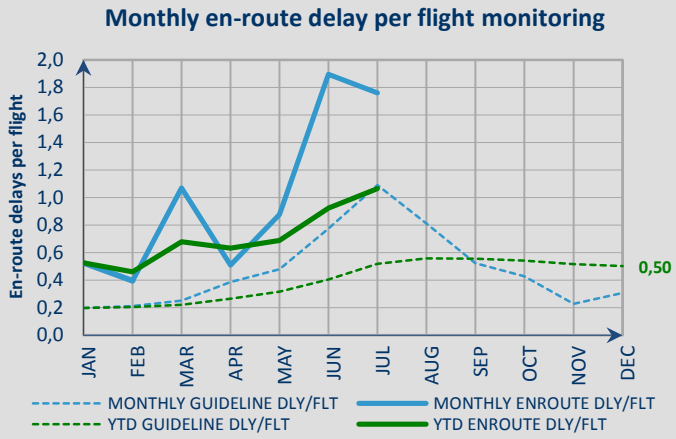
Nicosia ACC average en-route ATFM delay/flight increased from 0.39 min/flt in June 2016 to 1.06 min/flt in July 2016.

Scottish ACC average en-route ATFM delay/flight decreased from 1.36 min/flt in June 2016 to 0.77 min/flt in July 2016.

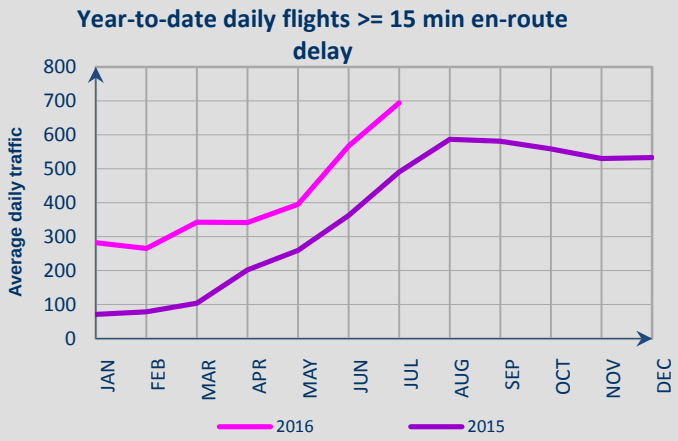
EN-ROUTE ATFM DELAY YEAR-TO-DATE



These are the top 20 en-route delay locations for 2016 with respect to the total ATFM delay. Figures are the average daily en-route delay in minutes for the individual locations.
The top 20 en-route delay locations generated **56.5%** of the total ATFM (network) delay.
The top 5 en-route delay locations generated **32.1%** of the total ATFM (network) delay.



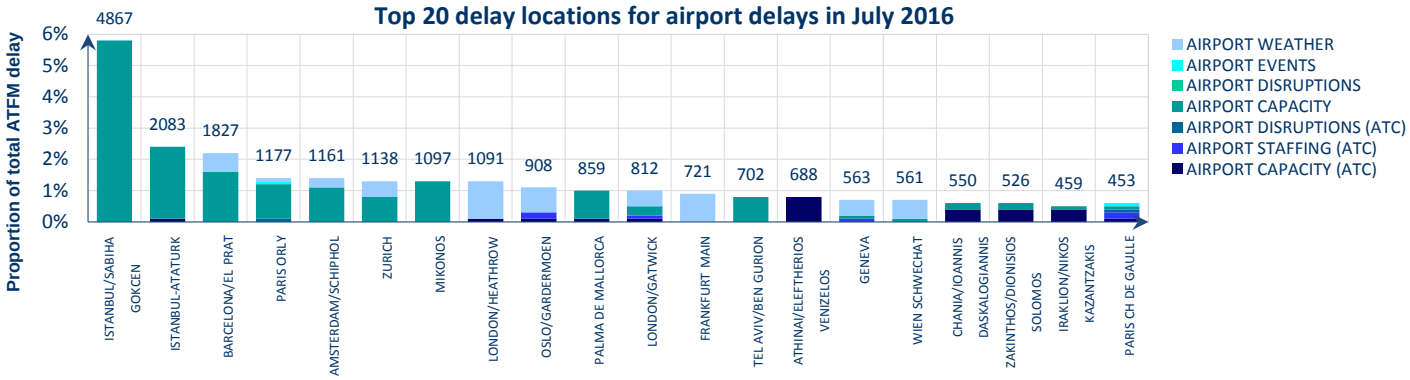
Reporting month: The average en-route delay per flight in the NM area[iv] in July was 1.76 min/flt which is above the corresponding monthly guideline[v] value of 1.09 min/flt.
Year To Date: The average YTD en-route ATFM delay per flight in 2016 in the NM area is 1.07 min/flt which is above the corresponding guideline value of 0.52 min/flt.



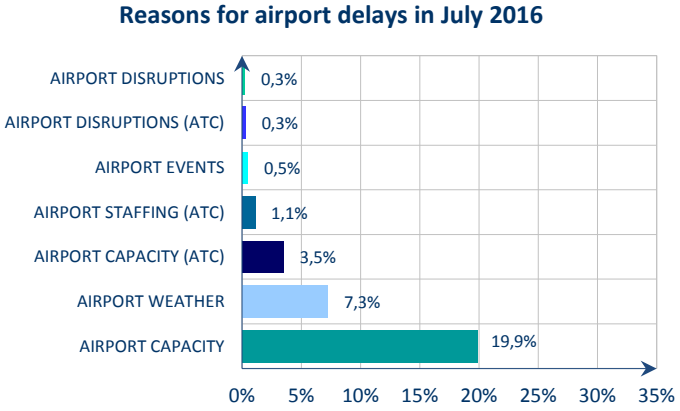
Year to date: An average of 694 flights/day had an en-route ATFM delay of at least 15 minutes in 2016. The corresponding figure in 2015 was 491 flights/day.

4. AIRPORT/TMA ATFM DELAYS

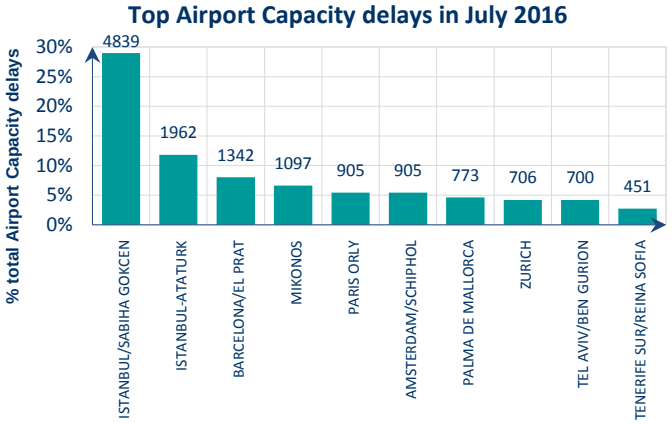
AIRPORT/TMA ATFM DELAY PER LOCATION



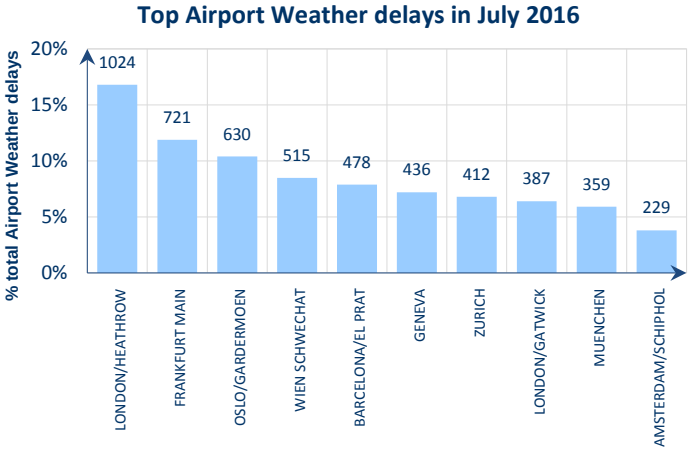
AIRPORT/TMA ATFM DELAY PER DELAY GROUPS



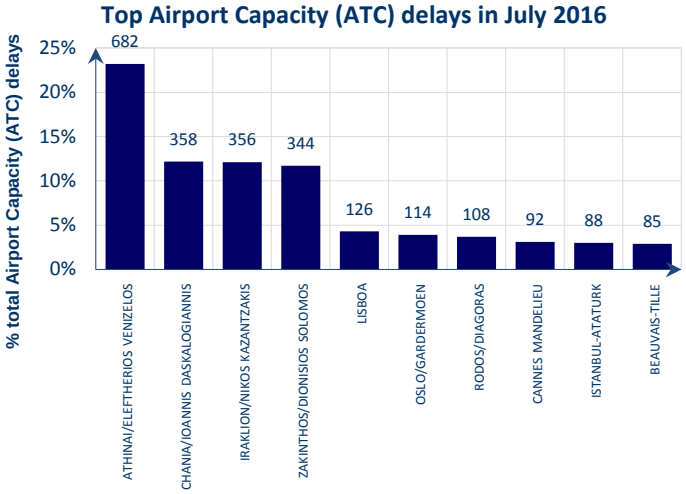
Airports accounted for 32.8% of all ATFM delays in July 2016, mainly due to airport capacity and weather.



Airport capacity delays at Istanbul/Sabiha Gökcen, Istanbul/Ataturk and Barcelona airports. Environmental constraints generated delays at Barcelona and Zurich airports. Delays recorded at Paris/Orly airport due to runway maintenance.

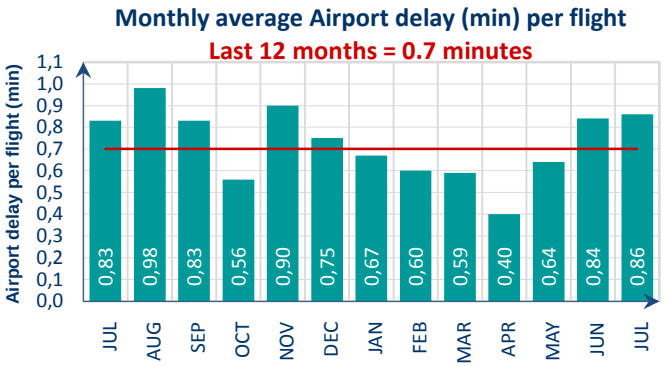


Adverse seasonal weather particularly impacted operations at London/Heathrow airport and, to a lesser extent, Frankfurt, Oslo and Vienna airports.

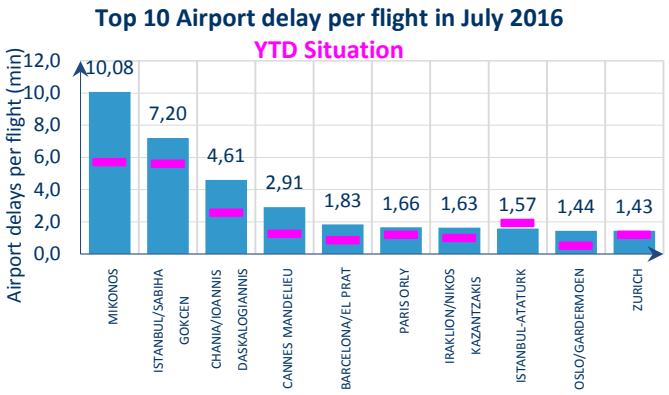


Athens and Greek islands airports generated delay due to high demand.

AIRPORT/TMA ATFM DELAY PER FLIGHT

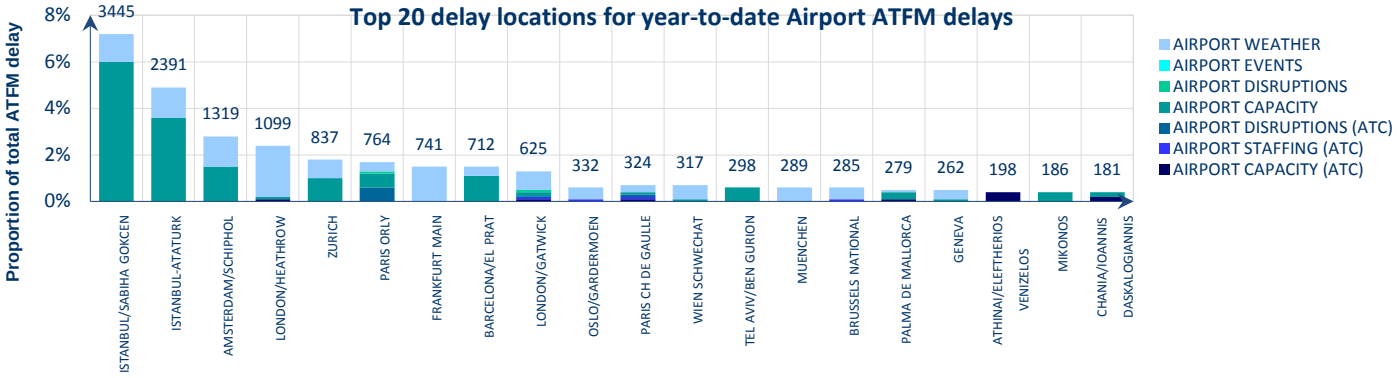


Average airport/TMA delay per flight increased from 0.83 min/flt in July 2015 to 0.86 min/flt in July 2016.



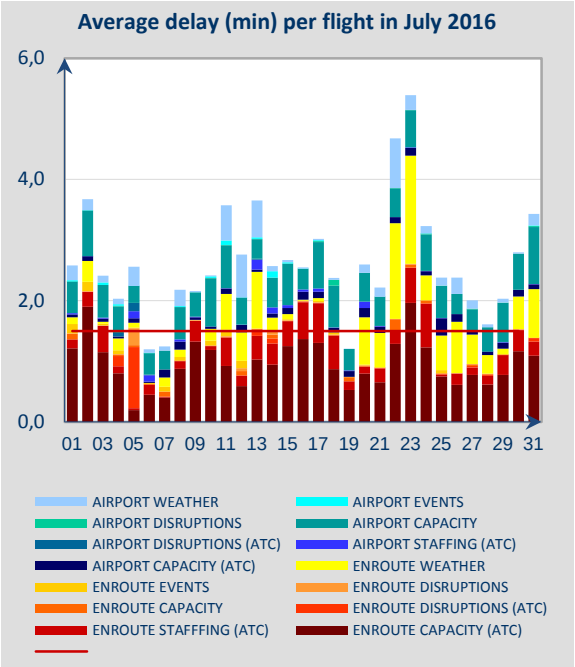
Summer destinations like Mikonos and Chania registered a high delay per flight. Nine of the top 10 delay airports generated a daily average ATFM per flight above their year to date values, only Istanbul/Ataturk airport decreased.

AIRPORT/TMA ATFM DELAY YEAR-TO-DATE



The top 20 Airport/TMA delay locations have generated **31.1%** of the total ATFM (network) delay in 2016.
The top 5 Airport/TMA delay locations have generated **19.1%** of the total ATFM (network) delay in 2016.

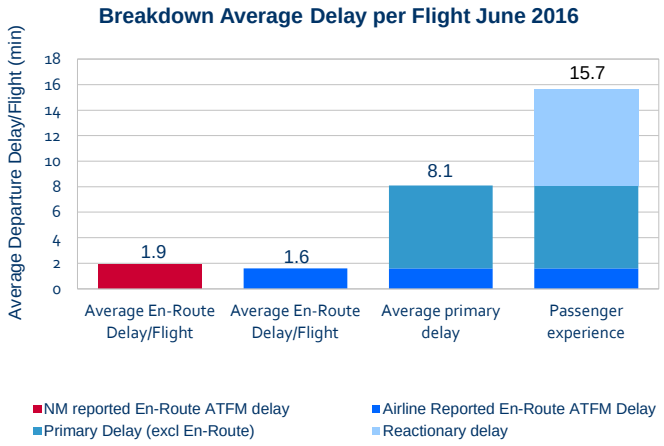
5. DAILY EVOLUTION



All but 3 days in July 2016 had an average delay/flt above 1.5 min/flt.
These were the most significant days;
02 July; En-route ATC capacity delays in Brest, Barcelona, Marseille, Bordeaux, Maastricht and Madrid ACCs; Airport capacity issues in both Istanbul airports and Greek Islands; En-route weather delays in Karlsruhe and Vienna ACCs.
05 July; En-route ATC disruptions delays in Bordeaux, Brest and Paris ACCs due to French ATC industrial action, with additional delays in Karlsruhe and Maastricht ACCs; Paris/Charles de Gaulle and Paris/Orly airports were the most impacted by the French industrial ATC action and generated delays.
11-13 July; En-route weather delays in Karlsruhe, London, Maastricht, Reims, Scottish and Vienna ACCs; Airport weather issues at Amsterdam, Barcelona, Frankfurt, London/Gatwick, London/Heathrow, Oslo and Vienna airports; En-route ATC capacity delays in Barcelona, Bordeaux, Brest and Maastricht ACCs; Airport capacity delays in Istanbul/Sabiha Gökcen, Istanbul/Ataturk, Amsterdam and Barcelona airports.
22-24 July; Adverse seasonal weather particularly impacted operations in Maastricht ACC and, to a lesser extent, Karlsruhe, Marseille, Bordeaux, Reims, Paris and Munich ACCs; Airport weather delays at Geneva, Frankfurt, Barcelona, London/Gatwick, London/Heathrow and Oslo airports; En-route ATC capacity delays in Brest, Bordeaux, Barcelona, Marseille, Maastricht, Reims and Palma ACCs; En-route ATC staffing delays in Karlsruhe, London TMA, Warsaw, Scottish, Brussels and Langen ACCs; Aerodrome capacity delays in both Istanbul airports, Paris/Orly, Palma, Mikonos and Barcelona airports.
30-31 July; En-route ATC capacity in Brest, Barcelona, Marseille, Palma, Maastricht, Bordeaux, Scottish and Athens ACCs; Aerodrome capacity delays at Istanbul/Sabiha Gökcen, Mikonos, Istanbul/Ataturk, Palma, Barcelona, Zurich and London/Gatwick airports; Seasonal weather particularly impacted operations in Karlsruhe, Bordeaux and Marseille ACCs and, to a lesser extent, Vienna, Warsaw, Barcelona and Geneva ACCs;

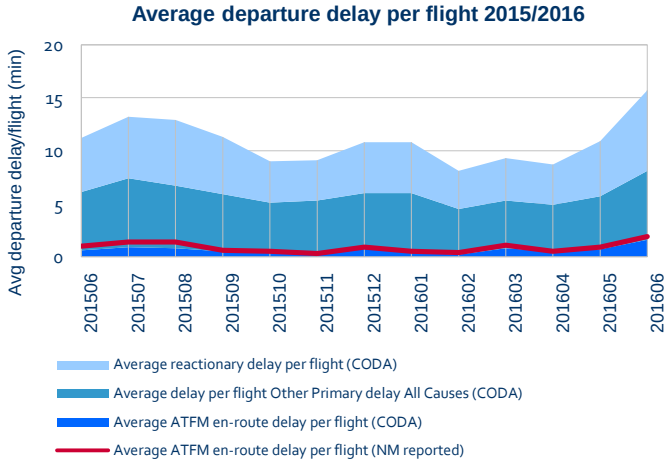
6. ALL AIR TRANSPORT DELAYS (SOURCE: CODA)

This section presents the all air transport delay situation as seen from the airlines by using the data collected by Central Office for Delay Analysis (CODA) from the airlines. Data coverage is 62% of the commercial flights in the ECAC region for June 2016. ATFM delays reported by airlines may be lower than the NM calculated ATFM delays due to difference in methods: ATFM delays of NM are the (flight) planned “delays”; the airlines report the “actual” experienced ATFM delay on departure. For instance, a flight with an ATFM delay may also have a handling delay absorbed within the ATFM delay. For the airline, a part of this delay is the ATFM delay and the remaining amount is the handling delay.

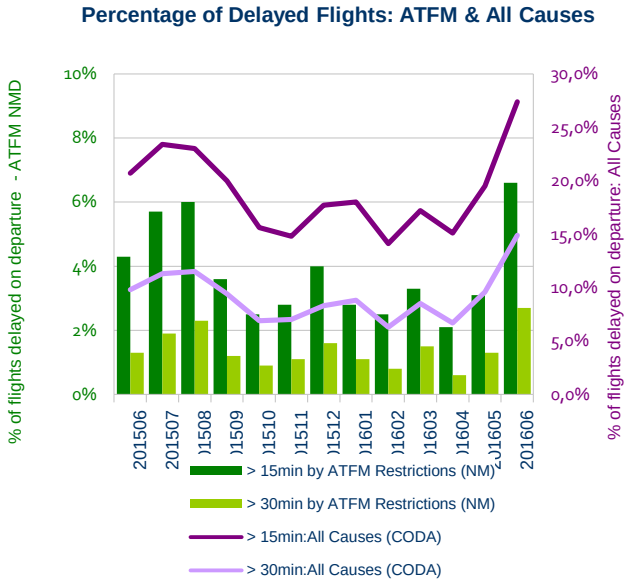


Based on airline data, the average departure delay per flight from “All Causes” was 15.7 minutes per flight, this was an increase of 43% in comparison to 11 minutes per flight in the same month of 2015 and a record high for 2016, following a month where ATC industrial action in France generated both en-route and airport delays.

Within all air transport delays, en-route ATFM delays were 1.6 minutes/flight in June 2016. Primary delays counted for 52% (or 8.2 min/flt), with reactionary delays representing a smaller remaining share of 48% at (7.5 min/flt).

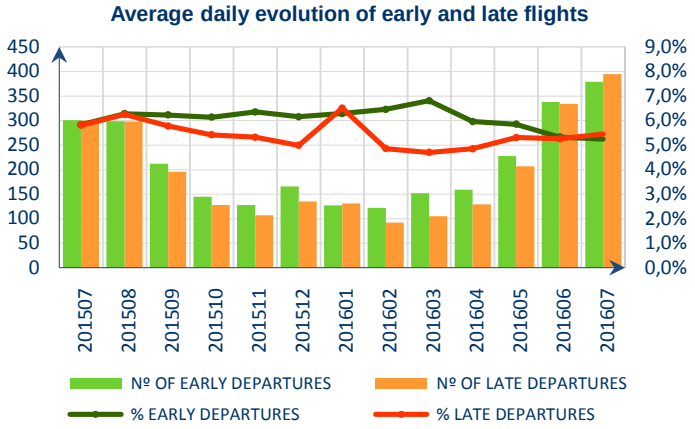


Further analysis of airline data from ’All-Causes’ shows that the average en-route ATFM delay was 1.6 minutes per flight. This was lower than the NM reported average en-route ATFM delay of 1.9 minutes per flight.



The percentage of flights delayed from ‘all-causes’ increased (those exceeding 15 minutes) by 7 percentage points to 27.4% and those (exceeding 30 minutes) by 5.1 points to 14.9% of flights in June 2016.

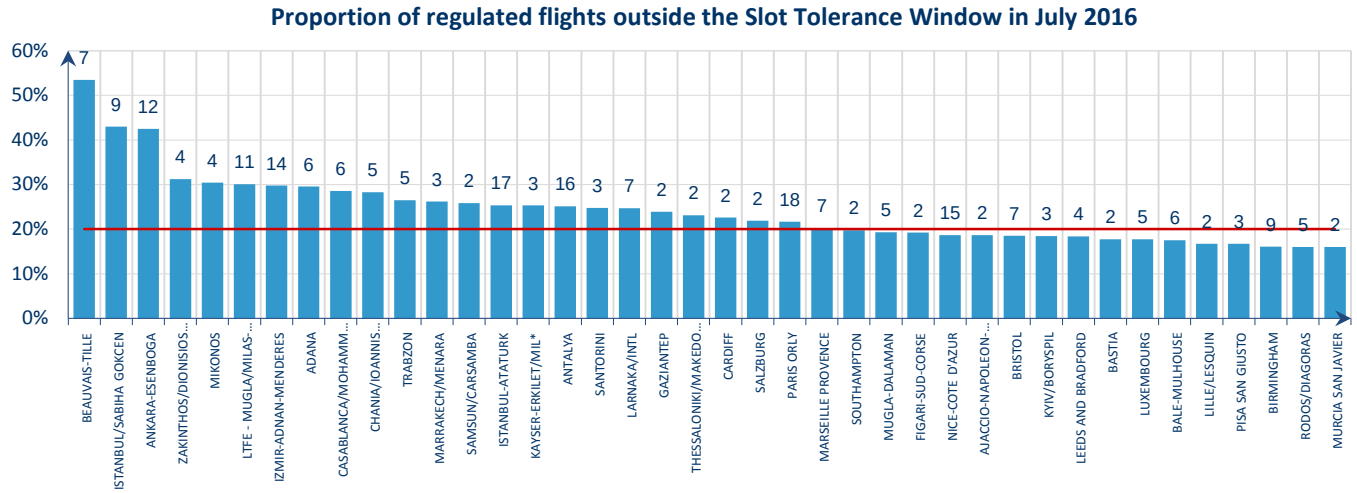
7. ATFM SLOT ADHERENCE



The percentage of early departures for July 2016 is 5.3% of regulated flights, which is a decrease of 0.6% compared to July 2015.

The percentage of late departures for July 2016 is 5.5% of regulated flights, which is a decrease of 0.4% compared to July 2015

The chart below shows the airports that have more than 300 regulated flights during the month with their average daily number and proportion of regulated flights that departed outside of the Slot Tolerance Window (STW). Any airport above the red line is non-compliant with the threshold (20%). Those airports with a number of departures outside the slot tolerance window can reduce network predictability.



8. SIGNIFICANT EVENTS AND ISSUES

PLANNED EVENTS

ACC

Major airspace or ATM system improvement projects.
Three ACCs carried out projects involving ATM system changes/upgrades during this reporting period.

L'viv ACC
The implementation of a new ATM system progressed through the transition phase during July 2016, not generating ATFM delay, despite a planned capacity reduction of 10%.

Langen ACC
The extended second phase of the transition to the PSS system continued throughout July generating 11,137 minutes of ATFM delay. This presented 34.5% of total delay (32,285min) by Langen ACC in July.

Scottish (Prestwick) ACC
The training and familiarisation with a new System (iTec[iii]) generated 19,245minutes of delay. This presented 27% of total delay (70,930 min) by Scottish ACC in July.

AIRPORTS

Local Plans in July

A number of airports undertook infrastructure and technical system improvement works during July. These improvements had at most a minor impact on local airport operations unless otherwise stated:

Special Events

- Air Race Championship at Lisbon airport between 1 and 3 July (1,521 minutes of airport ATFM delay);
- Swedish politics festival in Visby between 2 and 9 July (1,195 minutes of airport ATFM delay);
- The Farnborough International Air Show between 11 and 17 July (2,125 minutes of airport ATFM delay);
- Bastille Day Air Show at several French airports on 11 and 14 July (5,671 minutes of airport ATFM delay);
- Belgium National Holiday Air Show on 21 July;
- The World Youth Days in Krakow between 27 and 31 July (1,042 minutes of airport ATFM delay).

Completed:

- Runway maintenance at Amsterdam/Schiphol (1,766 minutes of airport ATFM delay), Luxembourg and Oslo/Gardermoen airports.

Ongoing

- Runway maintenance at Brussels, Cologne, Gran Canaria (4,916 minutes of airport ATFM delay), Istanbul/Sabiha Gökcen, Kishinev, Krakow, Lisbon, Paris/Charles de Gaulle (1,493 minutes of airport ATFM delay), Paris Orly (23,033 minutes of airport ATFM delay), Riga, Stockholm and Tallinn airports;
- Taxiway(s) and/or apron(s) improvements at Copenhagen, Gran Canaria, Hamburg, Helsinki, Lanzarote, London Heathrow, Oslo/Gardermoen, Riga, Stuttgart, Tallinn, Tenerife/Sur (13,989 minutes of airport ATFM delay), Thessaloniki, Toulouse and Venice airports;
- ILS maintenance at Bologna, Budapest, Dusseldorf, Lisbon, Oslo/Gardermoen and Paris Charles de Gaulle airports;
- Terminal building(s) improvements/works at Belgrade, Bergen, Budapest, Frankfurt Main, Ljubljana, and Oslo/Gardermoen airports;
- PRIDEP at Zurich airport generated 4,272 minutes of airport ATFM delay.

DISRUPTIONS

Disruption

- A technical issue in the airport terminal necessitated a reduction in the arrival capacity at Rome Fiumicino airport on 18 July which resulted in 3,167 minutes of ATFM delay.

Industrial Action

- French ATC industrial action between 1700 UTC on 4 July and 0400 UTC on 6 July generated 6,027 minutes of airport ATFM delay and 36,720 minutes of en-route ATFM delay in France. Most affected airport were Paris Orly (2,109 minutes of ATFM delays) and Marseille (1,903 minutes of ATFM delays). Neighbouring states generated 8,809 minutes due to ATFM protective measures;
- Industrial action by Air France pilots from 27 July; Overall 1400 flights were cancelled over this strike action[vi].
- Industrial action by Alitalia pilots and flight attendants on 05 July; Overall 142 flights were cancelled over this strike action[vii] .

Other

- ATC equipment issue in Langen and Karlsruhe ACCs on 13 July generated 3,172 minutes of ATFM delay;
- ATC equipment issue in London TMA on 14 July generated 2,706 minutes of ATFM delay
- Marseille TMA generated 3,636 minutes of ATFM delay due to the semi-final of EURO2016 football tournament on 07 and 08 July;
- The EURO 2016 took place in France from 10th June to 10th July. Eleven airports were coordinated and NM worked closely with COHOR to produce a daily forecast of traffic at these coordinated airports. On request of COHOR[viii] some 113 flights were manually suspended by NMOC. An estimated 3262 additional flights (including general & business aviation) were operated specifically for EURO 2016 with a total of 5870 mins of ATFM delay. Daily teleconferences, with all relevant participants, took place to review the tactical and pretactical planning. The event organisation was concluded by a debriefing meeting between EURO 2016 organisers, DSNA, DGAC and NM in Paris on the 27th July.

9. NM ADDED VALUE

FLIGHTS WITH DELAY > 30'

The number of flights that had more than 30 minutes of ATFM delay increased by 14.4% from 604 flts/day in July 2015 to 691 flts/day in July 2016.

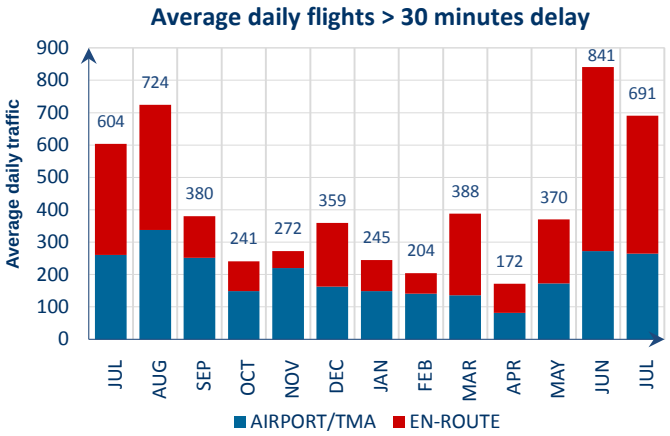
61.6% of flights with more than 30 minutes of ATFM delay in July 2016 were en-route and 38.4% were airport.

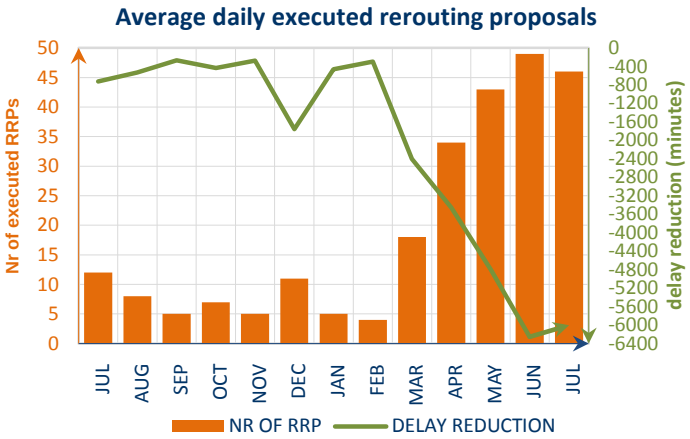
A significant number of flights with high en-route delays were located in Athens, Langen and Brest ACCs.

RRP DIRECT DELAY SAVINGS

A daily average of 91 RRPs were offered in July 2016 of which 46 RRPs were executed, saving 6,003 minutes of daily delay.

This graph shows the actual daily averages for the previous 13 months' period.





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i See Notice on page 1 for more information on traffic and delay comparison.
ii Internals, international departures and arrivals, excluding overflights.
iii iTEC (interoperability Through European Collaboration) provides advanced flight data processing and Controller Working Position under SWIM (System Wide Information Management) which will improve information flow in control centres and airports.
iv See Notice on page 1 for more information on NM Area
v NM's calculation that provides the guideline en-route delay (min) requirements to achieve the annual target (0.5 min/flight).
vi See http://corporate.airfrance.com/en/press/news/article/item/call-for-strike-action-by-two-of-the-three-cabin-crew-unions/
vii See http://www.ansa.it/english/news/business/2016/07/05/alitalia-flight-crew-in-4-hr-strike_f70ad770-09b7-463d-80b9-8442e4088500.html
viii COHOR : Association for the Coordination and Schedules , website http://www.cohor.org/