Network Manager
nominated by
the European Commission

EUROCONTROL

Monthly Network Operations Report

Analysis – January 2018

TABLE OF CONTENTS

NOTICE

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

Graphics
All graphs in chapter 3 and chapter 4 are in average minutes of ATFM delay per day, unless otherwise stated.

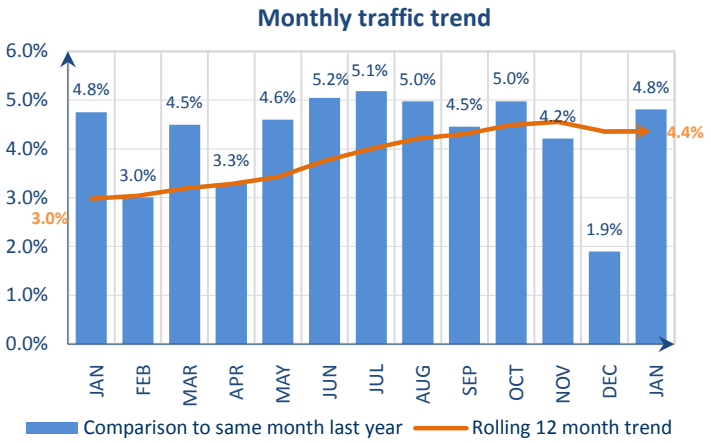
NM Area
All figures presented in this report are for the geographical area that is within Network Manager's responsibility (NM area). For further information on the NM Area go to the Reporting Assumptions and Descriptions document available on the EUROCONTROL website at **http://www.eurocontrol.int/articles/network-operations-monitoring-and-reporting**.

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

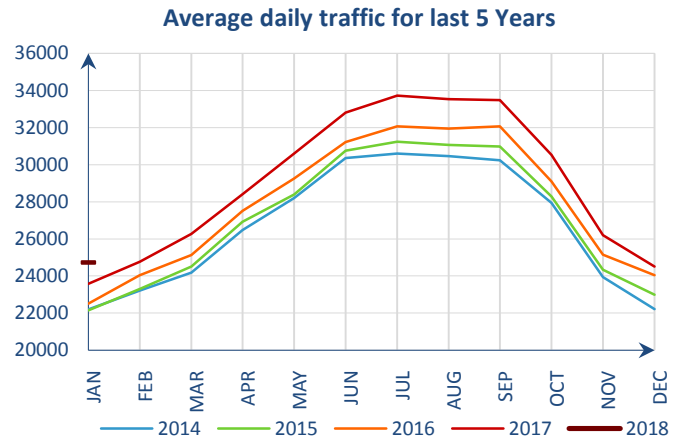
	EN-ROUTE CAPACITY (ATC)		AIRPORT CAPACITY (ATC)
	EN-ROUTE STAFFING (ATC)		AIRPORT STAFFING (ATC)
	EN-ROUTE DISRUPTIONS (ATC)		AIRPORT DISRUPTIONS (ATC)
	EN-ROUTE CAPACITY		AIRPORT CAPACITY
	EN-ROUTE DISRUPTIONS		AIRPORT DISRUPTIONS
	EN-ROUTE EVENTS		AIRPORT EVENTS
	EN-ROUTE WEATHER		AIRPORT WEATHER

For further information on 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**.

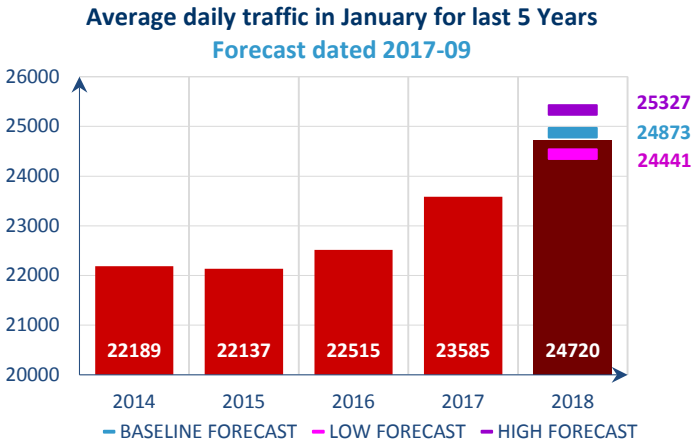
1. TOTAL TRAFFIC



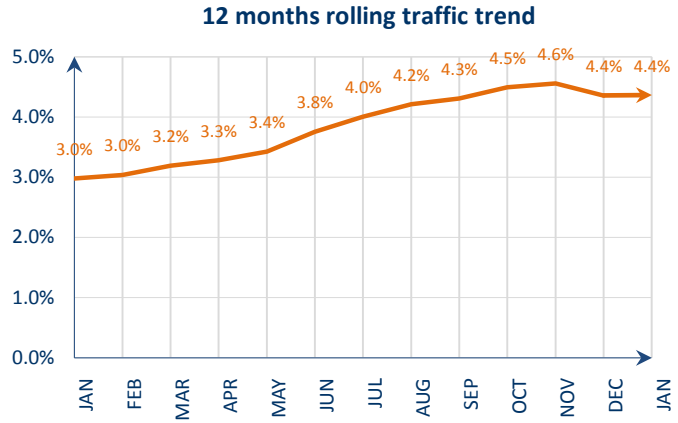
Traffic increased by 4.8% in January 2018[i].



Average daily traffic in January 2018 was the highest for January in the last five years.



The traffic increase of 4.8% for January was just below the baseline forecast updated in September 2017.



This graph shows the variation in average daily traffic for the last 12-month period relative to the previous 12-months. The average daily traffic from February 2017 to January 2018 was 4.4% higher than the average from February 2016 to January 2017.

In January, nine countries each added daily more than 50 flights to the European local[ii] traffic growth. Turkey was back as the top contributor and added 268 flights per day to the network owing to a strong internal flow (up 16% on January 2017) but also to a dynamic flow to/from the Middle East (Saudi Arabia and Iran) and the continued recovery of its flows to/from the Russian Federation and Ukraine. Spain was the second contributor adding 149 daily flights with a strong internal flow (+7%) and increases on its flows to/from Western Europe (+10%). The third contributor was Italy with 116 additional daily flights boosted by its strong internal flow but also by important increases on its flow to/from Spain and France, to/from the Russian Federation and to/from Ukraine. Poland ranked fourth with 108 extra daily flights explained by its international departure/arrival flow which grew by 16%. France added 87 flights per day thanks to its flows to/from South West Europe but also to its flow to/from North Africa (Morocco and Tunisia). The remaining countries: Germany (+68 flights/day), Portugal, excl. Azores (+62 flights/day), the Netherlands (+59 flights/day) and Finland (+55 flights/day) completed the list.

The top three external partners (for average daily flights on flows in both directions) were the United States with 757 flights (-0.5%), the Russian Federation with 681 flights (+11.6%) and the United Arab Emirates with 336 flights (+3.5%). Traffic flows between Europe and Egypt increased by 29.4% with circa 209 flights per day whereas traffic flows between Europe and Tunisia were up by 8.1% to 103 daily flights.

The traditional scheduled segment surpassed low-cost as the main driver of growth (+754 flights/day) and recorded an increase of 5.8%. The charter segment had the fastest growth and surged to an increase of 16.9% owing to flows to the Middle-East from Turkey and from the Russian Federation and the continued recovery of traffic to Egypt from Germany. The business aviation and all-cargo segments recorded sustained growth rates of 4.2% and 3% respectively. Low-cost was the weakest segment as it continued to be impacted by the failures of Monarch and Air Berlin and recorded a 1.7% growth rate; the two airlines accounted for 7% of low-cost flights in January 2017.

The aircraft operators which added the most flights to the network on a daily basis in January 2018 were Turkish Airlines (+225 flights), Lufthansa (+104 flights), easyJet UK (+100 flights), Ryanair (+80 flights) and Wizz Air (+77 flights).

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

Nine of the top ten airports had positive traffic growth. Overall, the largest traffic increases in January 2018 were at Ankara, Tel Aviv/Ben Gurion, Istanbul/Atatürk, Budapest and Lisbon airports. The largest traffic decreases were at Berlin/Tegel, Düsseldorf, Birmingham, Hamburg and Berlin/Schoenefeld airports. Tel Aviv/Ben Gurion traffic increase was due to the expansion of routes made available by low-cost airlines and increase of tourism. Traffic decreases at Berlin/Tegel, Düsseldorf, Hamburg and Berlin/Schoenefeld are due in part to Air Berlin cessation of operations.

Eight of the top ten aircraft operators flew more compared to January 2017. The operators with the highest traffic growth were Eurowings, Norwegian Air International, Turkish Airlines, Qatar Airways and Wizz Air. The highest traffic decreases were recorded by United Airlines, HOP, Transavia.com, Alitalia and Brussels Airlines.

Norwegian Air International traffic variation comes from a change in fleet size following new aircraft deliveries, as well as aircraft moving from using NAX to the IBK callsign. The traffic variation of Eurowings follows the continued integration of Germanwings, some Lufthansa routes and more recently ex Air Berlin operated routes into the Eurowings operation.

N°	ADEP	ADEP NAME	201801	%
1	EGLL	LONDON/HEATHROW	617	2,5%
2	EHAM	AMSTERDAM/SCHIPHOL	612	4,4%
3	LFPG	PARIS CH DE GAULLE	599	1,7%
4	EDDF	FRANKFURT MAIN	595	8,5%
5	LTBA	ISTANBUL-ATATURK	588	15,9%
6	LEMD	ADOLFO SUAREZ MADRID-BARAJA	506	5,7%
7	EDDM	MUENCHEN	489	2,6%
8	LEBL	BARCELONA/EL PRAT	361	7,5%
9	LIRF	ROMA/FIUMICINO	349	-0,9%
10	LSZH	ZURICH	332	1,1%
11	EGKK	LONDON/GATWICK	308	-2,8%
12	ENGM	OSLO/GARDERMOEN	307	2,0%
13	EKCH	KOBENHAVN/KASTRUP	306	-0,9%
14	ESSA	STOCKHOLM-ARLANDA	299	3,0%
15	LTFJ	ISTANBUL/SABIHA GOKCEN	287	11,4%
16	LFPO	PARIS ORLY	284	1,3%
17	LOWW	WIEN SCHWECHAT	273	0,2%
18	EBBR	BRUSSELS NATIONAL	268	-2,1%
19	EIDW	DUBLIN	266	4,5%
20	LPPT	LISBOA	261	12,4%
21	LSGG	GENEVA	249	-0,3%
22	EFHK	HELSINKI-VANTAA	243	9,5%
23	EDDL	DUESSELDORF	238	-8,9%
24	EGSS	LONDON/STANSTED	230	3,0%
25	EPWA	CHOPINA W WARSZAWIE	222	11,3%
26	EGCC	MANCHESTER	218	-2,7%
27	LIMC	MILANO MALPENSA	217	9,6%
28	LGAV	ATHINAI/ELEFTHERIOS VENIZELOS	199	4,4%
29	EDDT	BERLIN-TEGEL	183	-15,7%
30	GCLP	GRAN CANARIA	180	10,5%
31	EDDH	HAMBURG	171	-5,6%
32	LTAC	ANKARA-ESENBOGA	169	29,4%
33	LLBG	TEL AVIV/BEN GURION	163	23,3%
34	EDDK	KOELN-BONN	159	1,2%
35	LKPR	PRAHA RUZYNE	159	3,7%
36	EGGW	LONDON/LUTON	151	-1,6%
37	LIML	MILANO LINATE	144	-0,5%
38	EGPH	EDINBURGH	141	4,8%
39	LROP	BUCURESTI/HENRI COANDA	141	0,9%
40	LFLL	LYON SAINT-EXUPERY	135	-0,8%
41	LFMN	NICE-COTE D'AZUR	133	7,4%
42	LHBP	BUDAPEST LISZT FERENC INT.	132	14,3%
43	EDDS	STUTTGART	132	6,5%
44	LFBO	TOULOUSE BLAGNAC	123	4,2%
45	EGBB	BIRMINGHAM	122	-7,7%
46	LEMG	MALAGA/COSTA DEL SOL	122	5,1%
47	GMMN	CASABLANCA/MOHAMMED	118	3,7%
48	EDDB	SCHOENEFELD-BERLIN	118	-5,2%
49	LFML	MARSEILLE PROVENCE	116	-1,8%
50	LEPA	PALMA DE MALLORCA	114	1,9%
	TOTALS and % TOTAL TRAFFIC		12849	58,9%

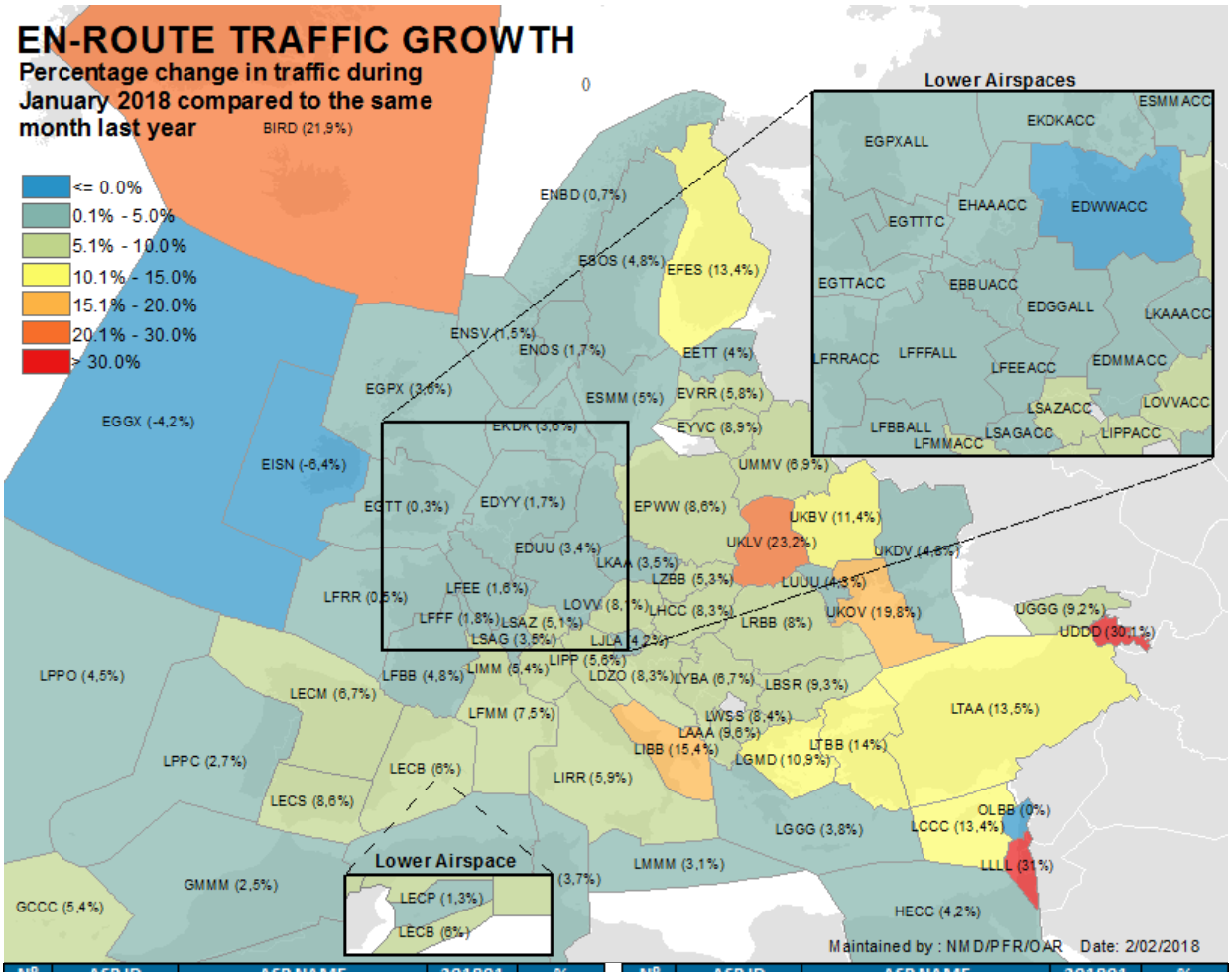
Top 50 Departure Airports with average daily traffic and percentage compared to same period of previous year

N°	ICAO	AIR OPERATOR	201801	%
1	RYR	RYANAIR	1752	4,8%
2	DLH	DEUTSCHE LUFTHANSA	1264	9,0%
3	THY	TURKISH AIRLINES	1239	22,2%
4	EZY	EASYJET	1072	10,3%
5	AFR	AIR FRANCE	823	1,2%
6	SAS	SCANDINAVIAN AIRLINES SYSTEM	689	-3,9%
7	BAW	BRITISH AIRWAYS	620	1,2%
8	KLM	KLM ROYAL DUTCH AIRL	595	7,3%
9	EWG	EUROWINGS AG	510	259,4%
10	AZA	ALITALIA	478	-4,5%
11	WZZ	WIZZ AIR	447	20,7%
12	PGT	PEGASUS HAVA TASI.	434	16,2%
13	VLG	VUELING AIRLINES SA	421	15,7%
14	BEE	JERSEY EUROPEAN T/A FLYBE	367	-2,1%
15	SWR	SWISS INTERNATIONAL	356	-2,6%
16	TAP	TAP/AIR PORTUGAL	340	13,1%
17	FIN	FINNAIR O/Y	324	11,0%
18	WIF	WIDEROE	318	-4,1%
19	NAX	NORWEGIAN AIR SHUTTLE	304	-1,3%
20	LOT	LOT-POLISH AIRLINES	299	17,9%
21	AFL	AEROFLOT-RUSSIAN	288	9,4%
22	AUA	AUSTRIAN AIRLINES	284	4,6%
23	AEA	AIR EUROPA	234	10,5%
24	QTR	QATAR AIRWAYS COMP.	228	21,7%
25	IBE	IBERIA	227	6,7%
26	IBK	NORWEGIAN AIR INTERNATIONAL	217	29,6%
27	HOP	HOP (MERGE OF BZH + RAE + RLA)	194	-7,1%
28	RAM	ROYAL AIR MAROC	192	0,5%
29	UAE	EMIRATES	190	-0,9%
30	ANE	AIR NOSTRUM	187	1,4%
31	BEL	BRUSSELS AIRLINES	177	-4,3%
32	EIN	AER LINGUS TEORANTA	161	2,8%
33	BCS	EUROPEAN AIR TRANSP.	154	6,6%
34	AUI	UKRAINE INTERNATIONA	145	4,2%
35	BTI	AIR BALTIC CORPORAT.	125	14,8%
36	OAL	OLYMPIC	111	2,1%
37	EZS	EASY JET SWITZERLAND	109	4,8%
38	TRA	TRANSAVIA.COM	107	-6,3%
39	LOG	LOGANAIR	107	13,6%
40	AEE	AEGEAN AIRLINES	104	0,3%
41	SHT	BAW SHUTTLE	101	3,0%
42	UAL	UNITED AIRLINES INC.	99	-8,6%
43	TOM	THOMSON FLY LTD	98	-3,6%
44	DAH	AIR ALGERIE	97	1,4%
45	NJE	NETJETS	96	3,6%
46	DAL	DELTA AIR LINES INC.	96	4,6%
47	CFE	CITYFLYER EXPRESS	94	17,7%
48	TAY	TNT INTERNATIONAL	93	2,2%
49	IBS	IBERIA EXPRESS	91	12,0%
50	ROT	TAROM	88	0,5%
	TOTALS and % TOTAL TRAFFIC		17146	69,3%

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

N°	ICAO	AIR OPERATOR	201801	%
		Unidentified	1593	4,5%

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

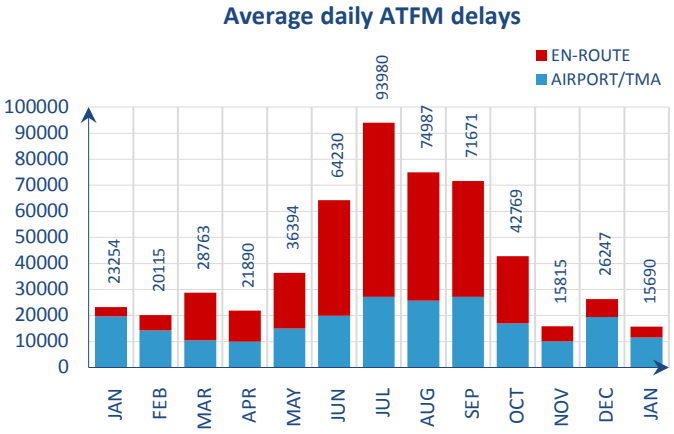


Nº	ASP ID	ASP NAME	201801	%
1	BIRDACC	REYKJAVIK ACC	373	21,9%
2	DAAAACC	ALGERS ACC	465	3,6%
3	DTTCACC	TUNIS ACC	251	3,7%
4	EBBUACC	BRUSSELS CANAC	1431	3,3%
5	EDGGALL	LANGEN ACC_FIR	2962	4,2%
6	EDMMACC	MUNCHEN ACC	2646	3,9%
7	EDUUUAC	KARLSRUHE UAC	4317	3,4%
8	EDWWACC	BREMEN ACC	1415	-6,0%
9	EDYYUAC	MAASTRICHT UAC	4378	1,7%
10	EETTACC	TALLIN ACC	494	4,0%
11	EFESACC	TAMPERE ACC	509	13,4%
12	EGGXOCA	SHANWICK OACC	1084	-4,2%
13	EGPXALL	SCOTTISH ACC	2344	3,6%
14	EGTTACC	LONDON ACC	4622	0,3%
15	EGTTTC	LONDON TMA TC	3341	1,3%
16	EHAAACC	AMSTERDAM ACC(245-)	1416	2,8%
17	EIDWACC	DUBLIN ACC	566	3,5%
18	EISNACC	SHANNON ACC	948	-6,4%
19	EKDKACC	COPENHAGEN ACC	1364	3,7%
20	ENBDACC	BODO ACC	560	0,7%
21	ENOSACC	OSLO ATCC	877	1,7%
22	ENSVACC	STAVANGER ATCC	551	1,5%
23	EPWWACC	WARSZAWA ACC	1828	8,6%
24	ESMMACC	MALMO ACC	1325	5,0%
25	ESOSACC	STOCKHOLM ACC	1061	4,8%
26	EVRRACC	RIGA ACC	635	5,8%
27	EYVCACC	VILNIUS ACC	575	8,9%
28	GCCCACC	CANARIAS ACC/FIC	961	5,4%
29	GMMMACC	CASABLANCA ACC	1141	2,5%
30	HECCACC	CAIROACC	628	4,2%
31	LAAAACC	TIRANA ACC	354	9,6%
32	LBSRACC	SOFIA ACC	1663	9,3%
33	LCCCACC	NICOSIA ACC	854	13,4%
34	LDZOACC	ZAGREB ACC	976	8,3%
35	LECBACC	BARCELONA ACC	1585	6,0%
36	LECMALL	MADRID ALL ACC	2639	6,7%
37	LECPACC	PALMA ACC	310	1,3%
38	LECSACC	SEVILLA ACC	889	8,6%

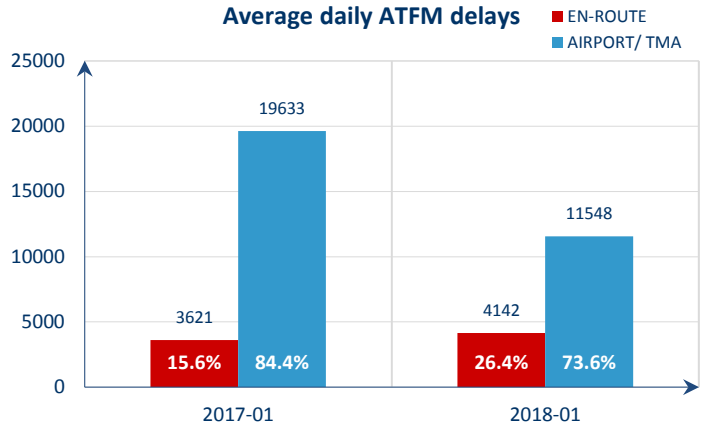
Nº	ASP ID	ASP NAME	201801	%
39	LFBBALL	BORDEAUX ALL ACC	1979	4,8%
40	LFEEACC	REIMS U/ACC	2257	1,6%
41	LFFFALL	PARIS ALL ACC	2885	1,8%
42	LFMMACC	MARSEILLE ACC	2257	7,5%
43	LFMMAPP	MARSEILLE TMA	645	5,1%
44	LFRRACC	BREST U/ACC	2205	0,6%
45	LGGGACC	ATHINAI CONTROL	909	3,8%
46	LGMDACC	MAKEDONIA CONTROL	694	10,9%
47	LHCCACC	BUDAPEST ACC	1703	8,3%
48	LIBBACC	BRINDISI ACC	591	15,4%
49	LIMMACC	MILANO ACC	1806	5,4%
50	LIPPACC	PADOVA ACC	1353	5,6%
51	LIRRACC	ROMA ACC	1728	5,9%
52	LJLAACC	LJUBLJANA ACC	567	4,2%
53	LKAAACC	PRAGUE ACC	1790	3,5%
54	LLLLACC	TEL AVIV ACC	423	31,0%
55	LMMMACC	MALTA ACC	266	3,1%
56	LOVVACC	WIEN ACC	1810	8,1%
57	LPPCACC	LISBOA ACC/UAC	1417	2,7%
58	LPPOOAC	SANTA MARIA OACC	416	4,5%
59	LQSBACC	BOSNIA-HERZEGOVINA	85	16,4%
60	LRBBACC	BUCURESTI ACC	1512	8,0%
61	LSAGACC	GENEVA ACC	1464	3,5%
62	LSAZACC	ZURICH ACC	1747	5,1%
63	LTAAACC	ANKARA ACC	3211	13,5%
64	LTBBACC	ISTANBUL ACC	1873	14,0%
65	LUUUACC	CHISINAU ACC	97	4,3%
66	LWSSACC	SKOPJE ACC	232	8,4%
67	LYBAACC	BEOGRADE ACC	1200	6,7%
68	LZBBACC	BRATISLAVA ACC	1064	5,4%
69	OLBBACC	BEIRUT ACC	133	0,0%
70	UDDDACC	YEREVAN ACC	134	30,1%
71	UGGGACC	TBILISI ACC	358	9,2%
72	UKBVACC	KIEV ACC	352	11,4%
73	UKDVACC	DNIPROPETROVSK ACC	44	4,8%
74	UKLVACC	L'VIV ACC	266	23,2%
75	UKOVACC	ODESSA ACC	200	19,8%
76	UMMVACC	MINSK ACC	702	6,9%

The Sevilla, Lisbon, Canarias, Madrid and Casablanca ACCs variation is due to increased traffic in the South/West axis. However, the highest relative traffic increases in January 2018 were in Tel Aviv, Yerevan, L'viv, Reykjavik and Bosnia-Herzegovina ACCs. Traffic increase in Ukraine is partially due to an increase of overflights from/to Turkey. Israel is now integrated in IFPS and the inclusion of Israeli domestic traffic explains much of the traffic growth for Tel Aviv ACC. Reykjavik ACC variation is due to weather patterns that resulted in transatlantic flights adopting more northerly routes. The traffic variation in Turkish ACCs is due to flight recovery of holidaymakers in Turkey.

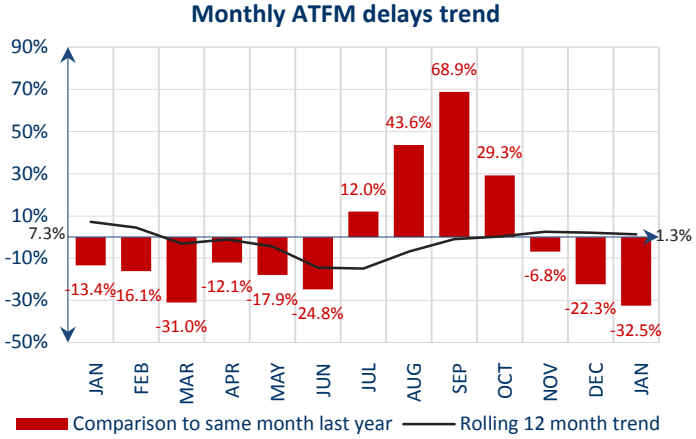
2. ATFM DELAY AND ATTRIBUTIONS



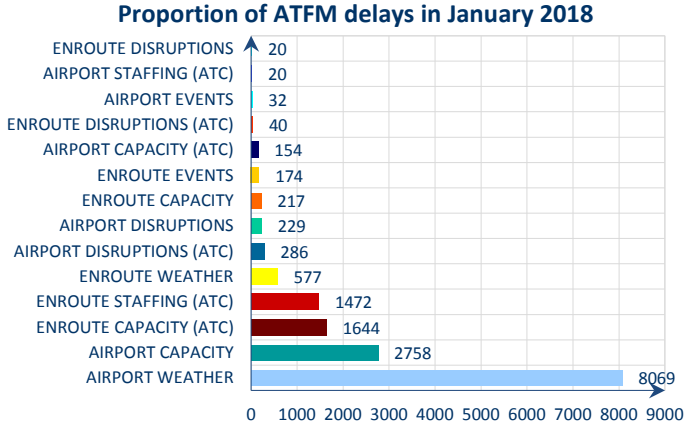
Total ATFM delays decreased by 32.5% in January 2018.



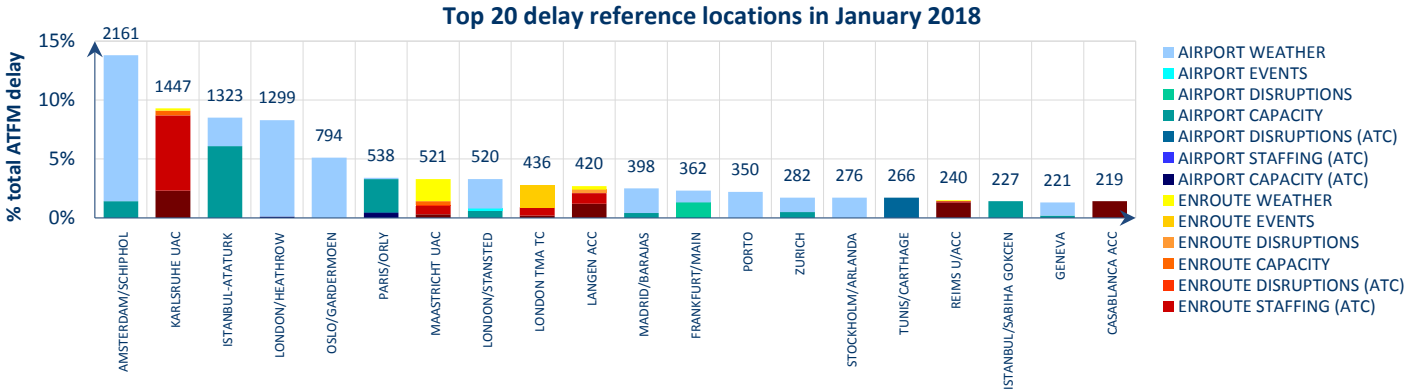
En-route ATFM delays increased by 14.4% and airport ATFM delays decreased by 41.2%.



The rolling 12-month trend shows that ATFM delay was 1.3% higher during the period February 2017 – January 2018 compared to February 2016 – January 2017.



Airport weather (51.4%), airport capacity (17.6%) and en-route ATC capacity (10.5%) were the main causes of ATFM delays in January 2018.

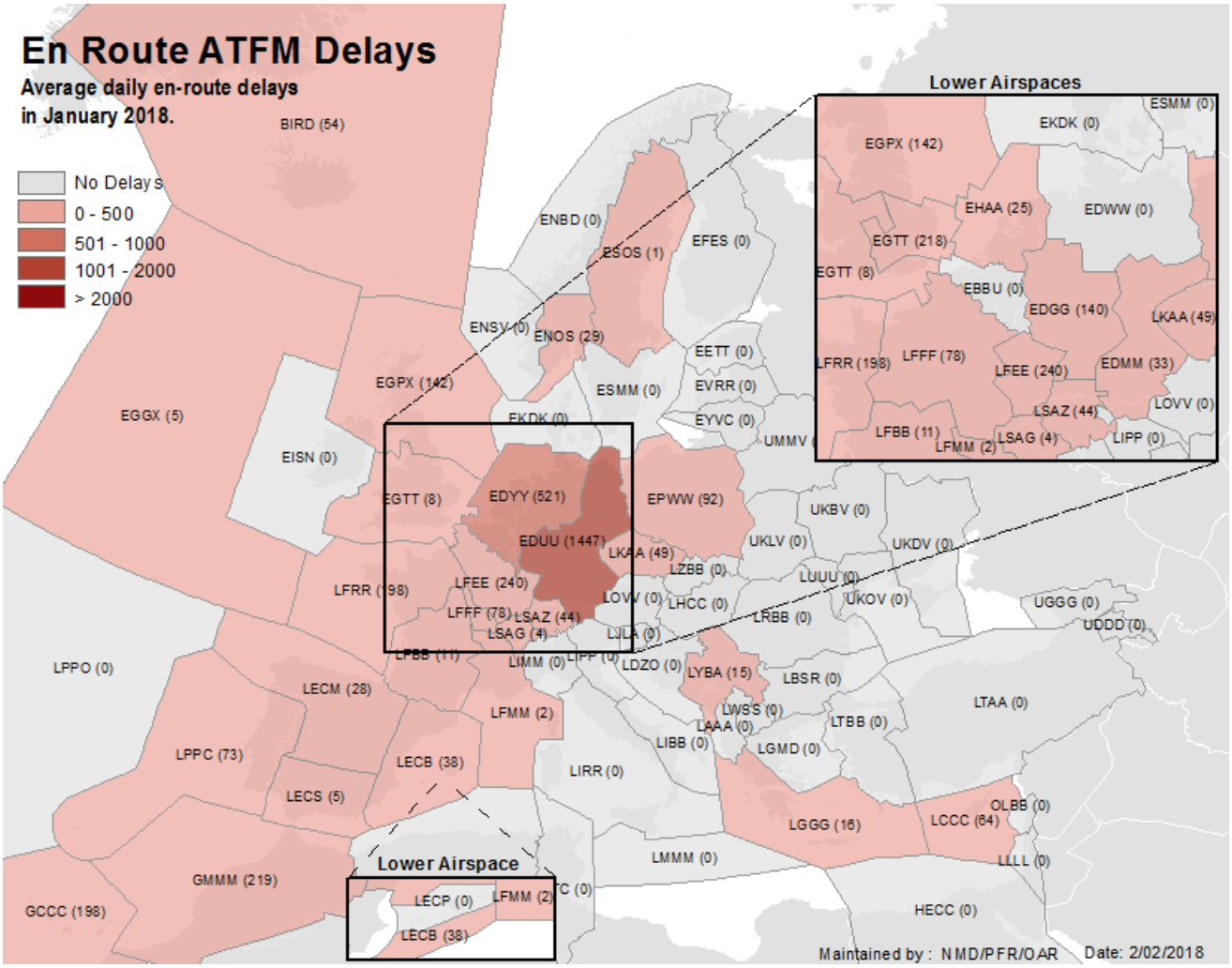


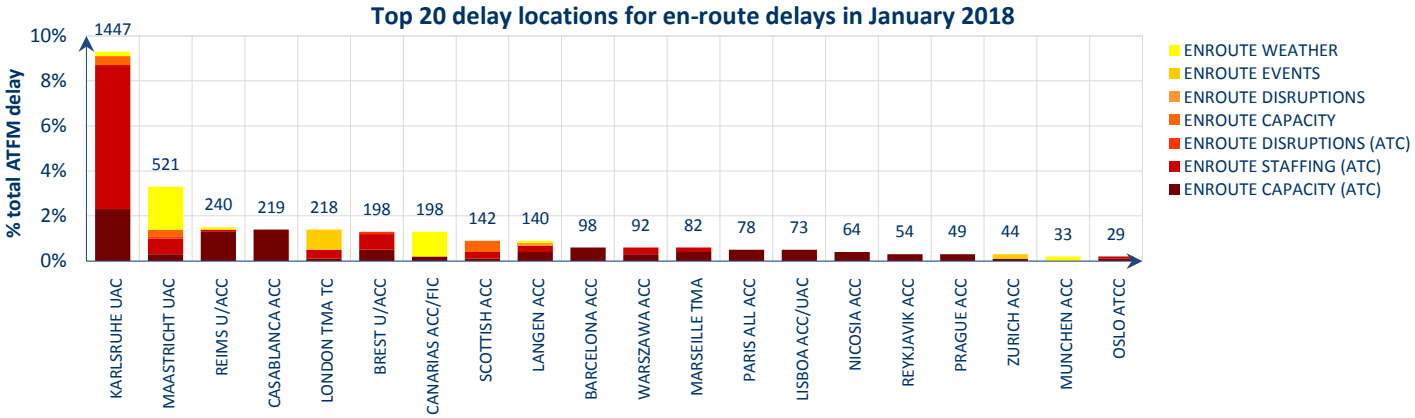
These are the top 20 delay generating locations for the reporting month with respect to total ATFM delays. Figures are the average daily delays in minutes for the individual locations.

- Seasonal weather impacted operations strongly at Amsterdam/Schiphol, London/Heathrow and Oslo/Gardermoen airports and, to a lesser extent, at Istanbul/Atatürk, London/Stansted, Madrid/Barajas, Frankfurt, Porto, Zurich and Stockholm/Arlanda airports;
- Capacity issues at Istanbul/ Atatürk and Amsterdam/Schiphol airports;
- Tower/taxiway maintenance in conjunction with airport capacity at Paris/Orly airport;
- En-route ATC staffing issues in Karlsruhe UAC;
- En-route capacity delays in Karlsruhe, Langen, Reims and Casablanca ACCs;
- Implementation of Extended Computer Display system in London TC;
- Technical issues with local flight information system affected ground handling at Frankfurt airport on 02 January and generated 6,276 minutes of ATFM delay.

3. EN-ROUTE ATFM DELAYS

EN-ROUTE ATFM DELAY PER LOCATION



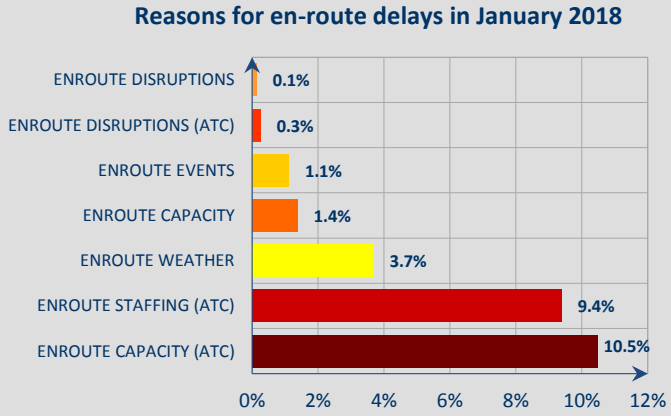


These are the top 20 en-route ATFM delay generating locations for the reporting month with respect to total ATFM delays. Figures are the average daily delays in minutes for the individual locations.

The top 20 en-route ATFM delay locations generated **25.6%** of the monthly total (network) ATFM delay.
The top 5 en-route ATFM delay locations generated **16.9%** of the monthly total (network) ATFM delay.

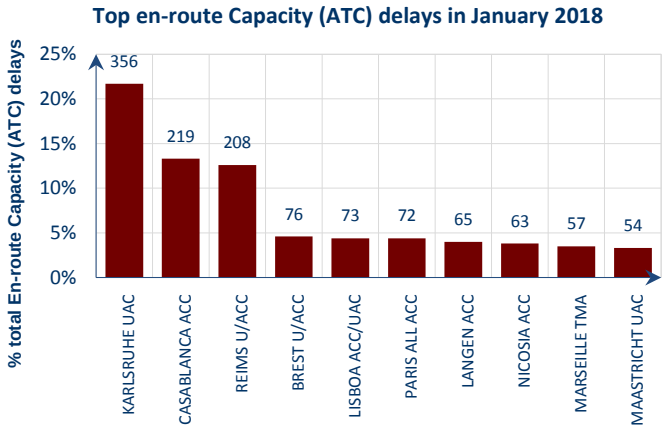
More detailed information available in the Monthly per ACC Summary Report via the **NM ATFCM Statistics website.**

EN-ROUTE ATFM DELAY PER DELAY GROUP

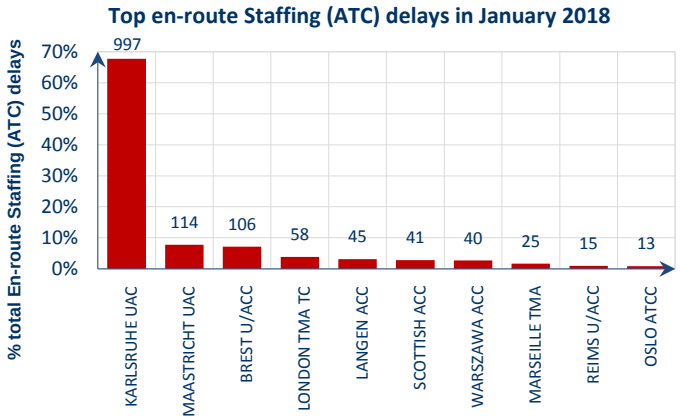


En-route ATFM delays accounted for 26.4% of all ATFM delays. Most of this delay was caused by en-route ATC capacity, en-route ATC staffing and en-route weather as explained in detail below. The other causes were:

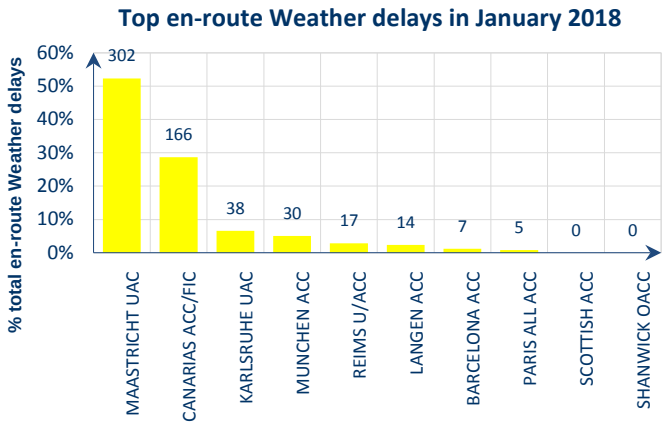
En-route capacity; Military activities in Scottish, Maastricht and Karlsruhe ACCs;
En-route events; Implementation of Extended Computer Display system in London TC;
En-route ATC disruptions; Radar problem in Maastricht UAC on 16 January and communication failure in Brest ACC on 18 January.



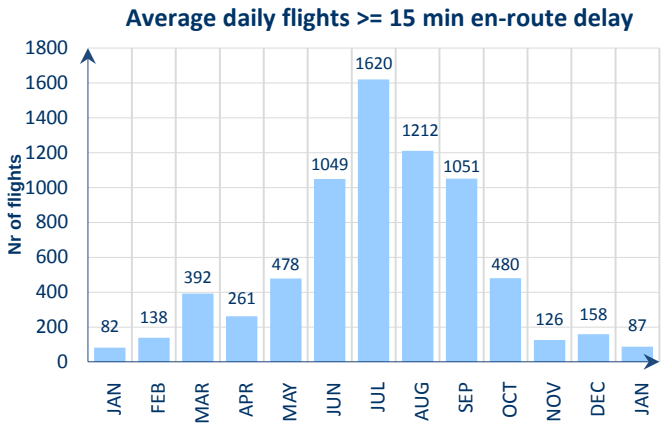
Karlsruhe, Casablanca and Reims ACCs were the biggest generators of en-route ATC capacity delays in January.



Karlsruhe UAC generated 68% of en-route ATC staffing delays due to staff shortage.

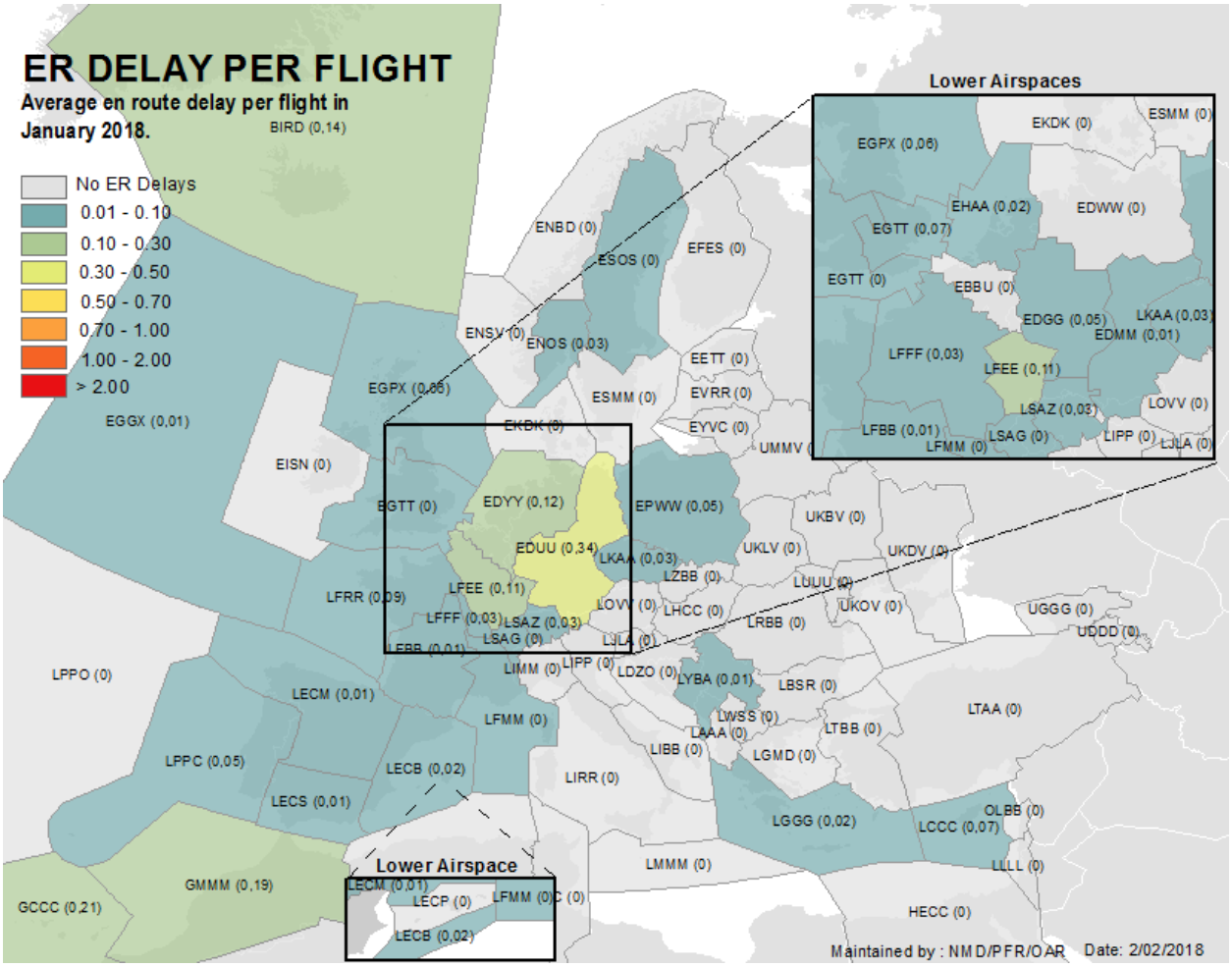


Turbulence in Maastricht UAC on 27 January impacted operations with 7,870 minutes of ATFM delay. Strong winds in Canarias ACC on 06 January generated 4,007 minutes of ATFM delay.

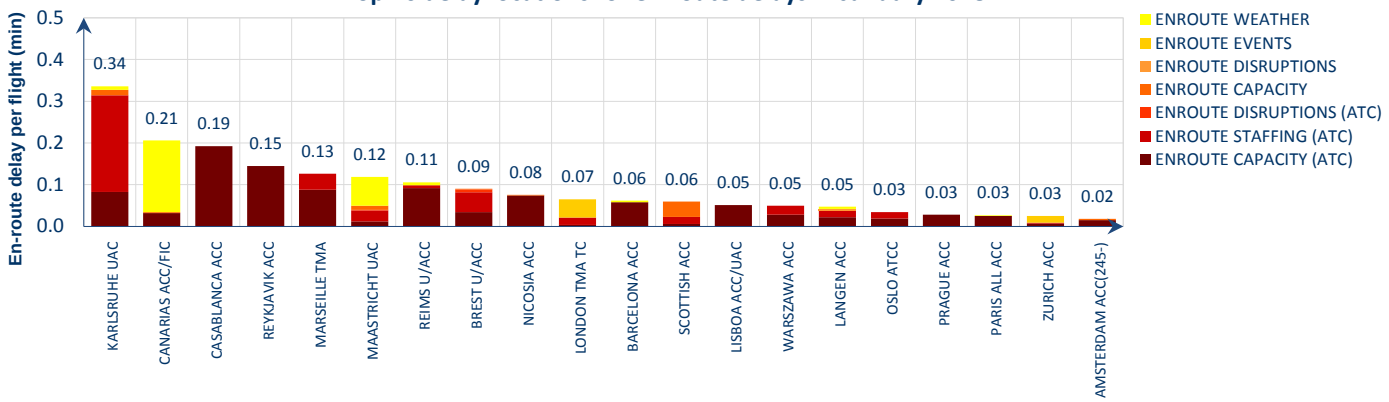


The average daily flights with an en-route ATFM delay of at least 15 minutes decreased from 158 flights/day in January 2018 to 87 flights/day in January 2018.

EN-ROUTE ATFM DELAY PER FLIGHT



Top 20 delay locations for en-route delays in January 2018



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.

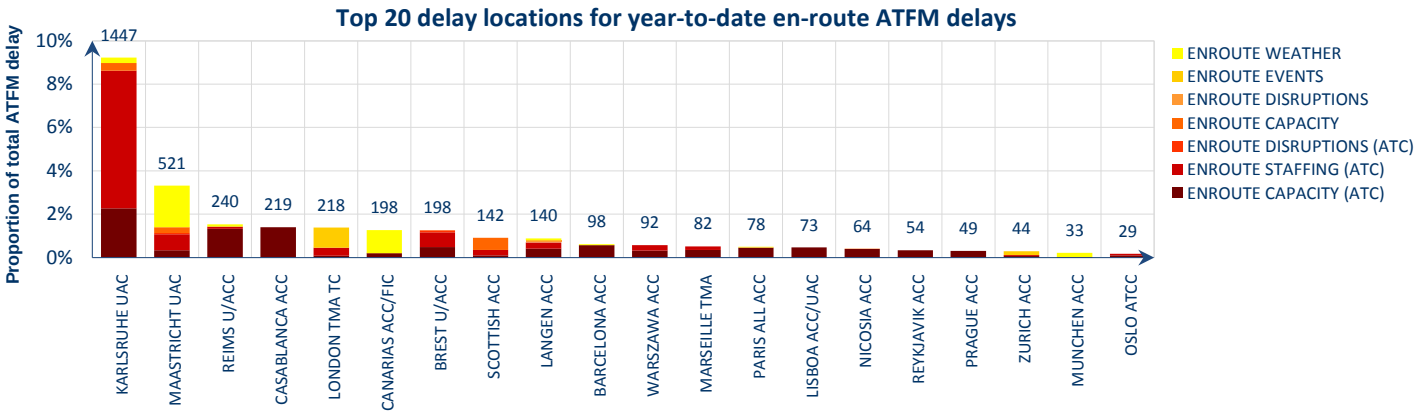
Karlsruhe UAC en-route ATFM delay/flight decreased from 0.56 min/flight in December 2017 to 0.34 min/flight in January 2018, mainly due to less impact of weather in January;

Canarias ACC en-route ATFM delay/flight decreased from 0.31 min/flight in December 2017 to 0.21 min/flight in January 2018, mainly due to a significant decrease of en-route capacity issues;

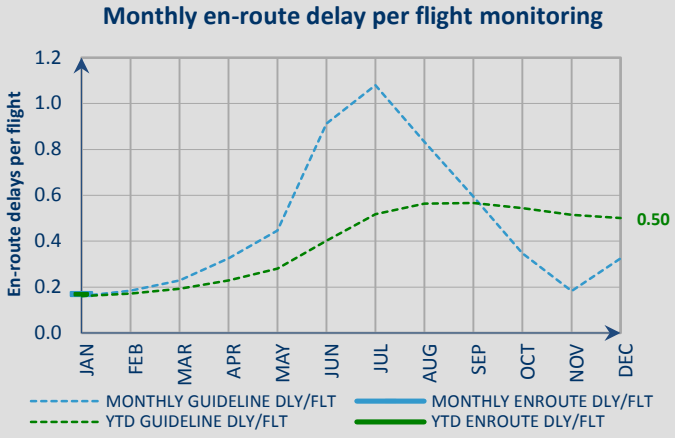
Casablanca and Reykjavik ACCs entered the top 20 delay locations in January 2018 due to en-route capacity issues;

Marseille ACC en-route ATFM delay/flight increased from 0.03 min/flight in December 2017 to 0.13 min/flight in January 2018 due to an increase of en-route capacity and staffing issues.

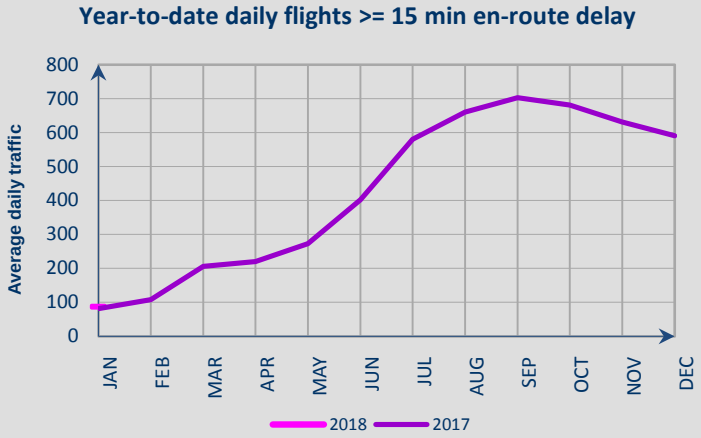
EN-ROUTE ATFM DELAY YEAR-TO-DATE



These are the top 20 en-route delay locations for 2018 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 **25.6%** of the total ATFM (network) delay.
The top 5 en-route delay locations generated **16.9%** of the total ATFM (network) delay.



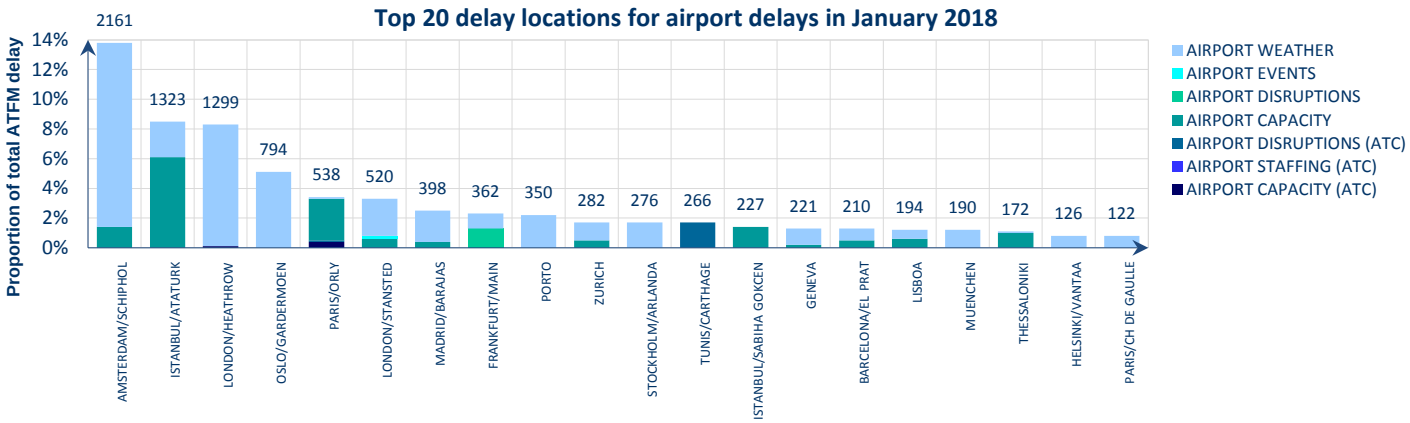
Reporting month: The average en-route ATFM delay per flight in the NM area[iii] in January was 0.17 min/flt, which is above the corresponding monthly guideline[iv] value of 0.16 min/flt.



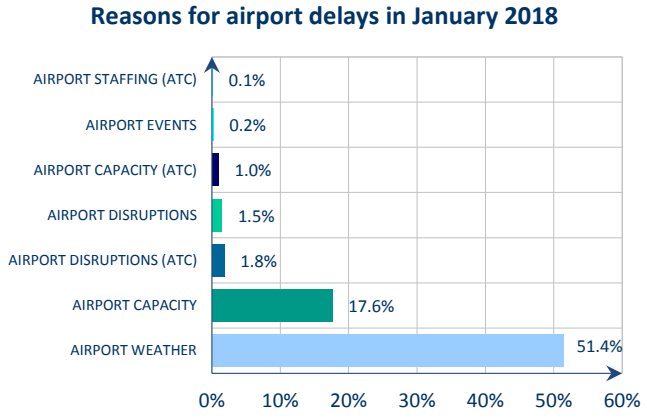
An average of 87 flights/day had an en-route ATFM delay of at least 15 minutes in 2018. The corresponding figure in 2017 was 82 flights/day.

4. AIRPORT/TMA ATFM DELAYS

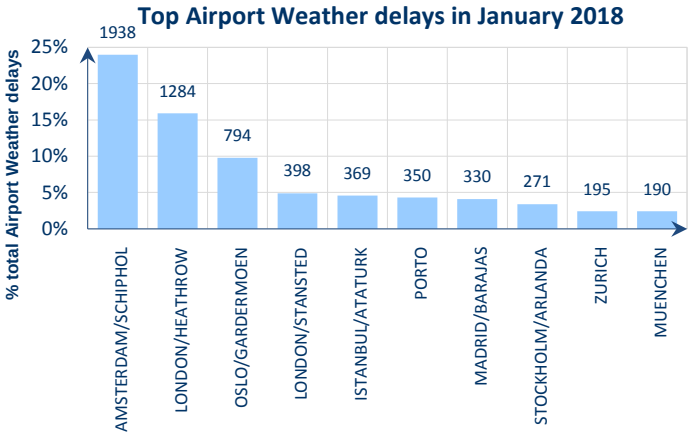
AIRPORT/TMA ATFM DELAY PER LOCATION



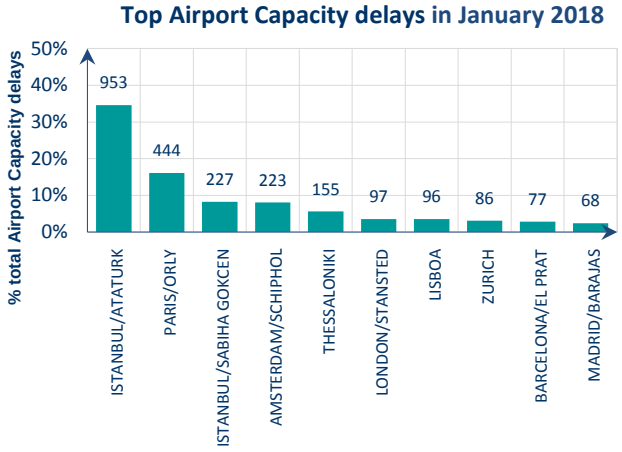
AIRPORT/TMA ATFM DELAY PER DELAY GROUPS



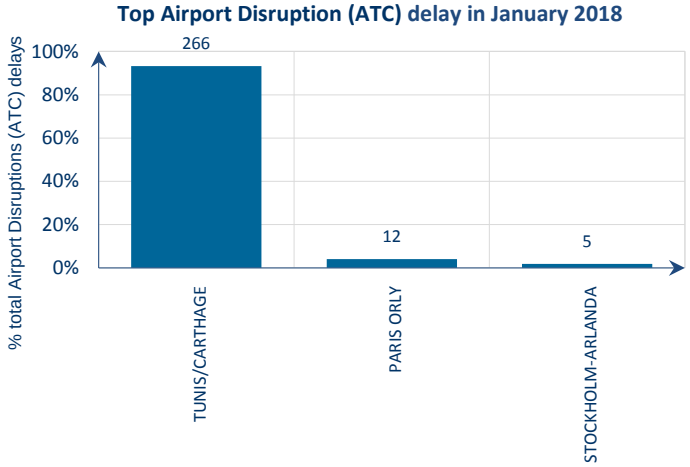
Airports accounted for 73.6% of all ATFM delays in January 2018, mainly due to airport weather and aerodrome capacity.



Seasonal weather impacted operations strongly at Amsterdam/Schiphol, with a peak of 13,188 minutes of delay on 18 January. London/Heathrow airport was impacted by strong winds especially on 03 January with 8,535 minutes of ATFM delay.

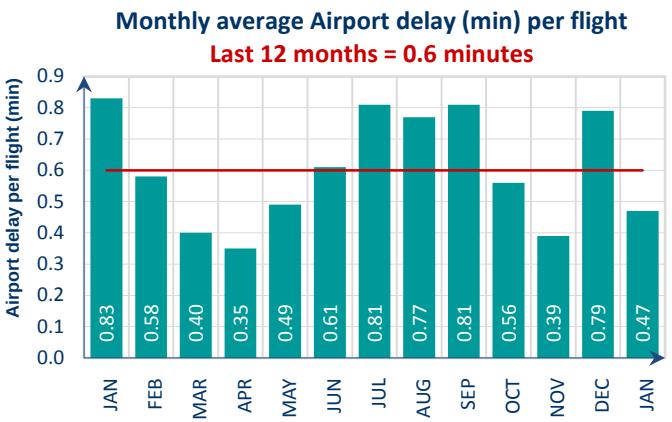


Capacity issues at both Istanbul airports. Tower/taxiway maintenance in conjunction with airport capacity at Paris/Orly airport.

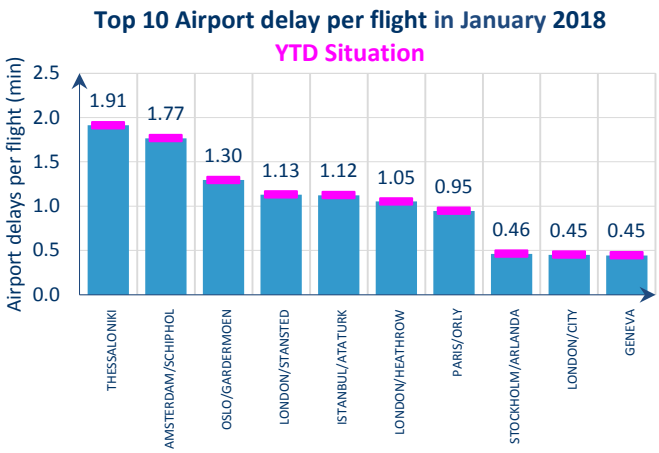


New radar equipment implementation throughout the month at Tunis/Carthage airport generated 8,258 minutes of ATFM delay;

AIRPORT/TMA ATFM DELAY PER FLIGHT

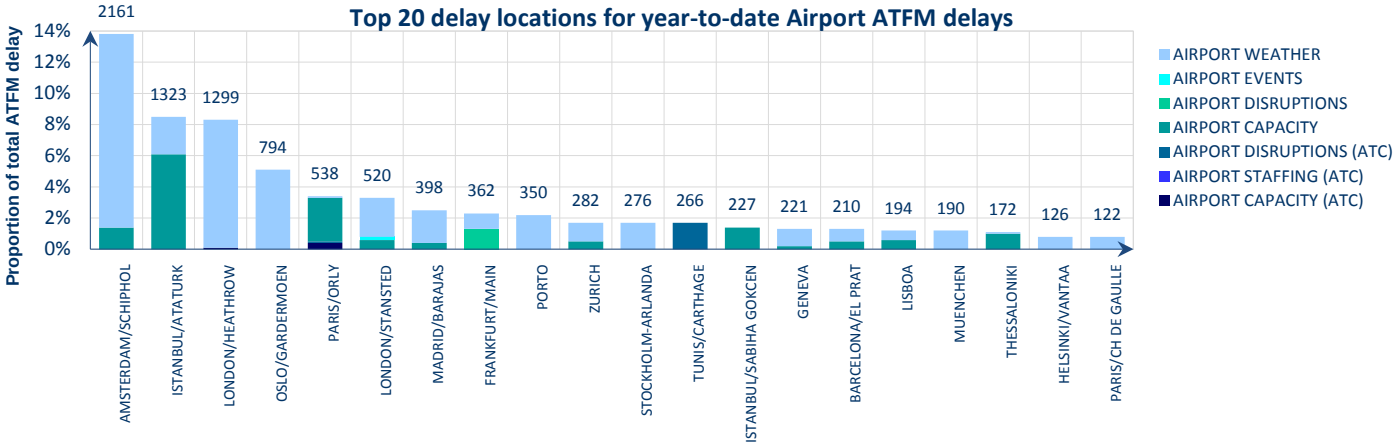


Average airport/TMA delay per flight decreased from 0.83 min/flt in January 2017 to 0.47 min/flt in January 2018.



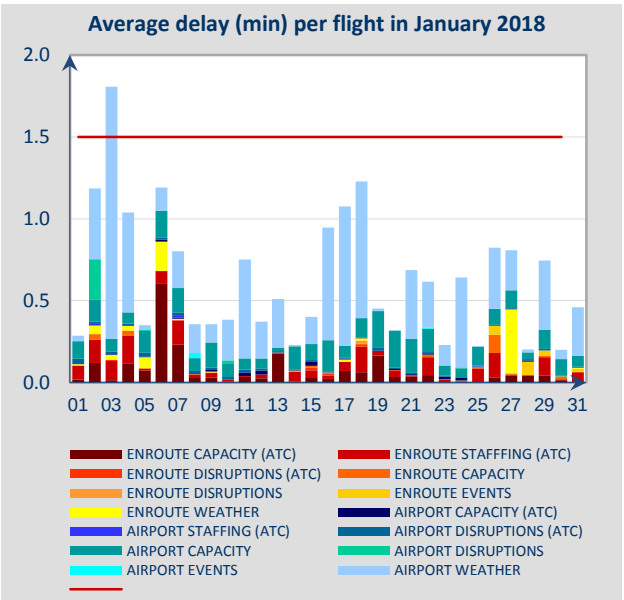
Thessaloniki airport had the highest delay per flight in January. Istanbul/Ataturk airport delay per flight decreased from 2.12 min/flt in January 2017 to 1.12 min/flt in January 2018.

AIRPORT/TMA ATFM DELAY YEAR-TO-DATE



The top 20 Airport/TMA delay locations have generated **63.6%** of the total ATFM (network) delay in 2018.
The top 5 Airport/TMA delay locations have generated **39.1%** of the total ATFM (network) delay in 2018.

5. DAILY EVOLUTION

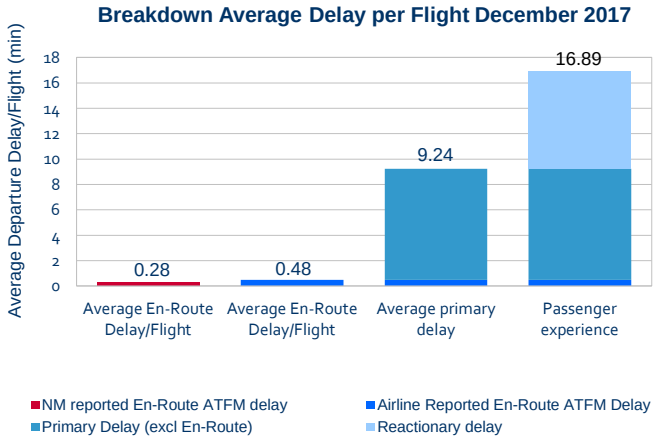


One day in January 2018 had an average ATFM delay/flt exceeding 1.5 min/flt:
03January 2018: Strong winds impacted operations at Amsterdam/Schiphol and London/Heathrow airports; Low visibility conditions generated delays at Madrid/Barajas and Porto airports; ATC staffing issues in Karlsruhe UAC; Airport capacity delays at Lisbon, Barcelona and Istanbul/Sabiha Gökcen airports.

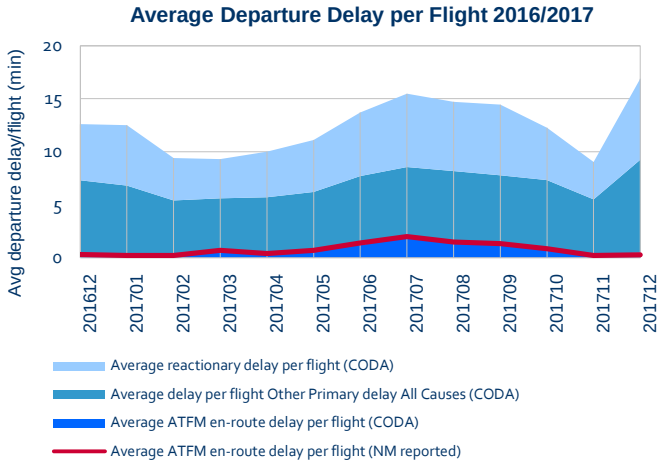
6. ALL AIR TRANSPORT DELAYS (SOURCE: CODA)

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 airlines. Data coverage is 65% of the commercial flights in the ECAC region for November 2017. ATFM delays reported by airlines could 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.

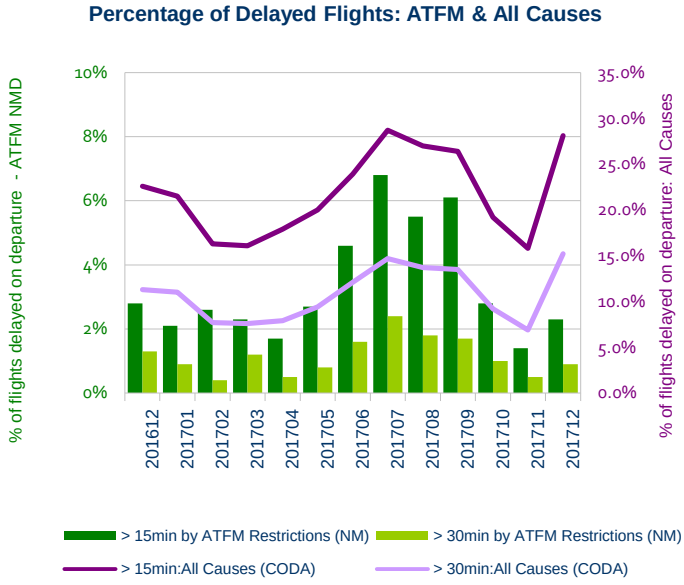
For instance, a flight with an ATFM delay may also have a handling delay absorbed within the ATFM delay. In the event of a long delay an example being during ATC industrial action a flight may keep its original schedule however when it’s flight plan is submitted for example a day later any ATFM delay allocated may be lower or zero, in this case airline reported delay will exceed NM reported ATFM delay.



Based on airline data, the average departure delay per flight from ‘All-Causes’ was 16.89 minutes per flight, an increase in comparison to December 2016 where the average delay was 13.64 minutes per flight. Primary delays counted for 55% (or 9.24 min/flt), with reactionary delays representing the smaller remaining share of 45% at (7.65 min/flt).



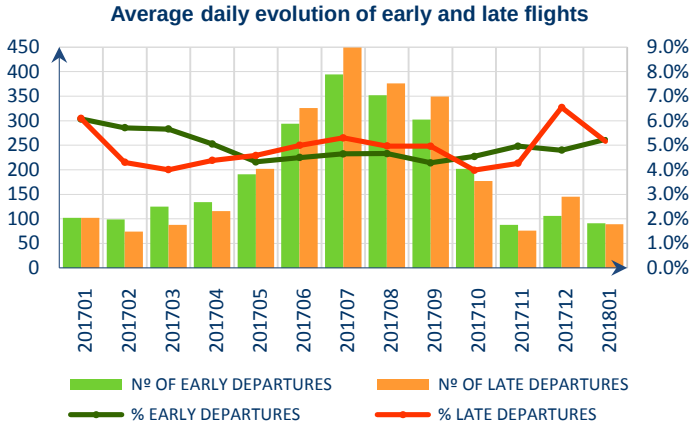
Further analysis of the past 12 months shows that the average ‘All-Causes’ en-route ATFM delay reported by airlines was 0.28 minutes per flight. This lower when compared to the NM reported average en-route ATFM delay of 0.48 minutes per flight in December 2017.



The percentage of flights delayed from ‘All-Causes’ remained stable with (those exceeding 15 minutes) increasing by 5.5 percentage points to 28.1%. Those (exceeding 30 minutes) also increased with 15.2% of flights being delayed in December 2017.

For more information on CODA delays **http://www.eurocontrol.int/sites/default/files/publication/files/flad-dec-2017.pdf**

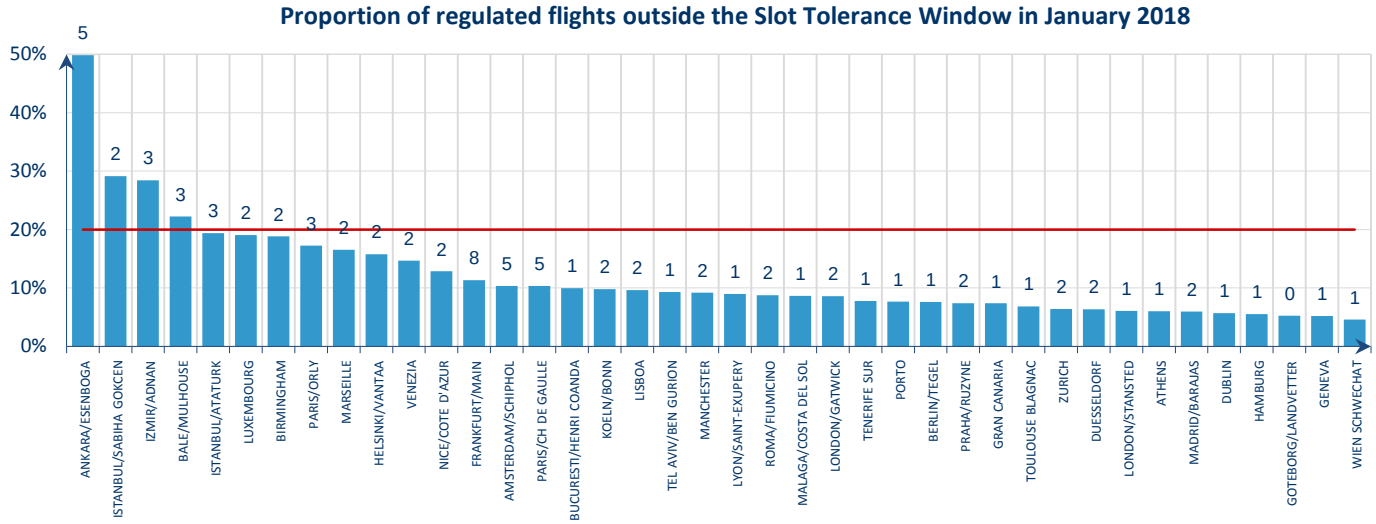
7. ATFM SLOT ADHERENCE



The percentage of early departures for January 2018 is 5.2% of regulated flights, which is a decrease of 0.9 percentage points compared to January 2017.

The percentage of late departures for January 2018 is 5.2% of regulated flights, which is a decrease of 0.9 percentage points compared to January 2017.

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

PLANNED EVENTS

London TC introduced on 26 January, as planned, ExCDS (full electronic flight progress strip capability), along with the system training of APP ATCOs for Luton and Stansted, generating 4,528 minutes of ATFM delay. Originally, capacity reductions had been planned to the agreed service delivery targets for Luton and Stansted arrivals. This amount of delay presented 67 % of total delay, 6,755min, generated by London TC during January. Additional 785 minutes of ATFM delay affected arrivals to Stansted (EGSS).

AIRPORTS

Local Plans in January

A number of airports undertook infrastructure and technical system improvement works during January. These improvements as well as some special events had at most a minor impact on local airport operations, unless otherwise stated.

Special Events

- WWII ordnance disposal at Bremen with zero-rate regulations on the 10, 11 and 26 January.

Completed

- Runway maintenance at Katowice, Manchester and Tel Aviv/Ben Gurion airports;
- ILS maintenance at Antalya airport.

Ongoing

- Runway maintenance at Copenhagen, Dublin, Istanbul/Sabiha Gökcen, Krakow and Thessaloniki airports;
- Taxiway and/or apron improvements at Antalya, Dublin, Frankfurt/Main, Hamburg, Ibiza, Larnaca, Lisbon, Nice, Palma de Mallorca, Paris/Orly, Rome/Fiumicino, Tenerife/Sur, Thessaloniki (2,950 minutes of ATFM delay in conjunction with weather) and Zurich airports;
- Tower renovation at Paris/Orly airport (in conjunction with taxiway maintenance total of 12,144 minutes of ATFM delay were generated);
- ILS maintenance at Warsaw airport;
- Terminal building improvements/works at Barcelona, Budapest, Frankfurt/Main, Malta, Manchester and Oslo/Gardermoen airports.

DISRUPTIONS

Technical

- New radar equipment implementation throughout the month at Tunis/Carthage airport generated 8,258 minutes of ATFM delay;
- Technical issues with the airport local flight information system generated 6,276 minutes of ATFM delay at Frankfurt airport on 02 January;
- A hole on the taxiway at Köln/Bonn airport generated 1,198 minutes of ATFM delay on 09 January;
- A hole on the taxiway at Nantes/Atlantique airport generated 1,066 minutes of ATFM delay on 21 January.

Weather

- Strong winds severely disrupted operations at Amsterdam/Schiphol airport on 18 January. NM estimates there were 330 fewer flights than the previous Thursday, 23 diversions and 13,000 minutes of ATFM delay.

9. NM ADDED VALUE

FLIGHTS WITH DELAY > 30'

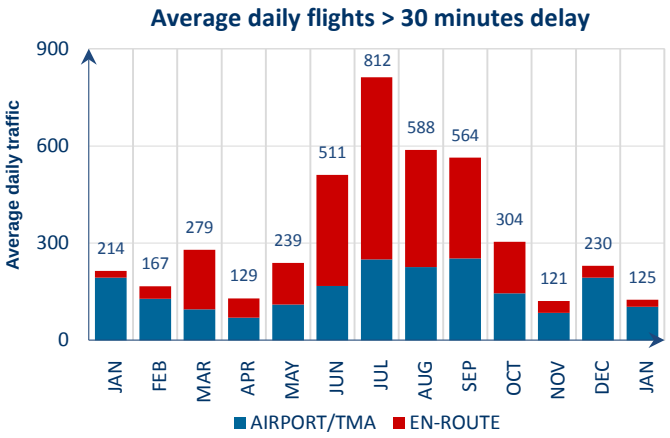
The number of flights with more than 30 minutes of ATFM delay decreased between January 2017 and January 2018.

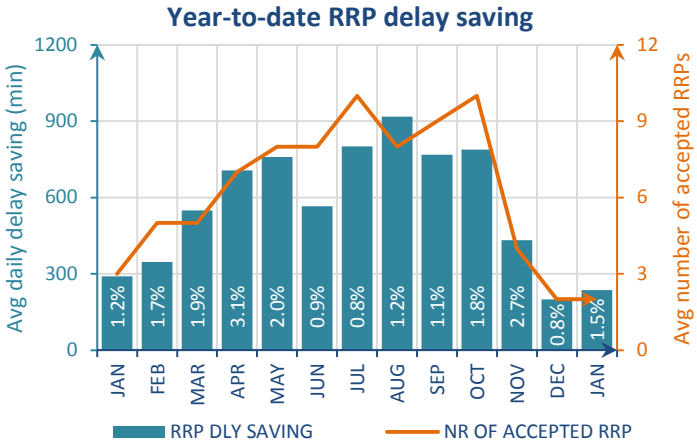
In January 2018,17.6% of flights with more than 30 minutes of ATFM delay were en-route and 82.4% were airport.

RRP DIRECT DELAY SAVINGS

On average 2 RRPs/day were executed saving 200 min/day, accounting for 1.5% of ATFM delays.

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





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http://www.eurocontrol.int/articles/network-operations-monitoring-and-reporting

i See Notice on page 2 for more information on traffic and delay comparison.
ii Internals, international arrivals and departures, excluding overflights.
iii See Notice on page 2 for more information on NM Area .
iv NM's calculation that provides the guideline en-route delay (min) requirements to achieve the annual target (0.5 min/flight).
v NM has revised the delay saving method. Where flights are subject to scenarios, delay savings from RRPs are considered when the RRP is sent 3 hours (or less) in advance of the EOBT.