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NOTICE

Incomplete traffic data – 3 April
NM operational data archive for 3 April is incomplete due to NM system outage (See note i)

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 chapters 2, 3 and 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.

<table>
<thead>
<tr>
<th>EN-ROUTE CAPACITY (ATC)</th>
<th>AIRPORT CAPACITY (ATC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN-ROUTE STAFFING (ATC)</td>
<td>AIRPORT STAFFING (ATC)</td>
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<tr>
<td>EN-ROUTE DISRUPTIONS (ATC)</td>
<td>AIRPORT DISRUPTIONS (ATC)</td>
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<td>AIRPORT DISRUPTIONS</td>
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<tr>
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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.

ATFM Statistics dashboard
More detailed information available via the new ATFM Statistics dashboard.
1. TOTAL TRAFFIC

Traffic increased by 4.1% in June 2018.

The traffic increase of 4.1% for June was in line with the high forecast published in February 2018. Last week of June was the busiest ever week for the network, with a record of 36,825 flights on Friday 29 June.

Twelve states added more than 50 flights per day to the European local traffic growth. Turkey was the main contributor, adding 306 flights/day to the network, thanks mainly to its traffic with the Russian federation that grew by around 30% and added itself 73 flights/day. Traffic from Western Europe grew also significantly, in particular from Germany (+42 flights/day, +15%) and the UK (+29 flights/day, +27.7%). Greece was the second highest contributor with 222 flights/day added to the network, a growth mainly due to traffic from Western Europe and in particular from Germany (+42 flights/day, +21%). Its internal traffic was also strong with a growth of +7.2%, adding 28 flights/day. Germany was the third contributor, adding 193 flights/day in June. Such a growth can be attributed to the traffic to Greece (+42 flights/day), Turkey (+42 flights/day, +15%), Spain (+35 flights/day) and Egypt (+21 flights/day). Spain came next with an additional 187 flights/day: this was mainly linked to the growth of its internal traffic (+36 flights/day, +4.6%) and also from Western Europe (in particular from Germany and Italy). Poland was the fifth contributor adding 169 flights/day: this traffic was particularly strong to Greece (+21 flights/day, +36%), Turkey (+21 flights/day, +127%) and Ukraine (+13 flights/day) but traffic also grew from other European countries. Italy was the following contributor with 87 flights/day more added to the network thanks to a growth of traffic from Europe (Spain in particular: +30 flights/day +10%) and the Russian Federation (+21 flights/day, +32%).

At the other end of the scale, Sweden lost 60 daily flights because of the weakness of its domestic traffic that lost 13.4% in June 2018 (i.e. 55 flights/day), in part as a consequence of the failure of Nextjet that represented around 9% of the market share in Domestic traffic in June 2017.

With an increase of 23%, the charter segment had the fastest growth owing to strong increases of flights between Turkey and the Russian Federation, Ukraine and Egypt and Germany and Egypt. The traditional scheduled saw a 5.1% increase. The business aviation and low-cost segments grew respectively by 3.7% and 1%. The all-cargo segment declined by 2.3%.

The top six external partners in average daily flights on flows in both directions were the Russian Federation (1280 flights, up 15.3%), the United States (1160 flights, down 1.1%), Israel (380 flights, up 6.3%), The United Arab Emirates (330 flights, up 8.4%), Morocco (325 flights, up 16.6%), and Egypt (245 flights, up 40.4%).

The airlines which added the most flights to the European network on a daily basis compared to June 2017 were Eurowings (+340 flights/day – 30 new airbus A320 in operation), easyJet UK (+119 flights), Ryanair (+115 flights/day), Lufthansa (+101 flights/day), Turkish Airlines (+98 flights/day), and Wizzair (+86 flights/day: they have grown their fleet to 100 Airbus A320/321 aircraft in June). Compared to last year, Eurowings and Lufthansa have taken over aircraft from AirBerlin, which has participated to the growth of their contribution.

For more information on EUROCONTROL Statistics and Forecasts, go to [http://www.eurocontrol.int/statfor/sid](http://www.eurocontrol.int/statfor/sid)
Eight of the top ten airports had positive traffic growth. Overall, the largest traffic increases in June 2018 were at Antalya, Athens, Tel Aviv/Ben Gurion, Budapest and Warsaw airports. The largest traffic decreases were at Birmingham, Hamburg, Düsseldorf, Stockholm/Arlanda and Milano/Linate airports. Traffic recovery in Turkey explained the traffic variation at Antalya airport. The Tel Aviv/Ben Gurion traffic increase was due to the expansion of routes made available by low-cost airlines and increased tourism. Athens traffic increase is mainly attributed to the expanded route network from summer 2018. Traffic decreases at Düsseldorf and Hamburg airports are due in part to Air Berlin cessation of operations. Birmingham airport traffic variation is partially due to the Monarch cessation of operations.

Nine of the top ten aircraft operators flew more compared to June 2017. The operators with the highest traffic growth were Eurowings, Condor, Jet2.com, Air Europa and Travel Service airlines. The highest traffic decreases were recorded by Flybe, Wideroe, Aegean, Alitalia and Transavia.com airlines.

The traffic variation of Eurowings follows the continued integration of Germanwings, some Lufthansa routes and more recently Air Berlin operated routes into the Eurowings operation. Condor airline has also recuperated routes from Air Berlin cessation of operations and particularly long haul to the Caribbean. Alitalia traffic decrease is partially due to ATC industrial action in Italy on 08 June.

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

<table>
<thead>
<tr>
<th>N°</th>
<th>ICAO</th>
<th>AIR OPERATOR</th>
<th>201806</th>
<th>%</th>
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<tbody>
<tr>
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<td>AMSTERDAM-AMSCHPHOL</td>
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<td>3</td>
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<td>PARIS-CHARLES DE GAULE</td>
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<td>ATHENS-INT</td>
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<td>STOCKHOLM-ARLANDA</td>
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<td>BRUSSELS-NATIONAL</td>
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<tr>
<td>21</td>
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<td>FARKAS OYA</td>
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<td>LISBOA</td>
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<td>7.5%</td>
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<tr>
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<td>LLFI</td>
<td>ISTANBUL-SABIHA</td>
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<tr>
<td>24</td>
<td>LLCL</td>
<td>COPENHAGEN</td>
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<tr>
<td>25</td>
<td>EGCC</td>
<td>MANCHESTER</td>
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<tr>
<td>26</td>
<td>EGSS</td>
<td>LONDON-STANSTED</td>
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<tr>
<td>27</td>
<td>LMCN</td>
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<tr>
<td>28</td>
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<td>CHOFNA WARSZAWIE</td>
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<tr>
<td>29</td>
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<tr>
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<td>BERLIN-TEGEL</td>
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<tr>
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<td>GENEVA</td>
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<tr>
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<tr>
<td>34</td>
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</tr>
<tr>
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<td>LEMG</td>
<td>MALAGASCOSA DEL SOL</td>
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<td>1.0%</td>
</tr>
<tr>
<td>36</td>
<td>EDDH</td>
<td>HAMBURG</td>
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<td>-7.3%</td>
</tr>
<tr>
<td>37</td>
<td>EDDK</td>
<td>KOEN-BONN</td>
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</tr>
<tr>
<td>38</td>
<td>EGSL</td>
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<td>1.4%</td>
</tr>
<tr>
<td>39</td>
<td>EGPI</td>
<td>EDINBURGH</td>
<td>206</td>
<td>1.4%</td>
</tr>
<tr>
<td>40</td>
<td>EDTG</td>
<td>STUTTGART</td>
<td>200</td>
<td>7.0%</td>
</tr>
<tr>
<td>41</td>
<td>LRBP</td>
<td>BUCURESTI-HENRI</td>
<td>182</td>
<td>5.2%</td>
</tr>
<tr>
<td>42</td>
<td>EGBG</td>
<td>BIRNAMHUR</td>
<td>181</td>
<td>10.0%</td>
</tr>
<tr>
<td>43</td>
<td>LHPG</td>
<td>BUDAPEST-LETIEN</td>
<td>176</td>
<td>14.0%</td>
</tr>
<tr>
<td>44</td>
<td>EUMB</td>
<td>MILAN-LINATE</td>
<td>176</td>
<td>1.2%</td>
</tr>
<tr>
<td>45</td>
<td>EIDB</td>
<td>IBIZA</td>
<td>160</td>
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<tr>
<td>46</td>
<td>ELCB</td>
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<td>47</td>
<td>LTAC</td>
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<td>3.2%</td>
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<td>48</td>
<td>GCLP</td>
<td>GIAN-CAIRP</td>
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<td>LEAL</td>
<td>ALICANTE</td>
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<td>1.5%</td>
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<tr>
<td>50</td>
<td>LPZP</td>
<td>VENIZAVIA TESSERA</td>
<td>153</td>
<td>-1.4%</td>
</tr>
</tbody>
</table>

**TOTALS and % TOTAL TRAFFIC:** 1923 95.3%
The Canarias, Casblanca, Lisbon, Santa Maria, Madrid and Sevilla ACCs variation is due to increased traffic in the South/West axis. However, the highest relative traffic increases in June 2018 were in Tunis, Yerevan, L'viv, Odessa, Chisinau and Brindisi 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. The traffic increase in Turkish airspace is due to domestic and Russian flights recovery. The traffic variation in Tunis and Algiers ACCs is partly due to the relative effects of several days of ATC industrial action in Marseille ACC throughout the month. Overall, there is double digit growth in South East Europe ACCs.
2. ATFM DELAY AND ATTRIBUTIONS

Total ATFM delays increased by 110.1% in June 2018.

En-route ATFM delays increased by 150.2% and airport ATFM delays increased by 20.4%.

The rolling 12-month trend shows that ATFM delay was 47% higher during the period July 2017 – June 2018 compared to July 2016 – June 2017.

En-route ATC capacity (28.9%), en-route weather (22.3%) and en-route ATC staffing (14.6%) were the main causes of ATFM delays in June 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.

- High en-route capacity delays in Karlsruhe UAC, and to a lesser extent in Langen, Reims, Brest, Maastricht and London ACCs;
- En-route weather issues in Karlsruhe, Langen, Reims, Maastricht and Vienna ACCs;
- En-route ATC staffing issues in Marseille, Maastricht, Reims, Karlsruhe, Brest and Athens ACCs;
- ATC industrial action in Marseille ACC generated disruptions in Marseille ACC with additional delays in Reims ACC;
- Implementation of Extended Computer Display system in London TC.
- Delays at Barcelona airport due to BRAIN (Barcelona RNAV Approach Innovations) implementation in Barcelona TMA.
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 74.4% of the monthly total (network) ATFM delay. The top 5 en-route ATFM delay locations generated 48.2% of the monthly total (network) ATFM delay.

More detailed information available in the Airspace dashboard via the ATFM Statistics dashboard.
En-route ATFM delays accounted for 82.3% 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;* ATC industrial action in Marseille ACC throughout the month; ATC industrial action in Italy on 08 June. Instability within the French Flight Data processing System (FDPS) on 26 June resulted in high delays;

*Communication failure in Makedonia ACC on 30 June;*

*En-route disruptions;* ATFM delay due to locally reported traffic onload in Reims, Milano, Tunis, Brest and London ACCs due to several ATC industrial action in Marseille ACC;

*Bordeaux ACC delays due to the reorganized interface with LECB/LEBL;*

*En-route capacity;* Military exercises in Karlsruhe, Nicosia, Marseille, Reims and Maastricht ACCs.

Karlsruhe UAC was the biggest generator of en-route ATC capacity delays in June. Delays in Reims and Brest ACCs due to locally reported traffic onload during Marseille ACC industrial action. Strong seasonal traffic growth added complexity in several ACCs.

Thunderstorms affected large areas of North West Europe with intense local convective activity, especially in Karlsruhe and Maastricht UACs, with a total of 164,078 minutes of delay in Karlsruhe UAC and a total of 79,918 minutes of delay in Maastricht UAC between 06 and 11 June.

Several staffing issues throughout the month in Marseille, Maastricht, Reims and Karlsruhe ACC.

The average daily flights with an en-route ATFM delay of at least 15 minutes increased from 1,049 flights/day in June 2017 to 2,710 flights/day in June 2018, which represents 7.9% of all traffic.
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.

Marseille ACC en-route ATFM delay/flight increased from 4.01 min/flight in May 2018 to 4.43 min/flight in June 2018, mainly due to several ATC industrial actions and staffing issues;

Karlsruhe UAC en-route ATFM delay/flight increased from 3.35 min/flight in May 2018 to 3.77 min/flight in June 2018, mainly due to ATC capacity and weather;

Reims ACC en-route ATFM delay/flight increased from 2.33 min/flight in May 2018 to 3.49 min/flight in June 2018, mainly due to ATC capacity, staffing and weather;

Maastricht UAC en-route ATFM delay/flight decreased from 2.06 min/flight in May 2018 to 1.53 min/flight in June 2018, mainly due reduced weather impact.

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 67.2% of the total ATFM (network) delay.
The top 5 en-route delay locations generated 46.5% of the total ATFM (network) delay.

These are the top 20 average en-route ATFM delay per flight generating locations in 2018 with respect to the total ATFM delay. Figures are the average daily en-route delay in minutes for the individual locations.

Reporting month: The average en-route ATFM delay per flight in the NM area\(^x\) in June was 3.25 min/flt, which is well above the corresponding monthly guideline\(^+\) value of 0.92 min/flt.

Year To Date: The average YTD en-route ATFM delay per flight in 2018 in the NM area\(^x\) is 1.49 min/flt which is more than three times the corresponding guideline value of 0.40 min/flt.

An average of 983 flights/day had an en-route ATFM delay of at least 15 minutes in 2018. The corresponding figure in 2017 was 402 flights/day.

The top 3 locations for flights with 15 minutes or more en-route ATFM delay (year-to-date) are:
- Karlsruhe UAC with 218 flights/day
- Marseille ACC with 143 flights/day
- Maastricht UAC with 103 flights/day
4. AIRPORT/TMA ATFM DELAYS

AIRPORT/TMA ATFM DELAY PER LOCATION

Airports accounted for 18.4% of all ATFM delays in June 2018, mainly due to airport weather and aerodrome capacity.

Reasons for airport delays in June 2018

Top Airport Weather delays in June 2018

Thunderstorms impacted operations strongly at Frankfurt/Main airport, mainly from 07 to 11 June with a total of 40,455 minutes of delay. Capacity was reduced at Amsterdam/Schiphol airport on 01 June due to low visibility condition which generated 16,384 minutes of delay.

Top 20 delay locations for airport delays in June 2018

Top Airport Capacity delays in June 2018

Top Airport Capacity (ATC) delays in June 2018

Arrivals regulated at Lisbon and London/Gatwick airport to balance with departures throughout the month.

Greek island and Athens airports generated delays due to high demand relative to their capacity throughout the month.

Greek island and Athens airports generated delays due to high demand relative to their capacity throughout the month.
AIRPORT/TMA ATFM DELAY PER FLIGHT

Average airport/TMA delay per flight increased from 0.61 min/flt in June 2017 to 0.70 min/flt in June 2018.

Mikons, Chania and Pisa airports generated an average delay per flight well above their year to date average. Mikons and Chania airports were impacted by ATC capacity and staffing. Work in progress at Pisa airport.

AIRPORT/TMA ATFM DELAY YEAR-TO-DATE

Top 20 delay locations for year-to-date Airport ATFM delays
5. DAILY EVOLUTION

All days in June 2018 had an average ATFM delay per flight exceeding 1.5 min and most weekend days had an average over 5.00 min. These were the most significant days:

**01-03 June**: Convective activity dominated the network particularly in Germany, France and central Europe with high weather delays in Vienna, Karlsruhe, Maastricht, Prague and Brussels ACCs; En-route ATC capacity delays in Karlsruhe, Reims, Brest, Marseille and Munich ACCs; ATC staffing issues in Maastricht, Marseille, Reims and London ACCs; Thunderstorms impacted operations at Amsterdam/Schiphol, Palma de Mallorca, Barcelona and Madrid airports;

**09-10 June**: En-route disruptions delays in Marseille ACC due to ATC industrial action, with additional delays in Milano, Brest, Reims, Bordeaux and Madrid ACCs; Convective activity impacted operations in Karlsruhe, Reims, Maastricht, Munich and Brest ACCs; En-route capacity delays in Karlsruhe, Reims, Barcelona, Brest and Maastricht ACCs; Seasonal weather impacted operations at Frankfurt/Main, Palma de Mallorca and Paris/Charles de Gaulle airports; ATC staffing issues in Reims and Maastricht ACCs;

**16-17 June**: En-route disruptions delays in Marseille ACC due to ATC industrial action, with additional delays in Reims, Tunis, Milano, and Bordeaux ACCs; En-route ATC capacity issues in Karlsruhe, Maastricht, Brest, Barcelona and Scottish ACCs; ATC staffing issues in Maastricht, Brest, Vienna, Athens and Makedonia ACCs; Thunderstorms impacted operations at Antalya and Istanbul/Ataturk airports; Airport ATC capacity issues at Greek island and Tel Aviv/Ben Gurion airports due to high demand; ATC staffing issues at Frankfurt/Main, Mikono and Santorini airports;

**23-24 June**: En-route disruptions delays in Marseille ACC due to ATC industrial action, with additional delays in Reims, Milano, Tunis, Brest and London ACCs; En-route ATC capacity delays in Karlsruhe, Brest, Maastricht, Barcelona, Reims and Athens ACCs; ATC staffing issues in Maastricht, Brest, Karlsruhe, Makedonia and Athens ACCs; Aerodrome capacity delays at Istanbul/Ataturk, London/Gatwick, Pisa, Istanbul/Sabih Gökcen and Amsterdam/Schiphol airports; Airport ATC capacity issues at Greek island and Athens airports due to high demand;

**26 June**: Instability within the French FDPS resulted in ATC disruptions delays in Brest, Marseille, Reims, Bordeaux and Paris ACCs; En-route ATC capacity delays in Karlsruhe, Reims, Langen, Zagreb and Marseille ACCs; ATC staffing issues in Marseille, Karlsruhe, Reims, Maastricht and Makedonia ACCs;

**29-30 June**: En-route ATC capacity delays in Karlsruhe, Reims, Athens, Maastricht, Zurich, Brest, Barcelona and Zagreb ACCs; ATC staffing issues in Marseille, Maastricht, Reims, Athens, Karlsruhe, Makedonia and Brest ACCs; Convective activity impacted operations in Budapest, Beograd, Madrid and Zagreb ACCs; Aerodrome capacity issues at London/Gatwick, Istanbul/Ataturk, Lisbon, Palma de Mallorca and Amsterdam/Schiphol airports; Airport ATC capacity issues at Greek island and Athens airports due to high demand.

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**Average delay (min) per flight in June 2018**

- **Enroute Capacity (ATC)**
- **Enroute Staffing (ATC)**
- **Enroute Disruptions (ATC)**
- **Enroute Weather**
- **Airport Capacity (ATC)**
- **Airport Staffing (ATC)**
- **Airport Disruptions (ATC)**
- **Airport Weather**

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**01 03 05 07 09 11 13 15 17 19 21 23 25 27 29**
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 67% of the commercial flights in the ECAC region for May 2018. 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 14.9 minutes per flight, an increase in comparison to May 2017 where the average delay was 10.8 minutes per flight. Primary delays counted for 54.8% or 8.2 min/ft, with reactionary delays representing the smaller remaining share of 45% at 6.7 min/ft, and increase of 1.9 min/ft compared to May 2017.

Further analysis of the past 12 months shows that the average ‘All-Causes’ en-route ATFM delay reported by airlines was 2.4 minutes per flight in May 2018. This was significantly higher when compared to May 2017 when the ‘All-Causes’ en-route ATFM delay was 0.7 minutes per flight. May 2018 saw Weather related ATFM delays and ATC industrial actions, which in turn caused an increase in reactionary delays for airlines.

The percentage of flights delayed greater than 15 minutes from ‘All-Causes’ increased by 6.1 percentage points to 25.6%. Delays exceeding 30 minutes also increased, with 14.3% of flights delayed in May 2018.

For more information on CODA delays:
7. ATFM SLOT ADHERENCE

The percentage of early departures for June 2018 is 4.1% of regulated flights, which is a decrease of 0.4 percentage points compared to June 2017.

The percentage of late departures for June 2018 is 4.2% of regulated flights, which is a decrease of 0.8 percentage points compared to June 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 ExCDS into the TMA East and Thames sectors and generated 52,099 min of ATFM delay across the whole month. Previously, 20% of capacity reductions had been planned up to 21 June for the said sectors. This amount of delay presented 61% of total delay (85,367 min) by London TC in June.

ADDITIONAL INFORMATION

Bordeaux ACC generated 9,090 minutes of ATFM delay due to the reorganized interface with LECB/LEBL, and 291 minutes due to the new TMA at LFBZ.

Barcelona ACC generated 602 minutes of ATFM delay due to the improved interface with LFBB.
AIRPORTS

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

Special Events

- Art Basel generated 3,598 minutes of ATFM delay at Basel airport from 11 to 14 June.

Completed

- Runway maintenance at Bucharest (generated 6,207 minutes of ATFM delay from 13 to 20 June), Budapest, Hamburg, Tenerife/Sur and Thessaloniki airports;
- Taxiway and/or apron improvements at Hamburg and Warsaw airports;
- Tower works at Tenerife/Sur airport;
- Terminal building improvements/works at Malta airport.

Ongoing

- Runway maintenance at Amsterdam/Schiphol, Cologne, Istanbul/Sabiha Gökcen, Krakow, Pisa (11,562 minutes of ATFM delay throughout the month) and Stockholm/Arlanda airport;
- Taxiway and/or apron improvements at Bergamo, Catania (generated 2,603 minutes of ATFM delay on 24 June), Copenhagen, Dusseldorf, Frankfurt/Main, Helsinki, Manchester, Paris/Orly, Paris/Charles de Gaulle, Rome/Fiumicino, Stuttgart and Tenerife/Sur airports;
- ILS maintenance at Milan/Malpensa, Porto (1,012 minutes of ATFM delay) and Poznan airports;
- Terminal building improvements/works at Budapest, Frankfurt/Main, Malta, Manchester, Oslo/Gardermoen and Paris/Charles de Gaulle airports.

DISRUPTIONS

Technical

- Power issues at Hamburg airport generated 1,212 minutes of ATFM delay on 03 June. NM estimates that approximately 290 flights did not operate, while 24 diversions were noted as a result of the outage;
- Communication system failure in Reims ACC on 08 June generated 1,088 minutes of ATFM delay;
- Surveillance system failure in Marseille TMA on 09 June generated 1,252 minutes of ATFM delay;
- Instability within the French Flight Data Processing System (FDPS) on 26 June generated a total of 69,402 minutes of ATFM delay across all of the French ACCs;
- Disabled aircraft on runway generated 1,188 minutes of ATFM delay at Geneva airport on 27 June;
- Communication system failure in Makedonia ACC on 30 June generated 2,533 minutes of ATFM delay.

Industrial Action

- Italian ATC industrial action on 08 June generated 12,056 minutes of en-route ATFM delay in Italy; NM estimates there were 350 flights which did not operate to/from Italian airports.
- Marseille ACC industrial action from 0430 UTC on Saturday 09 June to 0430 UTC on Monday 11 June generated 115,359 minutes of en-route ATFM delay in France; Neighbouring states generated 10,831 minutes due to ATFM protective measures;
- Marseille ACC industrial action from 0430 UTC on Saturday 16 June to 0430 UTC on Monday 18 June generated 118,303 minutes of en-route ATFM delay in France; Neighbouring states generated 15,039 minutes due to ATFM protective measures;
- Marseille ACC industrial action from 0430 UTC on Saturday 23 June to 0430 UTC on Monday 25 June generated 127,177 minutes of en-route ATFM delay in France; Neighbouring states generated 27,814 minutes due to ATFM protective measures;
9. NM ADDED VALUE

**FLIGHTS WITH DELAY > 30’**

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

In June 2018, 83.5% of flights with more than 30 minutes of ATFM delay were en-route and 16.5% were airport.

An average 147 flights per day had their delay reduced to less than 30 min by NM.

**RRP DIRECT DELAY SAVINGS**

On average 6 RRPs/day were executed saving 463 min/day, accounting for 0.3% of ATFM delays.

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

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i On the 03 April the Network Manager suffered an outage of its technical system affecting its operational services, which resulted in the non-availability of traffic data. Therefore the NOR traffic data for this date are based on guideline estimated traffic.

ii See Notice on page 2 for more information on traffic and delay comparison.

iii Internals, international arrivals and departures, excluding overflights.

iv See Notice on page 2 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 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.