

Monthly Network Operations Report

Overview July 2024



1. Summary

There were 1,065,828 flights in July 2024, 4.5% more than in July 2023. July 2024 was the busiest month in terms of traffic since August 2019.

The network had an average of 34,382 flights/day in July, about 1,500 flights/day more than in July 2023. The busiest day was Monday 15 July with 35,564 flights, which exceeded the busiest day of 2023 (34,637 flights on 07 July). The intra-NM SW axis saw 9.2% growth compared to 2023, which influenced the network growth of 4.5%.

The conflict in Ukraine still affects overflights in several countries. EUROCONTROL continues to help manage the war's impact on aviation.

NM worked closely with the French DSNA and operational stakeholders to ensure smooth and efficient operations across the European aviation network during the Olympic games in Paris.

All the Top 20 ACCs had more traffic than July 2023. Rome, Belgrade, and Zagreb ACCs had double-digit growth.

The low-cost segment remained the primary driver of flight growth in July 2024 compared to July 2023, adding 1,106 daily flights (+10.2%) to the network.

The rankings of the leading 6 airlines were unchanged since last month. Ryanair was the busiest operator averaging 3,596 movements per day (+8.2%) followed by easyJet (1,814), Turkish Airlines (1,561), Lufthansa (1,220) and Air France (1,139).

The busiest airport remained Istanbul airport with an average of 1,488 flights/day, followed by Amsterdam Schiphol (1,415 flights/day), Paris Charles de Gaulle (1,406 flights/day), London Heathrow (1,347 flights/day) and Frankfurt (1,307 flights/day). All the Top 20 airports had more traffic than in July 2023, with double-digit traffic growth at Rome Fiumicino and Athens airports.

Network departure punctuality (53.3%) and arrival punctuality (61.1%) were lower than in July 2023. The network was strongly impacted by ATC capacity issues and weather. Domestic routes had a departure punctuality of 65.0%, which was higher than punctuality at network level. Network first rotation departure punctuality was 72.4% and arrival punctuality was 81.8%. Improving first rotation punctuality remains a key objective for the Network Manager (NM). NM has highlighted several ACCs which must increase first rotation opening sectors during Summer 2024.

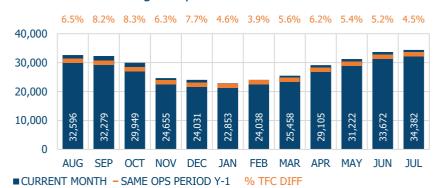
In July 2024, a record-setting 6,941,125 minutes of ATFM delays occurred within a single month. This was +65.1% compared to July 2023 with weather being responsible for 42% of the ATFM delay. The average enroute ATFM delay per flight for the network was 5.7 minutes in July. En-route ATFM delay represented 87% of these ATFM delays. Total en-route ATFM delays increased by 79.8% and total airport ATFM delays decreased by 7.2%. Nearly half (46.4%) of the en-route delays occurred in the southwest axis with Budapest as the main contributor. Weather issues and ATC capacity shortage on the south-east axis led to extensive flow measures. During the weekend of July 19-21, the network experienced significant weather disruptions, resulting in 517,197 minutes of ATFM delay. Convective activity in Karlsruhe UAC, Beograd and Zagreb ACCs impacted operations with severe disruption. ATC capacity delays increased in Karlsruhe UAC and Budapest ACC due to capacity constraints in conjunction with military traffic and additional complexity.

NMOC reduced en-route ATFM delays by 11.1% and airport ATFM delays by 10.0% through direct actions.

NM estimates that 3.3 million tonnes of fuel was burnt in the en-route flight phase in the NM area in July.

2. Traffic evolution

Last 12 months average daily traffic

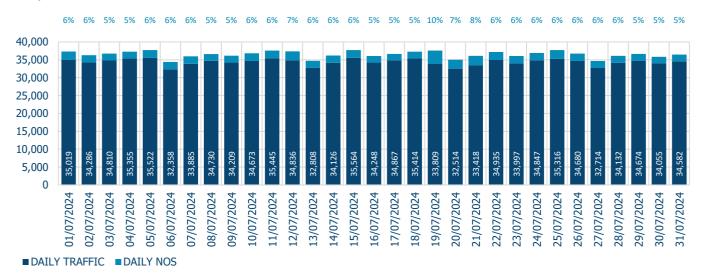


There were 1,065,828 flights throughout Europe in July 2024, 4.5% up compared to the same period last year.

Traffic followed the usual pattern during summer with an increase in flights to popular tourist destinations.

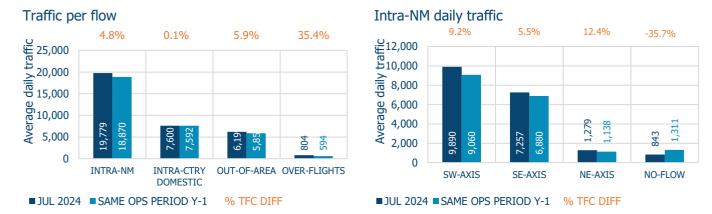
In July 2024 there was a slight slowdown in the main three passenger segments – Low-cost, Mainline and Regional – compared to the start of the summer. Compared to July 2023, the Low-cost segment was the primary driver of growth with a 10.2% increase (+1,106 flights/day), followed by Regional with a 2.2% rise (+89 flights/day), and Mainline with a 1.8% rise (+205 flights/day). The Business aviation segment grew by 2.4% (+64 flights/day), boosted by the Paris Olympics, which led to an increase in transatlantic flights between the United States and France (+3 flights/day) and an 8.7% rise between the UK and France (+4 flights/day). The All-cargo segment saw a modest improvement of 0.5% (+5 flights/day), partly due to an increase of 10 domestic flights/day in Sweden. Charter was the only segment to record a decrease (-2.6%, -38 flights/day), largely due to fewer daily flights between Türkiye and Israel (-15), Türkiye and the UK (-8), Germany and Greece (-8), the UK and Greece (-8), and Germany and Egypt (-8) compared to July 2023. In July 2024, two segments surpassed July 2019 flight levels: Business aviation (+14%) and Low-cost (+4%). Overall, the number of flights reached 97.4% of July 2019 levels.

Daily network traffic evolution

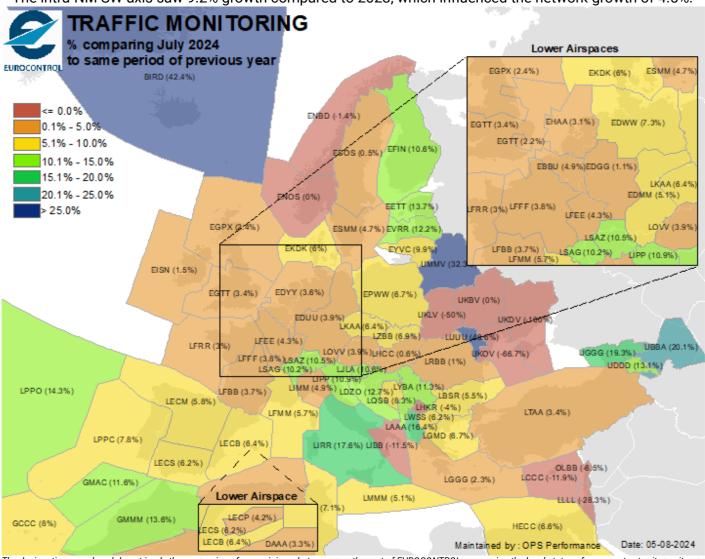


The busiest day was Monday 15 July (35,564 flights), which exceeded the busiest day of 2023 (34,637 flights on 07 July).

On average, 6.0% of scheduled traffic did not operate in July (see Non-Operated Schedules, NOS, above). This rose to 10% on 19 July (Crowdstrike outage).



The intra-NM SW axis saw 9.2% growth compared to 2023, which influenced the network growth of 4.5%.



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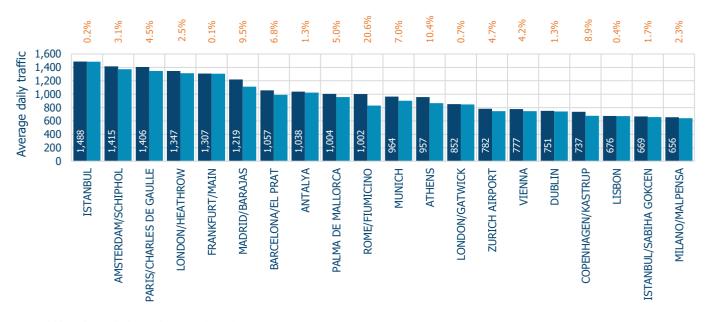
The apparent growth in traffic for Iceland is partly accounted for by Reykjavik FIR joining the IFPZ from 30-November 2023 (IFPZ = IFPS-Zone, the area for which the Integrated Initial Flight Plan Processing System collects, processes and distributes flight plans). Consequently, Flight Plans previously not counted (Icelandic domestic, departures or arrivals to-from North America) became visible. The growth in traffic for Tbilisi and Baku FIRs is partly due to a change in air operators routings resulting from the situation in the Middle East. Brindisi ACC traffic decrease was due to a new sector configuration: The northern sectors of Brindisi ACC are under Roma ACC control since 13 June 2024.

July 2024 | Top 20 ACC daily traffic



There was no change in the Top 4 ACCs compared to last month. London ACC remained the busiest ACC followed by Karlsruhe UAC, Maastricht UAC and Ankara ACC. All the Top 20 ACCs had positive traffic growth compared to July 2023 with double-digit traffic growth in Rome, Beograd and Zagreb ACCs.

July 2024 | Top 20 Airports daily traffic



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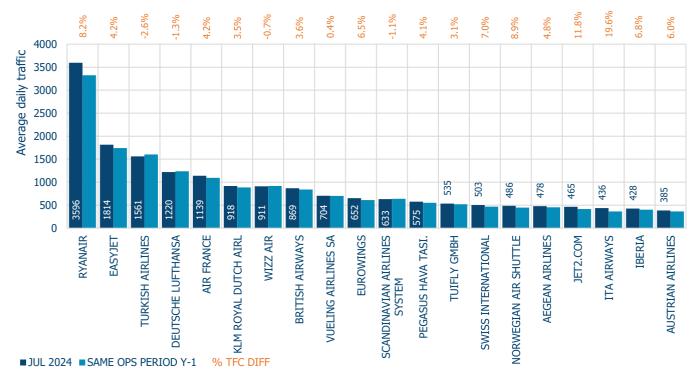
Istanbul airport was the busiest airport with, on average, 1,488 flights/day, followed by Amsterdam Schiphol (1,415 flights/day), Paris-Charles de Gaulle (1,406 flights/day), London Heathrow (1,347 flights/day) and Frankfurt (1,307 flights/day).

All Top 20 airports saw an increase in traffic compared to July 2023 with double-digit traffic growth at Rome Fiumicino and Athens airports.

New domestic routes by ITA, Wizz Air, Ryanair and Aeroitalia explained the traffic growth at Rome Fiumicino airport.

Passenger traffic at Athens airport increased by 9.3% compared to July 2023.

July 2024 | Top 20 Air Operator groups daily traffic



The Top 6 air operators remained the same as in June 2024. Two air operators had a double-digit percentage traffic growth compared to last year: JET2.COM and ITA Airways.

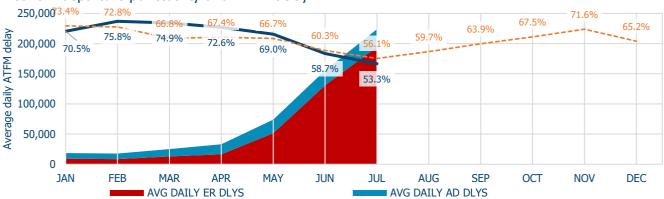
Ryanair was the busiest operator with, on average, 3,596 movements per day followed by easyJet (1,814), Turkish Airlines (1,561), Lufthansa (1,220) and Air France (1,139).

Turkish Airlines, Lufthansa, Wizzair and SAS saw a traffic decrease compared to July 2023.

3. Punctuality

3.1 Departure Punctuality

Network departure punctuality and ATFM delay



Network departure punctuality (53.3%) decreased by 5.4 p.p in July compared to June 2024. In July, traffic grew by 4.5% along with a 65.1% rise in ATFM delay. The network was affected by convective activity, mainly on the south-east axis, throughout the month.

Network departure punctuality was lower than the July 2023 level (-2.8 pp).

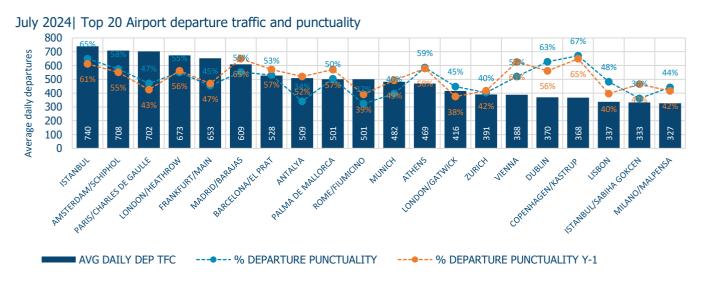
Punctuality on the domestic routes was higher (65.0%) than punctuality at network level. Punctuality on the south-east axis was 44.3%.

First rotation departure punctuality (72.5%) in July 2024 was 1.9 pp below July 2023. Departure punctuality dropped to 48.2% for the Midday period in July 2024 – there was a similar sized drop in July 2023.

Improving first rotation punctuality remains a key objective for NM. To support this aim, NM has highlighted several ACCs that must increase the number of open sectors in the first rotation period during Summer 2024.

*This view of operational punctuality can be tracked in near real-time by aircraft operator and airport level in the <u>NORTI Dashboard</u> and in <u>MIRROR</u>. Archived data can be found in the <u>FATHOM interactive dashboard</u>.

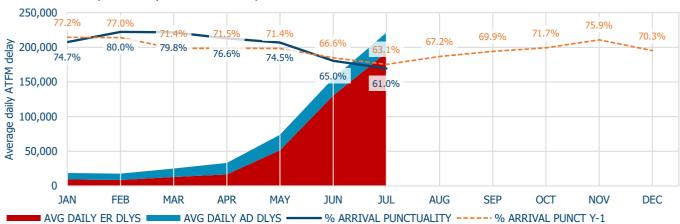
The Central Office for <u>Delay Analysis CODA reports</u> provide further detailed analysis of airline reported delay reasons.



Punctuality at many of the Top 20 airports deteriorated in July 2024 when compared to last year mainly due to a surge of en-route ATFM delays. ATFM arrival regulations as well as seasonal weather (CB, thunderstorm and low visibility) also contributed to reactionary delays. Most airports saw a strong impact on 19 July due to the CrowdStrike outage resulting in a network departure punctuality of only 37%.

3.2 Arrival Punctuality

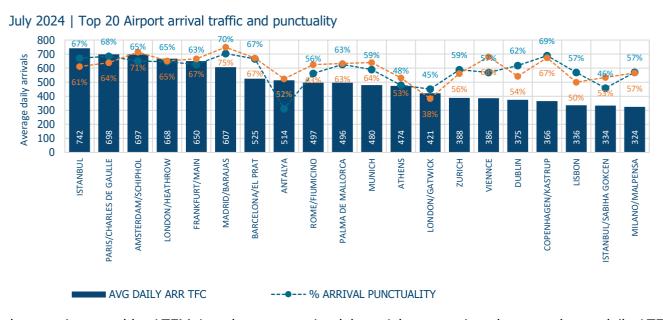




Network arrival punctuality (61.0%) decreased by 4.0 p.p. in July compared to June 2024 and was lower than July 2023 level (-2.1 p.p.).

Domestic routes (66.8%) arrival punctuality was higher than the network level. Punctuality on the southeast axis was 50.8%.

First rotation arrival punctuality was 81.8% which is significantly better than the first rotation departure punctuality of 72.5%. Note: the share of Out of Area arrivals is the highest during the First Rotation phase (19%); a flight will be exempted from ATFM regulations if departing from outside the ATFCM area. This means that almost 1 in 5 flights arriving during the First Rotation phase is not impacted by ATFM delays. The share of Out of Area arrivals reduces to 11% during the Midday phase and 6% during the Evening phase. The share of Out Of Area reduces during the day. Midday arrival rotation punctuality decreased to 62.7%, this trend continued during the day to end at 43.8% for the arrival night rotation. Similar trends were observed in July 2023.



Antalya was impacted by ATFM Aerodrome capacity delays, Athens continued to see almost daily ATFM arrival delays due to ATC capacity, Zurich was impacted by the capacity reductions at Skyguide due to the transitioning to a new ATM system. Gatwick saw traffic impacted by weather (thunderstorm and low visibility) and Aerodrome capacity delays throughout the month. Most airports saw a strong impact on 19 July due to the CrowdStrike outage resulting in a network arrival punctuality of only 46%.

4. Operations

4.1 Network Manager

July 2024 was the busiest month in terms of traffic figures since August 2019; in terms of ATFM delay, it was the most delays in one month at 6,941,125, 42% of which was attributed to weather delay. As such, NM collaborated with stakeholders throughout July when the network experienced such significant traffic and weather-related delay challenges with many ATFM delays, re-routings and flight cancellations with the 24/7 NMOC operation at the forefront of providing the very best, balanced approach to the network to keep delays as low as possible. NM is working on providing weather-based pre-tactical improved operations as a new approach from NMOC for Summer 2025 to mitigate the effects of the existing approach to weather regulations. Resilience in the network in time of convective weather is crucial to maintain current levels of safety, and to extract the best possible performance even when the weather is less than ideal.

NM continued to support operations affected by the Ukrainian war. It maintained airspace closures and NM systems supporting EU Sanctions Regulation for the Russian Federation and Belarus.

For Tel-Aviv FIR the NM provided a consolidated view of relevant NOTAMs on the NOP Portal and the EUROCONTROL Network Manager Operations Centre (NMOC) continues working 24/7 to implement State required airspace restrictions and in support to daily airline operations for routings and delay mitigation.

NM has been working closely with French DSNA and operational stakeholders to assist, forecast, plan and coordinate actions to ensure smooth and efficient operations across the European aviation network during the Olympic games in Paris. The airspace over Paris was closed during the Opening Ceremony on 26 July and approximately 750 flights to/from the restricted area and 750 overflights were impacted.



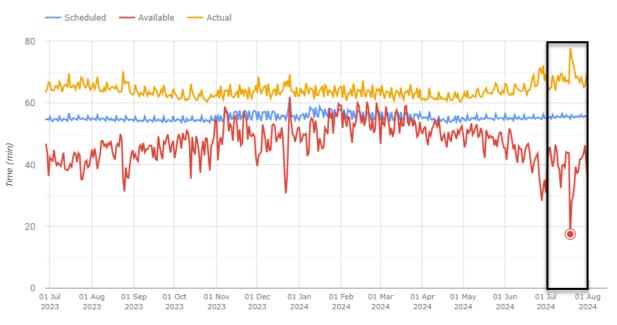
The FlightRadar map over Paris during the Opening Ceremony.

NMOC reduced en-route ATFM delays by 11.1% and airport ATFM delays by 10.0% through direct actions, and much more through the application of scenarios, re-routings and pre-tactical planning.

4.2 Ground

MIRROR's indicator shows that the network (average) available turnaround time decreased as delays increased, which is a familiar trend at the start of the summer season. However, towards the end of the month as en-route ATFM delays and weather took hold the gap between available and actual turnaround times widened. As reactionary delays occurred, arrival unpredictability for ground handlers increased. The impact of the CrowdStrike outage on 19 July is clearly visible resulting in the lowest available turnaround time in July 2024 and rolling 12-months.

July 2024 | Turnaround times



NM is monitoring TTOTⁱⁱ calculation quality. The network average TTOT error for the 32 A-CDM airports increased by 0.7 minutes, to 10.1 minutes, as compared to June. Looking at the difference between 2023 and 2024, the July 2024 network average is lower than the previous year. The lowest error was noticed in Oslo/Gardermoen (ENGM) – 6.5 minutes and was 0.1 minute higher than in June. Rome/Fiumicino (LIRF) noticed the highest error value, which increased by 2.6 minutes, as compared to June, to 15.7 minutes. NM continues liaising with selected airports for solutions to improve the TTOT quality.

4.3 Network

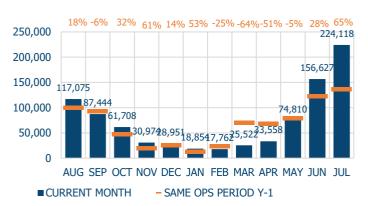
There were 6,947,660 minutes of ATFM delay in July, 65.1% higher than July 2023.

En-route ATFM delays accounted for 86.9% and airport ATFM delays accounted for 13.1%. Most of ATFM delays were due to weather and ATC capacity.

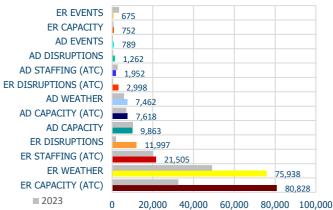
Nearly half (46.4%) of the en-route delays occurred in the southwest axis with Budapest as the main contributor.

The average en-route ATFM delay per flight for the network was 5.7 minutes in July.

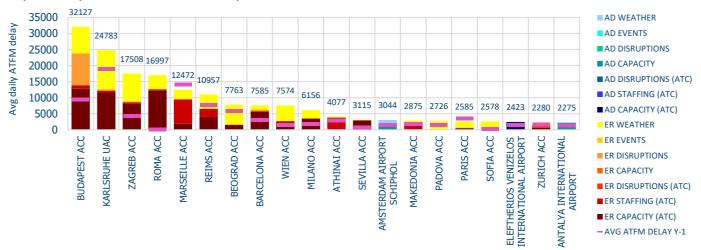
Last 12 months average daily ATFM delays



July 2024 | Reasons for ATFM delays



Top 20 delay reference locations in July 2024



The chart above shows the Top 20 delay generating locations for the reporting month regarding total ATFM delays. Figures are the average daily ATFM delays in minutes for the individual locations:

- Convective activity impacted operations strongly on the south-east axis, particularly in Karlsruhe,
 Zagreb, Budapest and Beograd ACCs;
- ATC capacity issues in conjunction with weather issues in Budapest, Roma, Karlsruhe, Zagreb, Barcelona and Reims ACCs:
- Staffing shortage in Marseille and Athens ACCs.

4.4 Significant Events

Events

There were many European events in July: Bastille Day celebration in France on 14 July, UEFA EURO2024 Final at Berlin on 14 July, Belgium National Day fly-by on 21 July, final race of 2024 Tour de France in Nice on 21 July, Farnborough International Airshow from 22 to 26 July, Paris 2024 Summer Olympics from 26 July with the opening ceremony on 28 July. NM and all operational stakeholders worked well together to handle these events smoothly and with relatively fewer network ATFM delays.

Technical

- Ongoing reduced capacities (since 01-March) in Swiss airspace above FL245 following a series of technical issues that resulted in system instability and generated 19,469 minutes of ATFM delay in Zurich ACC, and 5,698 minutes of ATFM delay at Zurich airport;
- Radar issues in Bordeaux ACC throughout the month generated 12,159 minutes of ATFM delay;

- Frequency issues in Brest ACC throughout the month generated 21,319 minutes of ATFM delay;
- OLDI failure in Roma ACC from 01 July to 05 July generated 8,147 minutes of ATFM delay;
- Communication system failure in Paris ACC on 11 July generated 2,392 minutes of ATFM delay;
- OLDI failure between Zagreb and Brindisi ACCs on 14 July generated 3,359 minutes of ATFM delay in Zagreb ACC;
- OLDI failure between Marseille and Roma ACCs from 16 to 17 July generated 2,713 minutes of ATFM delay in Marseille ACC and 2,079 minutes in Roma ACC;
- Crowdstrike outage on 19 July resulted in delays and cancellations across the network. EUROCONTROL's systems were not affected.
- IT issues at Venice airport on 20 July generated 3,228 minutes of ATFM delay;
- IT issues at Naples airport on 25 July generated 4,644 minutes of ATFM delay;
- iFMP outage in Maastricht UAC on 30 July generated 1,719 minutes of ATFM delay;

Industrial action

- ATC Industrial action at Venice airport on 05 July generated 1,984 minutes of ATFM delays;
- ATC Industrial action in Marseille ACC on 21 July generated 3,142 minutes of ATFM delays.

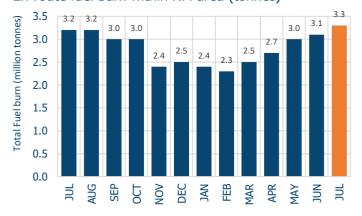
Other

- Volcanic ash cloud from Mount Etna and Stromboli eruptions from 05 to 23 July leaded to flight cancellations and rerouted flights. It also generated 3,298 minutes of ATFM delay at Catania airport.
- Climate activists disrupted operations at Frankfurt airport on 25 July leading to flight cancellations and generated 8,154 minutes of ATFM delay;
- Budapest ACC recorded 309,478 minutes of ATFM delay owing to daily protective capacity measures with significant on-load of traffic avoiding L'viv ACC and limited availability of ATCOs.
- The additional complexity due to the Ukrainian crisis generated 12,776 minutes of ATFM delays in Warsaw ACC.

5. Flight Efficiency

5.1 Fuel Burn

En-route fuel burn within NM area (tonnes)

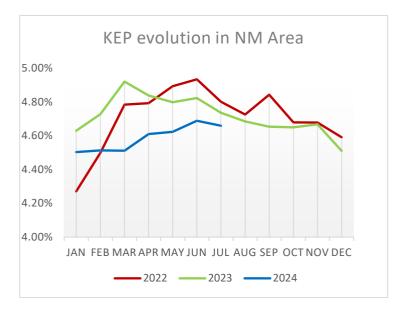


NM estimates that 3.3 million tonnes of fuel was burnt in the en-route flight phase in the NM area in July.

It was an increase compared to July 2023, with 1,500 extra flights per day in July 2024.

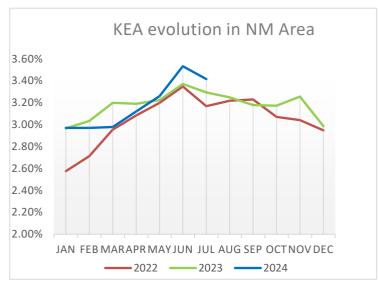
5.2 Horizontal Flight Efficiency

There are two horizontal flight efficiency KPIs. The indicators provide a measure of the average en-route additional distance with respect to the great circle distance. One is based on last filed flight plan (KEP) and the other on actual trajectory (KEA). KEP and KEA decreased in July 2024.



KEP indicator (4.66%) remained lower than in 2023 (4.74%)

NM Flight Efficiency Taskforce continues to support AOs to further improve their flight planning.



KEA indicator (3.42%) decreased by 0.11 pp compared to June 2024 and was higher than in 2023 (3.29%).

6. Notice

Traffic and Delay Comparisons

All traffic and delay comparisons are between report month and equivalent operational period of the previous year.

Traffic Monitoring

Country traffic counts are based on arrivals and departures traffic, overflights are excluded.

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 https://www.eurocontrol.int/network-performance

Regulation Reason Groupings

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 https://www.eurocontrol.int/network-performance

Airline Groupings

Description and definition available on the EUROCONTROL website at https://www.eurocontrol.int/directory/airline-groups-lookup

ATFM Statistics dashboard

More detailed information available via the **ATFM Statistics dashboard**

FATHOM dashboard

Interactive analysis tool to access archived data **FATHOM interactive dashboard**

Network Operations Analysis document

ATFM statistics provides an alternative source of network traffic and ATFM delays. https://www.eurocontrol.int/dashboard/air-traffic-flow-management-statistics-dashboard

And stakeholders can use FATHOM for a more detailed view of their operational performance. https://www.eurocontrol.int/tool/network-manager-interactive-analysis-tool

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ⁱ To request access to MIRROR see the EUROCONTROL <u>MIRROR project page</u> for more details.

ii Target Take-Off Time (TTOT) calculation quality at A-CDM airports is the average absolute difference between ATOT and TTOT at IOBT-30 minutes for non-regulated flights.

iii More information on KEP and KEA, see ANS performance page.



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