

Monthly Network Operations Report

Overview October 2024



1. Summary

There were 961,008 flights in October, 4.9% more than October 2023. Traffic in October remained high compared to previous year and continued the trend observed in previous months. With the start of the winter schedule on the last Sunday of October, traffic decreased as expected compared to September 2024.

A new EUROCONTROL traffic forecast update has been published which expects the number of flights across the network to reach 2019 levels during Summer 2025.

The network had an average of 31,000 flights/day in October, about 1,450 flights/day more than in October 2023. The busiest day was Friday 11 October with 33,136 flights, which exceeded the busiest day of October 2023 (32,725 flights). The intra-NM SW axis saw 5.7% growth compared to 2023 and SE axis 6.0%, which influenced the network growth of 4.9%.

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

The Low-cost market segment remained the primary driver of flight growth in October 2024 compared to October 2023, adding 959 daily flights (+9.6%) to the network.

Among the Top 20 ACCs, only Ankara ACC saw a decrease in traffic compared to October 2023. Notably, three ACCs – Barcelona, Roma and Beograd – registered double-digit growth, with +18% for Beograd. Traffic increased in Cairo, Cyprus, Makedonia, Zagreb, Tirana and Athens ACCs due to aircraft operators avoiding routes through Teheran and Baghdad FIR due to geopolitical tensions in the Middle East.

The rankings of the leading five airlines were unchanged since June, with Ryanair as the busiest operator averaging 3,374 movements per day (+8.3%) followed by easyJet (1,756), Turkish Airlines (1,376), Lufthansa (1,199) and Air France (1,040).

For the first time in 2024, Amsterdam/Schiphol became the busiest airport with an average of 1,397 flights/day, followed by Istanbul (1,367 flights/day), Paris Charles de Gaulle (1,344 flights/day), London Heathrow (1,327 flights/day) and Frankfurt (1,284 flights/day). Istanbul and Frankfurt airports had less traffic compared to the same period last year.

Network departure punctuality (68.1%) and arrival punctuality (72.9%) were higher than in October 2023. The network was mainly impacted by ATC capacity and weather issues. Domestic routes had a departure punctuality of 77.2%, which was higher than the network level. Punctuality on the south-east axis was 68.3% which is an increase of 1.4 pp compared to October 2023. Network first rotation departure punctuality was 79.9% and arrival punctuality was 84.5%, they both remained stable compared to 2023. Improving first rotation punctuality remains a key objective for the Network Manager (NM).

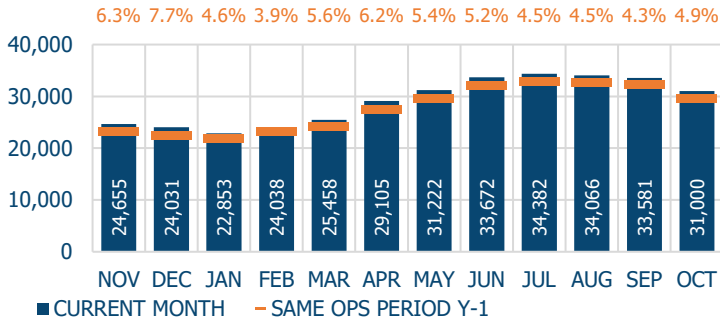
There were 2.2 million minutes of ATFM delay in October, +20.6% compared to October 2023. En-route ATFM delay represented 66% of these ATFM delays and airport 34%. The average en-route ATFM delay per flight for the network was 1.5 minutes in October. Total en-route ATFM delays increased by 14.8% and total airport ATFM delays increased by 33.4%. ATC capacity/staffing shortage and weather were the main issues in October. ATC capacity delays increased in Karlsruhe UAC due to capacity constraints in conjunction with military traffic and additional complexity. Wind and low visibility impacted operations strongly at London/Heathrow and London/Gatwick airports.

NM's Operational Centre reduced en-route ATFM delays by 10.9% and airport ATFM delays by 9.7% through direct actions.

NM estimates that 3.0 million tonnes of fuel was burnt in the en-route flight phase in the NM area in October.

2. Traffic evolution

Last 12 months average daily traffic



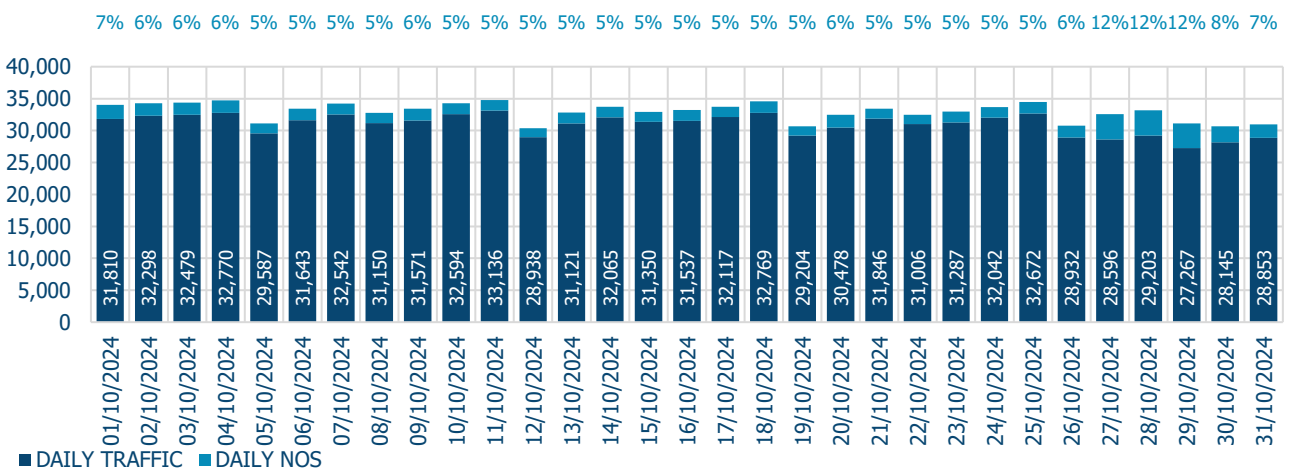
There were 961,008 flights throughout Europe in October 2024, 4.9% up compared to the same period last year.

With the start of the winter schedule on the last Sunday of October, traffic decreased as expected compared to September 2024.

A new EUROCONTROL traffic forecast update has been published which expects the number of flights across the network to reach 2019 levels during Summer 2025.

In October 2024, the Low-cost market segment maintained solid growth, increasing by 9.6% (+959 flights/day) compared to October 2023. In contrast, its two competitors showed significantly lower growth: the Regional segment experienced a modest increase of 0.7% increase (+25 flights/day), while the Mainline segment posted no growth compared to October 2023. The Mainline segment saw fewer flights between Türkiye and the Middle East (-38 flights/day), Türkiye domestic (-29), Spain (excluded Canary Islands) (-25) and Norway (-22). However, it recorded additional daily flights on flows between Türkiye and Russia (+33), Cyprus and Israel (+14) and Germany and Egypt (+12). The All-cargo segment increased by 3.7% (+37 flights/day) partly due to more flights across Sweden (+19 flights/day) and between NM area states and mainland China (+13 flights/day). The Business aviation segment slightly grew by 0.4% (+9 flights/day). Charter was the only segment to decrease, down by 1.1% (-11 flights/day). In October 2024, only two segments surpassed their October 2019 levels: Low-cost (+9.8%) and Business aviation (+8.5%). Overall, traffic was 2.1% below October 2019.

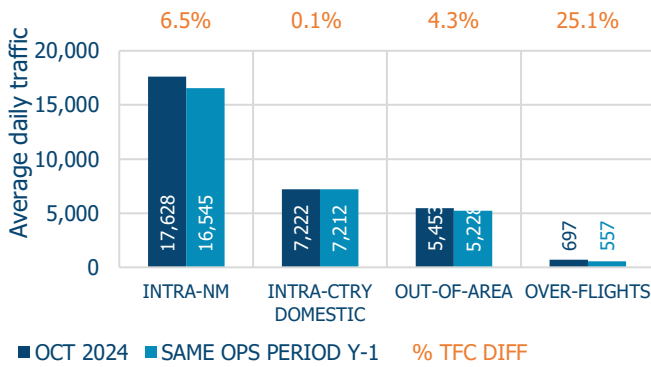
Daily network traffic evolution



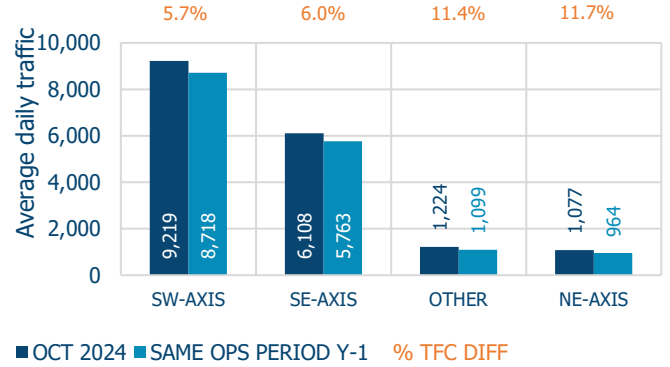
The busiest day was Friday 11 October (33,136 flights), which exceeded the busiest day of October 2023 (32,725 flights).

On average, 6.2% of scheduled traffic did not operate in October (see Non-Operated Schedules, NOS, above). The percentage increase in the last week of October was due to the switch from IATA summer to winter season.

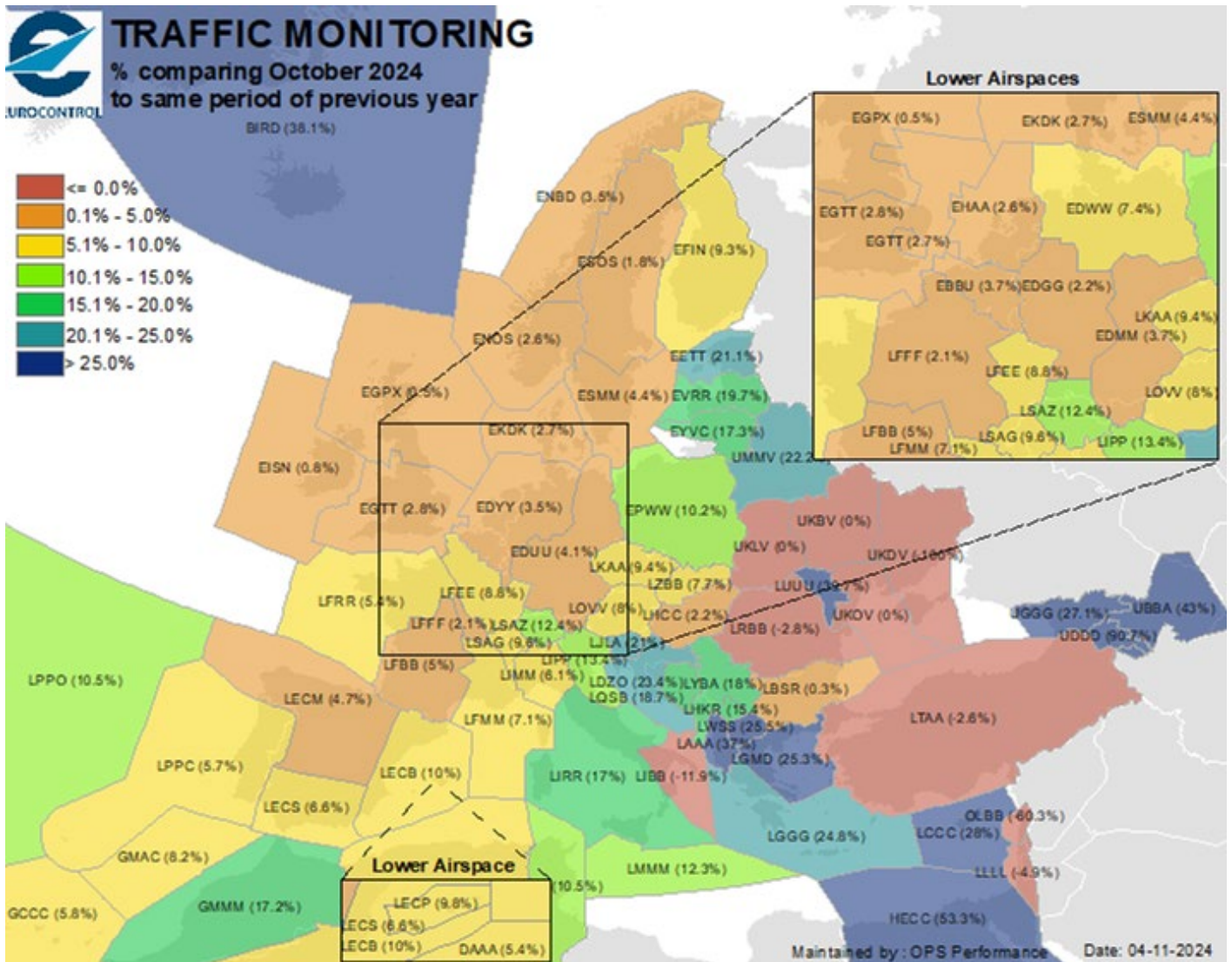
Traffic per flow



Intra-NM daily traffic



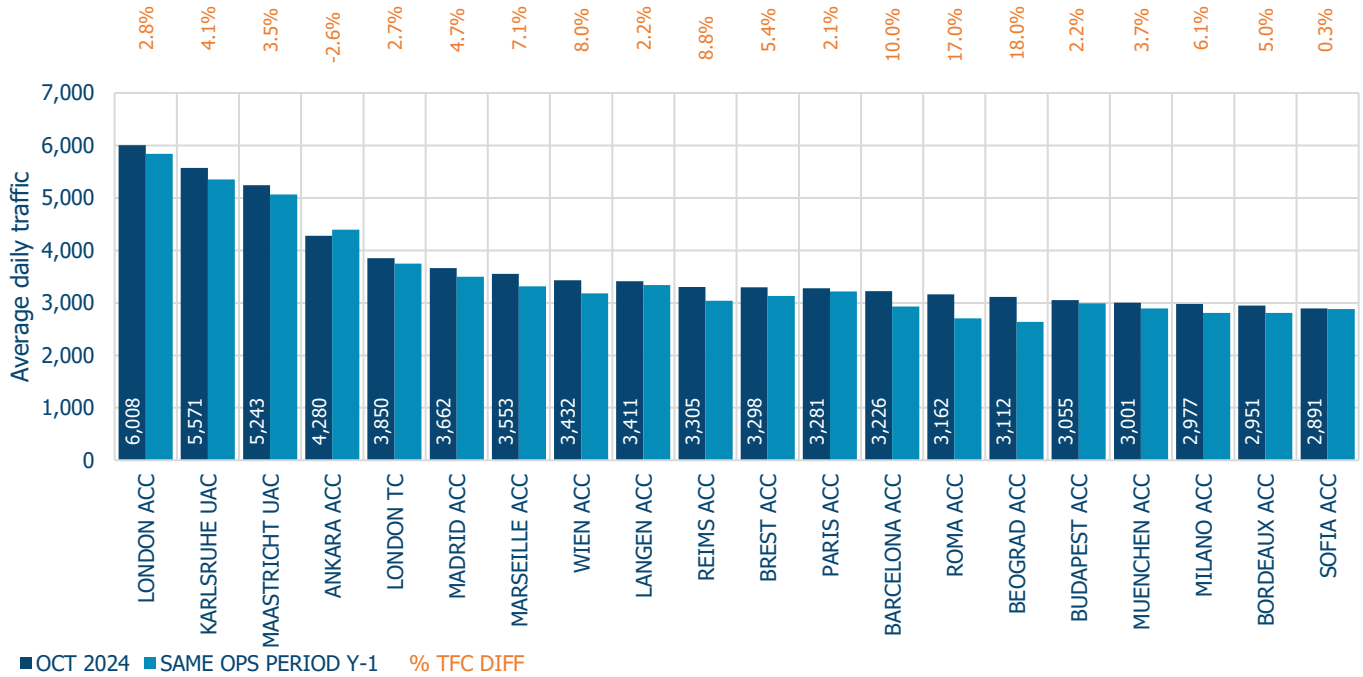
The intra-NM SW axis saw 5.7% growth compared to 2023 and SE axis 6.0%, which influenced the network growth of 4.9%.



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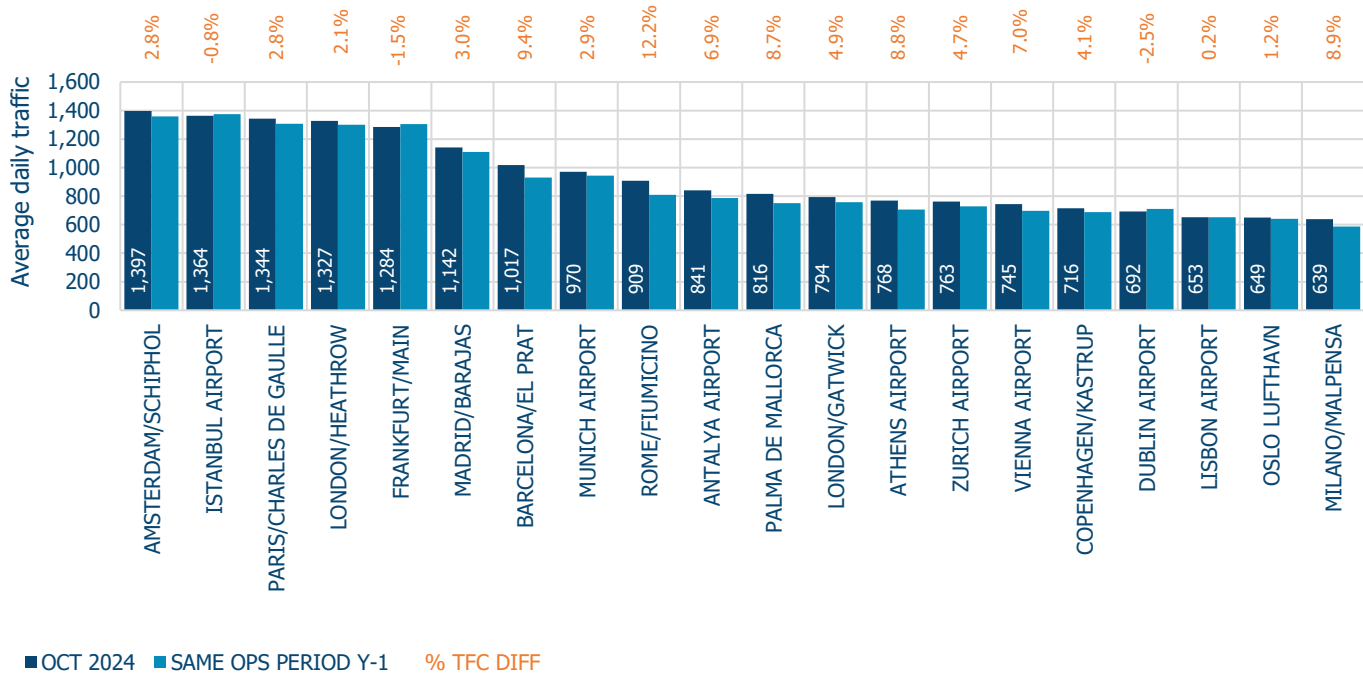
Aircraft operators were avoiding routes through Teheran and Baghdad FIR due to geopolitical tensions in the Middle East. This leads to increased traffic in Cairo, Cyprus, Makedonia, Zagreb, Tirana and Athens ACCs.

October 2024 | Top 20 ACC daily traffic



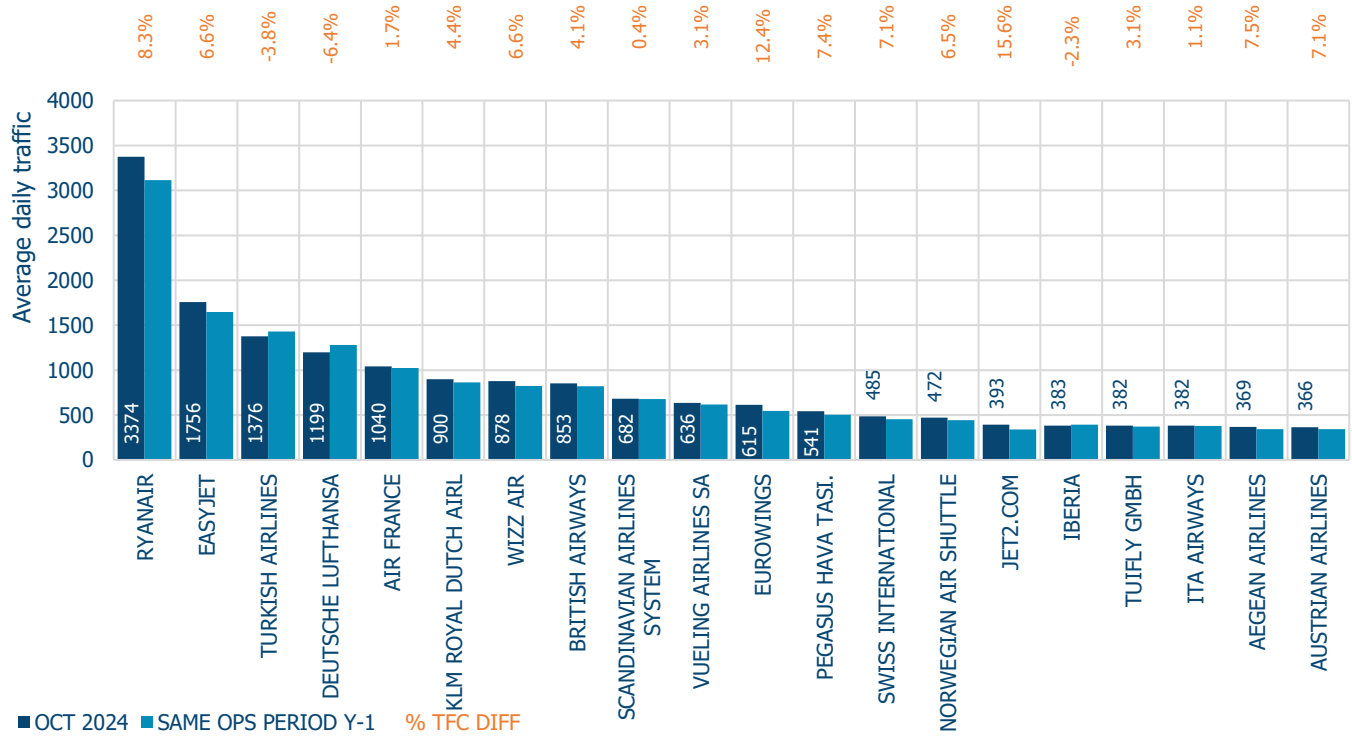
There was no change in the Top 5 ACCs compared to last month. London ACC remained the busiest followed by Karlsruhe UAC, Maastricht UAC, Ankara ACC and London TC. Among the Top 20 ACCs, only Ankara ACC saw no increase in traffic compared to September 2023. Notably, three ACCs—Barcelona, Roma, Beograd—registered substantial double-digit growth. Traffic increased in Cairo, Cyprus, Makedonia, Zagreb, Tirana and Athens ACCs were due to aircraft operators avoiding routes through Teheran and Baghdad FIR due to geopolitical tensions in the Middle East.

October 2024 | Top 20 Airports daily traffic



For the first time in 2024, Amsterdam/Schiphol became the busiest airport with an average of 1,397 flights/day, followed by Istanbul (1,367 flights/day), Paris Charles de Gaulle (1,344 flights/day), London Heathrow (1,327 flights/day) and Frankfurt (1,284 flights/day). Istanbul and Frankfurt airports had less traffic compared to the same period last year.

October 2024 | Top 20 Air Operator groups daily traffic



The Top 5 air operators remained the same as in September 2024. Two air operators had a double-digit percentage traffic growth compared to last year: Eurowings and JET2.COM.

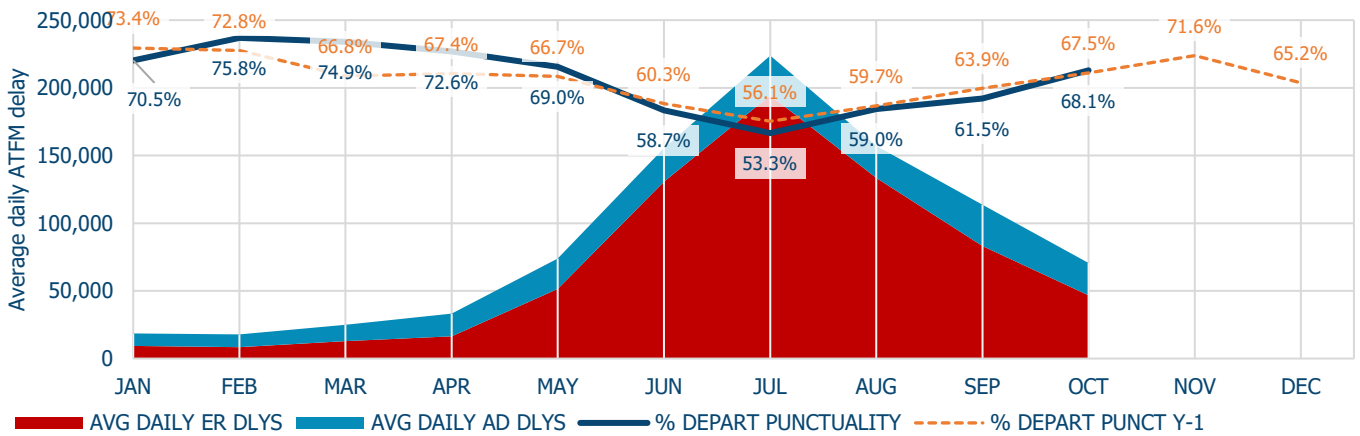
Ryanair was the busiest operator with, on average, 3,374 movements per day followed by easyJet (1,756), Turkish Airlines (1,376), Lufthansa (1,199) and Air France (1,040).

Turkish Airlines, Lufthansa and Iberia saw a traffic decrease compared to October 2023.

3. Punctuality

3.1 Departure Punctuality

Network departure punctuality and ATFM delay



Network departure punctuality (68.1%) increased by 6.6 p.p in October compared to September 2024 and was above the level of October 2023.

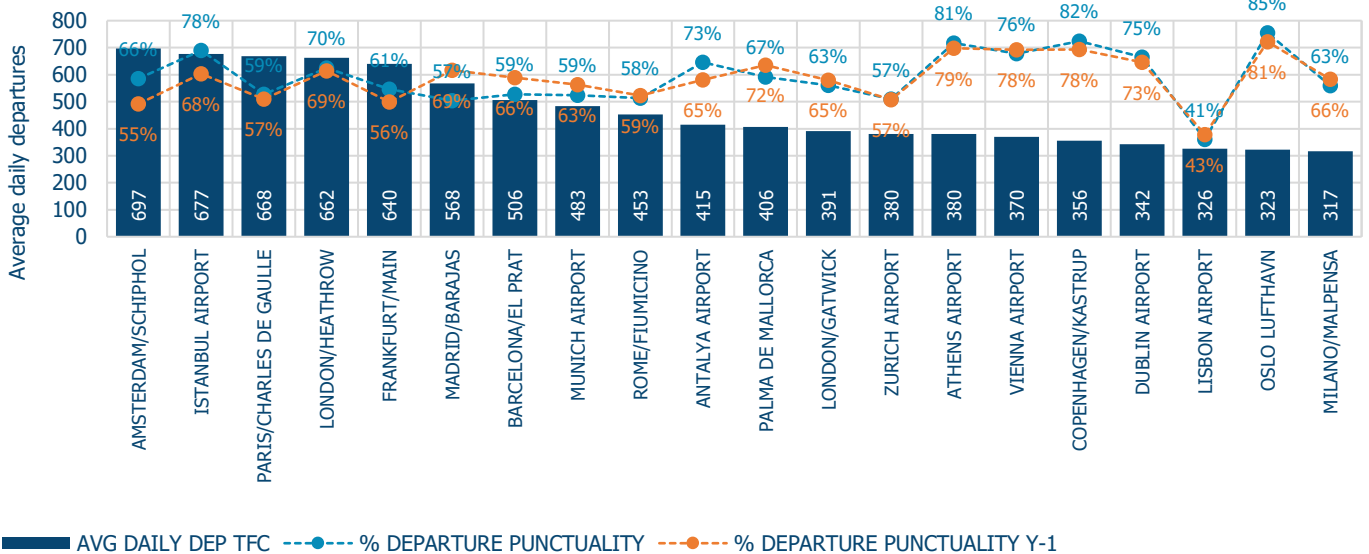
Punctuality on the domestic routes was higher (77.2%) than punctuality at network level. Punctuality on the south-east axis was 68.3% which is an increase of 1.4 pp compared to October 2023.

Network first rotation departure punctuality was 79.9%. and remained stable compared to 2023. Improving first rotation punctuality remains a key objective for NM.

*This view of operational punctuality can be tracked in near real-time by aircraft operator and airport level in the [NORTI Dashboard](#) and in [MIRROR](#). Archived data can be found in the [FATHOM interactive dashboard](#).

The Central Office for [Delay Analysis CODA reports](#) provide further detailed analysis of airline reported delay reasons.

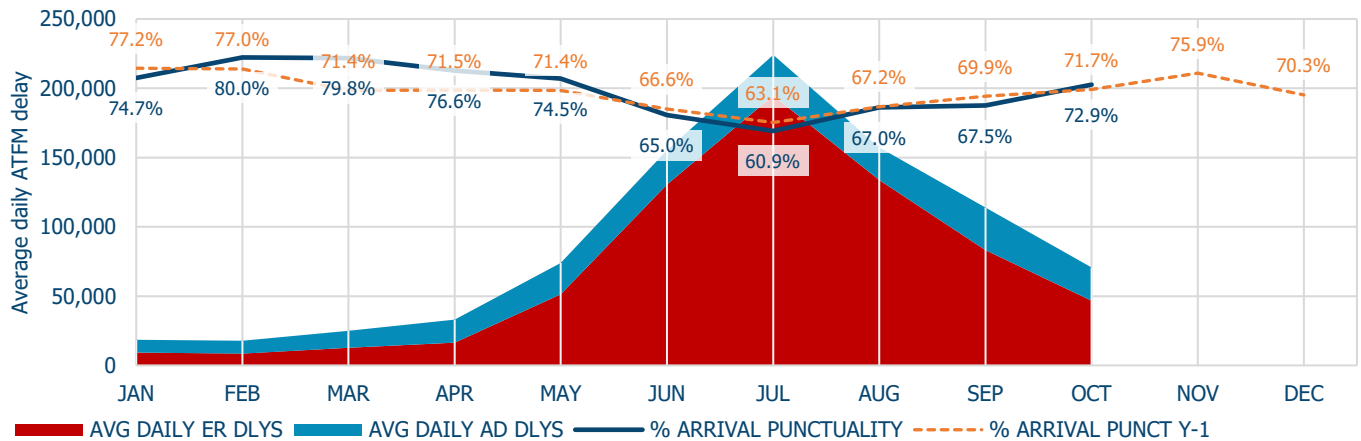
October 2024| Top 20 Airport departure traffic and punctuality



Punctuality in general remained stable at the Top 20 airports, with the Top 5 busiest airports seeing slight improvements. Amsterdam Schiphol saw delays due to multi-factors of weather (mainly low visibility) and aerodrome capacity reasons due to high demand, with the 24 and 25 October seeing high weather-related delays. Paris CDG and Frankfurt airports also suffered from low visibility, with multiple days seeing morning weather regulations.

3.2 Arrival Punctuality

Network arrival punctuality and ATFM delay

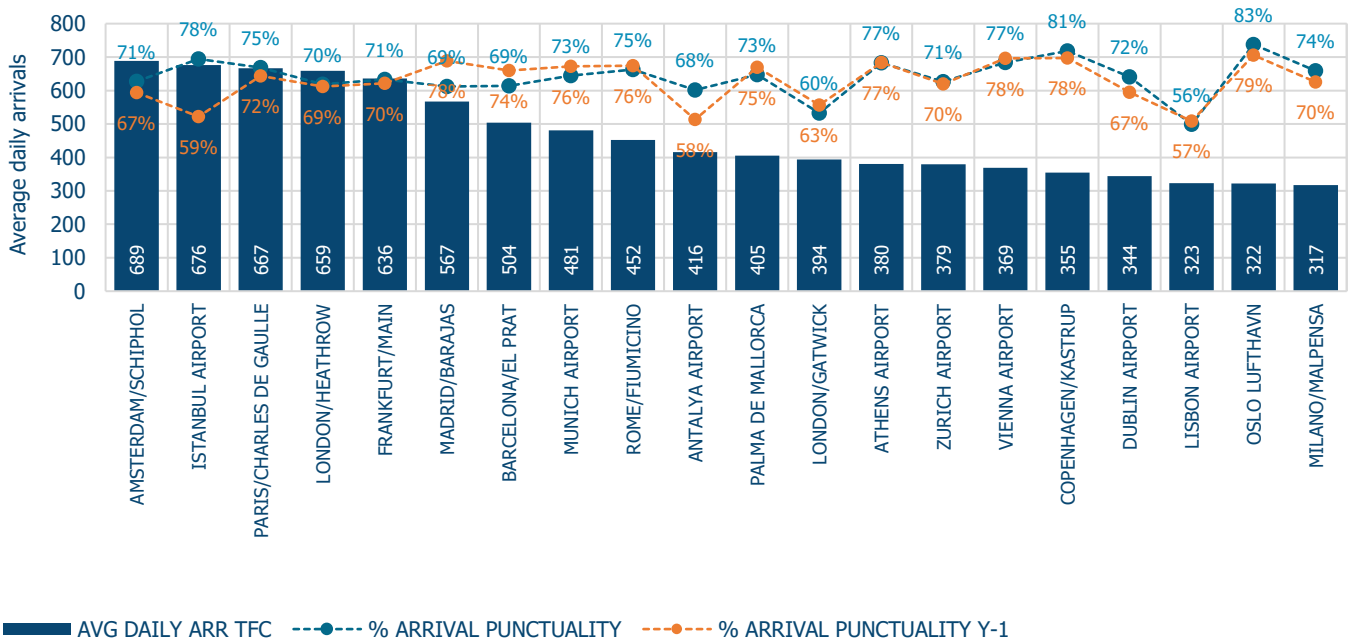


Network arrival punctuality (72.9%) increased by 5.4 p.p. in October compared to September 2024 and was higher than September 2023 level (+1.2 p.p.).

Domestic routes (78.6%) arrival punctuality was higher than the network level. Punctuality on the south-east axis was 72.9% which is an increase of 5.2 p.p. compared to October 2023.

First rotation arrival punctuality remained stable compared to October 2023 and was 84.5%.

October 2024 | Top 20 Airport arrival traffic and punctuality



As per the departure section above, seasonal weather (mainly low visibility) also influenced airport arrival punctuality during October. London Gatwick delays largely due to weather (low visibility and strong winds). Lisbon continues to suffer poor punctuality as weather and aerodrome capacity delays occurred throughout the month. London Heathrow saw frequent regulations for weather ranging from LVP to high winds and forecasted winds. Antalya saw improved punctuality as network delays fell on the south-east axis, reducing reactionary (knock-on) delays. Istanbul also improved compared to last year, where bad weather influenced performance, this year only one day saw regulation for CB activity.

4. Operations

4.1 Network Manager

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.

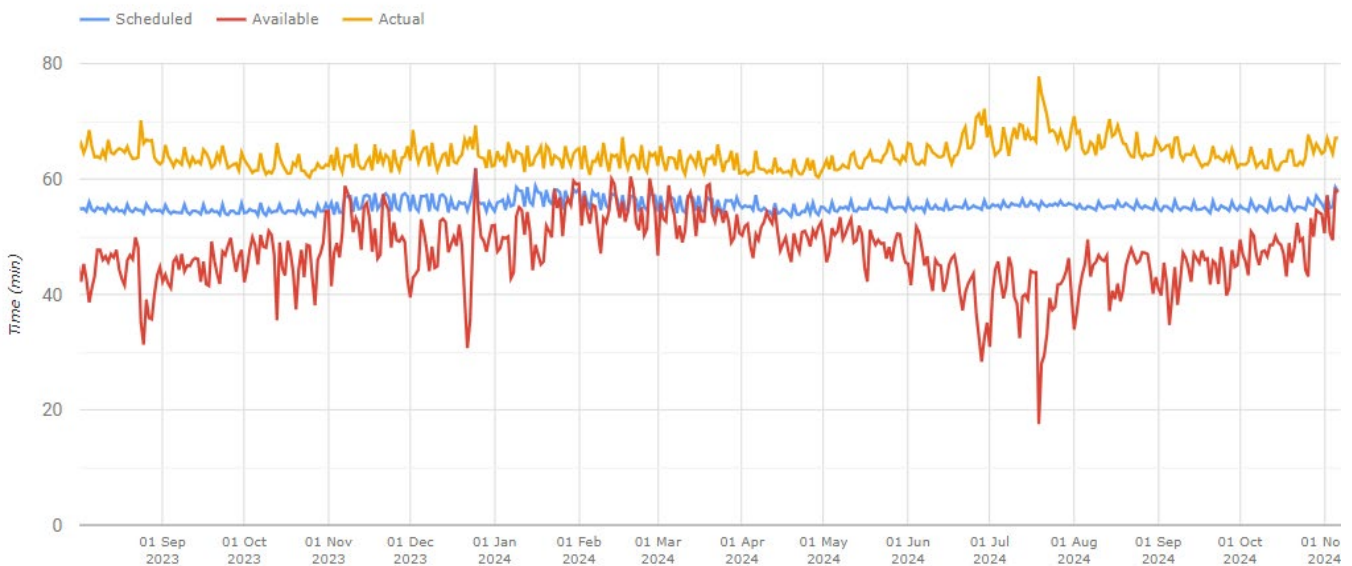
For Tel-Aviv FIR the NM provided a consolidated view of relevant NOTAMs on the NOP Portal and the EUROCONTROL Network Manager Operations Centre (NMOC) continues working 24/7 to implement State required airspace restrictions and in support to daily airline operations for routings and delay mitigation. The Conflict Zone Information Bulletin (CZIB) concerning Israel was revised the 09 October and then extended on 31 October together with the CZIB for Lebanon until 30 November.

NMOC's E-Helpdesk received 56,000 requests in October: 41,000 from AOs, 8,000 from FMPs and 7,000 from Towers. 6,000 of these requests were about flights that the AO considered "critical". The average delay saved per processed request was 24 minutes.

NMOC reduced en-route ATFM delays by 10.9% and airport ATFM delays by 9.7% through direct actions.

4.2 Ground

MIRROR'sⁱ indicator shows that in October the network (average) available turnaround time improved compared to October 2023 as punctuality improved. There were a few events that caused decreased turnaround times such as the DFS datalink issues on 04 October, LVP in London Heathrow and London Gatwick on 18 October and weather in Palma on 26 October.



NM is monitoring TTOTⁱⁱ calculation quality for the 32 A-CDM airports. The average error at a network level was 8.2 minutes, and decreased by 0.5 minutes compared to September, and by 0.8 minutes compared to October 2023. Brussels (EBBR) and Oslo/Gardermoen (ENGM) present the lowest error value among all 32 airports – 5.7 minutes. This is 0.1 minutes higher than the lowest value in September. Lisbon (LPPT) had the highest error value at 14.1 minutes, less by 0.2 minutes as compared to September. NM is providing the details of the TTOT error to the A-CDM airports and is working with selected airport operators to improve the TTOT quality.

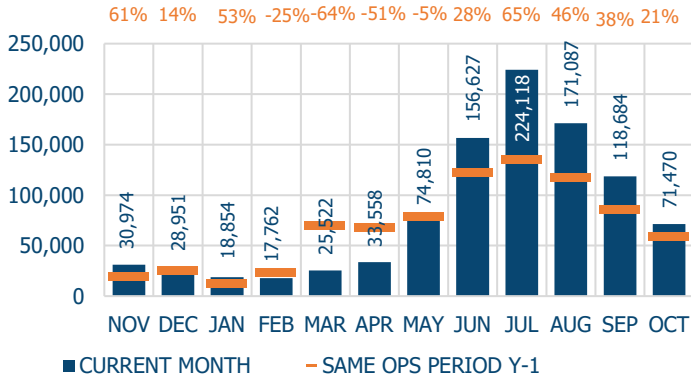
4.3 Network

There were 2,215,559 minutes of ATFM delay in October, 20.6% higher than October 2023.

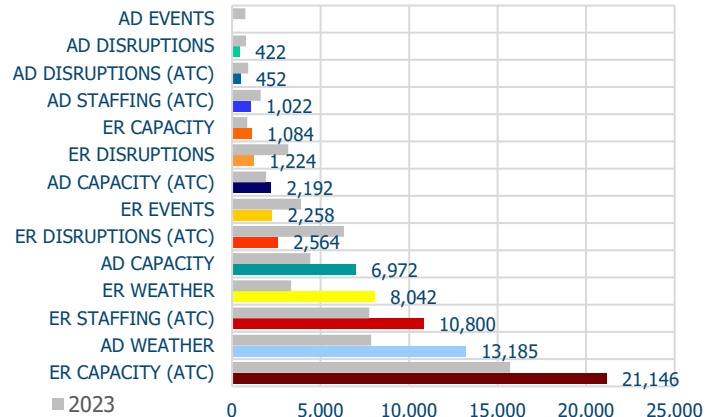
En-route ATFM delays accounted for 66.0% and airport ATFM delays accounted for 34.0%. Most of ATFM delays were due to ATC capacity/staffing and weather.

The average en-route ATFM delay per flight for the network was 1.5 minutes in October.

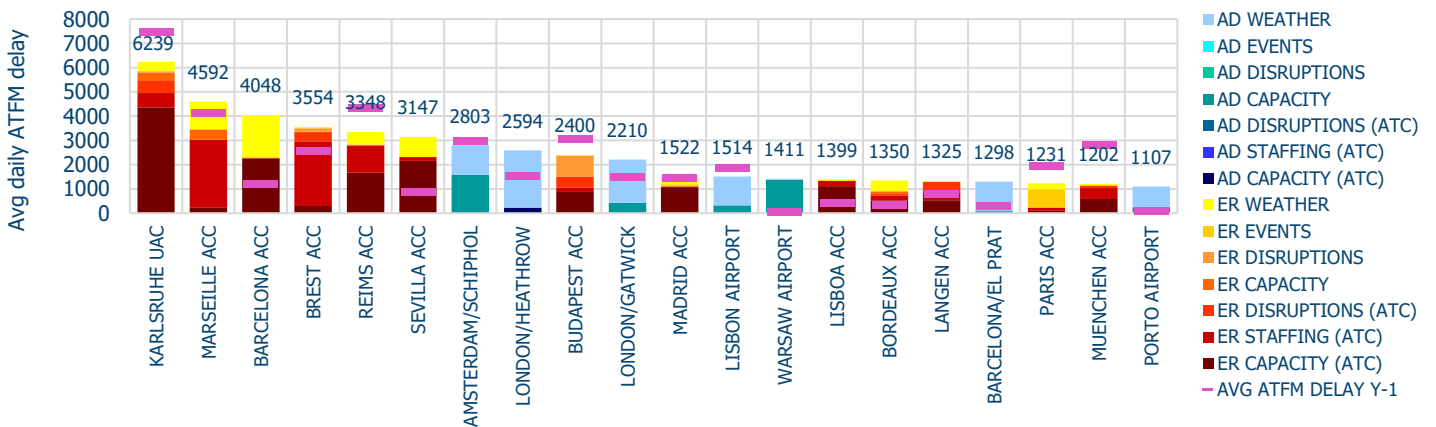
Last 12 months average daily ATFM delays



October 2024 | Reasons for ATFM delays



Top 20 delay reference locations in October 2024



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

- ATC capacity issues in Karlsruhe, Barcelona, Reims and Sevilla ACCs.
- Strong wind and low visibility generated high delays at London/Heathrow, London/Gatwick, Barcelona, Lisbon and Amsterdam/Schiphol airports.
- Convective activity impacted operations strongly in Barcelona and Marseille ACCs.
- Staffing shortage in Marseille and Brest ACCs.

4.4 Significant Events

Events

- A two-day live-trial of the new ATM system 4-Flight in Paris ACCs (08-09 October) generated 23,637 minutes of ATFM delay;
- MLU2 ATM system upgrade in Brussels ACC from 19 October to 22 October generated 29,264 minutes of ATFM delay;
- WIC24 military exercise generated 12,112 minutes of ATFM delay in Maastricht UAC;
- TLP military exercise generated 2,377 minutes of ATFM delay in Madrid ACC.

Technical

- Due to the unavailability of a radio antenna located on the Cantabrian coastline, the number of available sectors provided by Brest ACC in the Bay of Biscay was limited, prompting 11,868 minutes of ATFM delay;
- DFS control Center experienced technical issue on 04 October which led to capacity reduction in several German such as Karlsruhe UAC, Munich ACC and Bremen ACC. It also impacted Frankfurt airport and generated a total of 37,747 minutes of ATFM delay;
- Radar issue at Athens airport on 13 October generated 1,169 minutes of ATFM delay;
- Communication system issues in Bremen ACC on 04 and 15 October generated 2,266 minutes of ATFM delay;
- Communication system failure at Amsterdam/Schiphol on 19 October generated 1,582 minutes of ATFM delay;
- Flight Data Processing System issues in Milano ACC on 20 October generated 9,772 minutes of ATFM delay;
- Two days of radar maintenance in Budapest ACC on 28 and 29 October generated 14,465 minutes of ATFM delay;
- Communication system issue at Malaga airport on 29 October generated 2,220 minutes of ATFM delay;

Industrial action

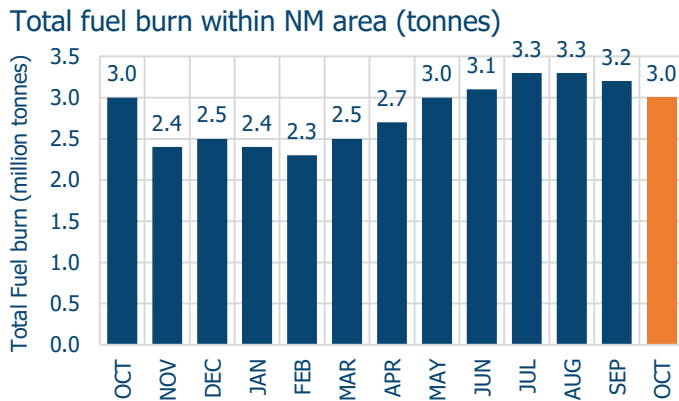
- General Industrial action in Belgium on 01 October affected Brussels Airport and Brussels South Charleroi Airport, with no passengers able to depart on scheduled flights .

Other

- Aircraft blocked the runway at Bergamo airport on 01 October. No movements were recorded between 05:55 and 17:41 UTC and -177 fewer movements were recorded week-on-week.
- Budapest ACC recorded 27,205 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 1,500 minutes of ATFM delays in Warsaw ACC.

5. Flight Efficiency

5.1 Fuel Burn

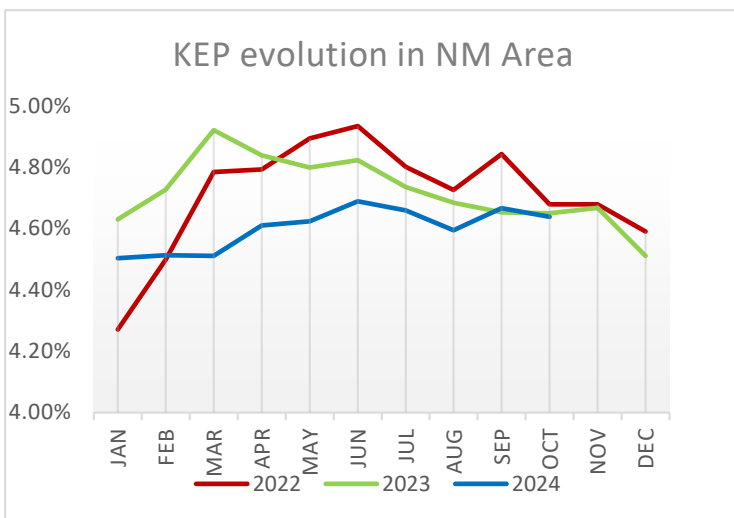


NM estimates that 3.0 million tonnes of fuel was burnt in the en-route flight phase in the NM area in October.

En-route fuel burn remained at a similar level to October 2023 with an extra 45,000 flights. NM believes this is due to more efficient narrow body aircraft operating in the network, e.g. A21N (+5,000 flights) and B38M (+13,000 flights) and fewer flights by older very large aircraft types (B772).

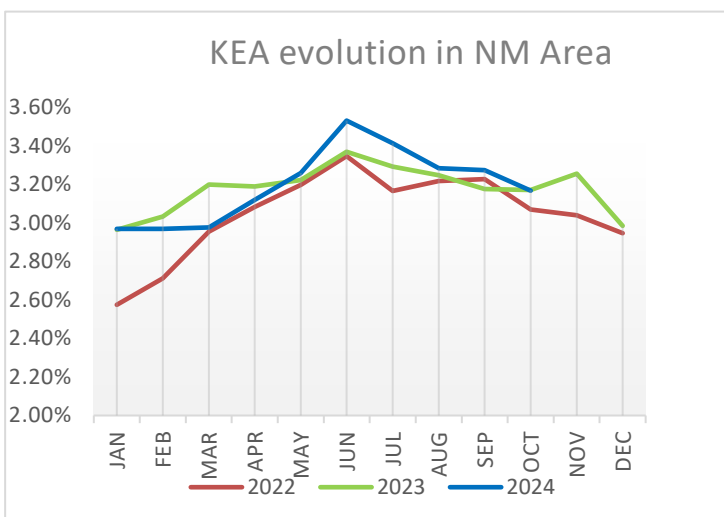
5.2 Horizontal Flight Efficiency

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



KEP indicator (4.64%) was at the same level as 2023 level and lower than 2022

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



KEA indicator (3.17%) was at the same level as October 2023 and higher than October 2022.

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 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.

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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