Monthly Network Operations Report

Overview January 2024

1. SUMMARY

Traffic in January (708,455 flights) was 4.6% higher than January 2023. Almost all states had more flights, with UK remaining the busiest. It was similar for most air operators and airports.

On average, the network saw 22,853 flights/day in January, some 1,000 flights/day more than January 2023. The peak day was Friday 05 January (26,115 flights). The Intra NM SW axis saw the 5.7% growth compared to January 2023 and SE axis had +5.4%. Domestic traffic decreased by -3.1%.

The war in Ukraine continues to affect overflights in several countries. The EUROCONTROL NM continues to help manage the aviation crisis caused by the war.

Ryanair was the busiest operator with, on average, 2,352 movements per day followed by Turkish Airlines (1,312), Lufthansa (943), easyJet (908) and Wizz Air (820). Wizz Air and KLM had double-digit growth compared to January 2023.

The busiest airport was Istanbul (1,308 flights/day), followed by London/Heathrow (1,201 flights/day), Amsterdam/Schiphol (1,160 flights/day), Paris/Charles de Gaulle (1,032 flights/day) and Madrid/Barajas (1,020 flights/day). All top 10 airports saw increase in traffic compared to January 2023, except Paris/Charles de Gaulle airport (-4.8%) which had a 4Flight 'live trial' traffic reduction program.

Network departure punctuality (70.5%) and arrival punctuality (74.8%) decreased compared to January 2023. Punctuality on domestic routes, the SW axis and the SE axis was higher than the network level.

A series of disruptive weather events including named storms affected the north-western part of the network: storm 'Henk' on 02 January; strong winds at Schiphol on 15-16 January; snow in Germany on 17 January; storm 'Isha' on 21-22 January; and storm 'Jocelyn' on 24 January.
A 6-week trial of the 4-Flight system began 09 January in Paris ACC. Sector capacities were in general reduced by -30% although a few sectors were limited to -50%. This generated a total of 119,143 minutes of ATFM delay.

There were 584,478 minutes of ATFM delay in January, 52.5% higher than January 2023. En-route accounted for 50.2% of these ATFM delays, and airports for 49.8%. The average en-route ATFM delay per flight for the network was 0.4 minutes in January. Flow measures were mainly due to airport weather and en-route events.

2. Traffic evolution

Last 12 months average daily traffic
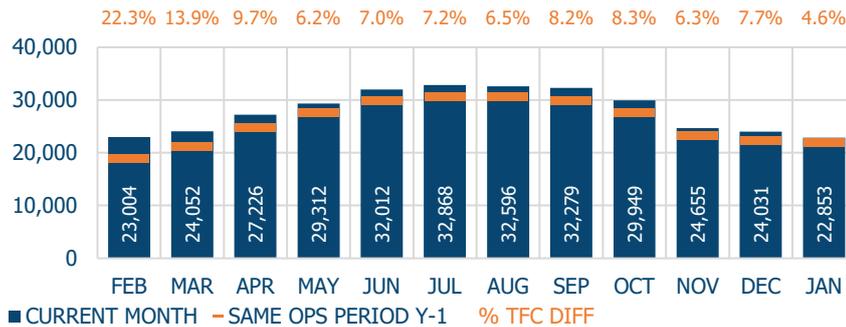
There were 708,455 flights throughout Europe in January 2024, 4.6% up compared to the same period last year.

In January 2024 (vs. January 2023), the main contributors to flight growth in the NM area were the Low-cost (+8.5%) and the Mainline (+6.6%) segments, they collectively added 1,089 daily flights to the network, partially due to extra daily flights between Italy <-> Spain (+43), Italy <-> Albania (+32), UK <-> UK (+32), Türkiye <-> Middle-East (+28) and Germany <-> Spain (+26). The Business Aviation segment recorded a slight uptick of +0.2%, and continued to be ahead of January 2019, at 105.5% in January 2024. On the other hand, the All-cargo segment decreased by –2.9% (-30 flights/day vs Jan 2023) with fewer daily flights between Germany <-> Italy (-9), Sweden <-> Sweden (-8), France <-> France (-6) and Italy <-> Italy (-4). The Charter segment went down -2.3% partly due to fewer daily flights between Türkiye <-> The Russian Federation (-6), UK <-> UK (-5) and Italy <-> Italy (-4). The Regional segment declined by -0.1% with fewer daily flights in UK domestic (-51) and Norway domestic (-24) routes.

Daily network traffic evolution

On average, 7.0% of scheduled traffic did not operate in January (see Non-Operated Schedules, NOS, above). The busiest day was Friday 05 January (26,115 flights). The lowest traffic level and the highest NOS was on 17 January, where snow and winds hit Northern Europe from Sweden to Germany. Aircraft operators cancelled many flights which explained the peak of 13% NOS.

Traffic per flow
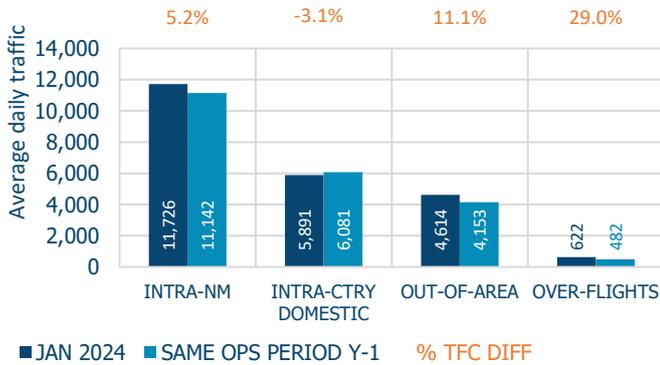
Intra-NM daily traffic
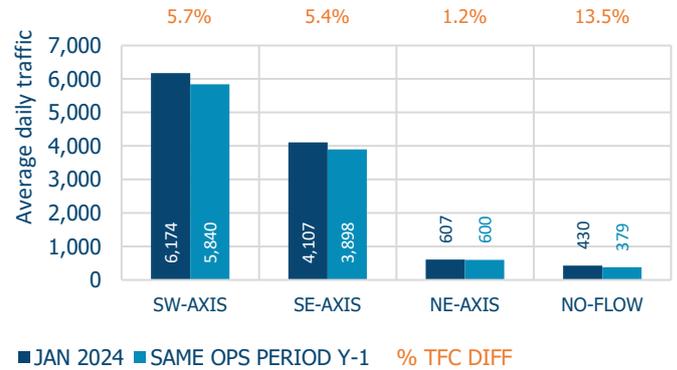
There were 191,404 flights in the Intra-NM SW-Axis traffic flow; 182,625 domestic flights; 127,324 flights in the Intra-NM SE-Axis.
Monthly Intra-NM SW (+335 flights/day) growth and Inter-NM SE (+450 flights/day) growth influenced the network growth of 7.7%.

TRAFFIC MONITORING
% comparing January 2024 to same period of previous year

Legend:
- <= 0.0%
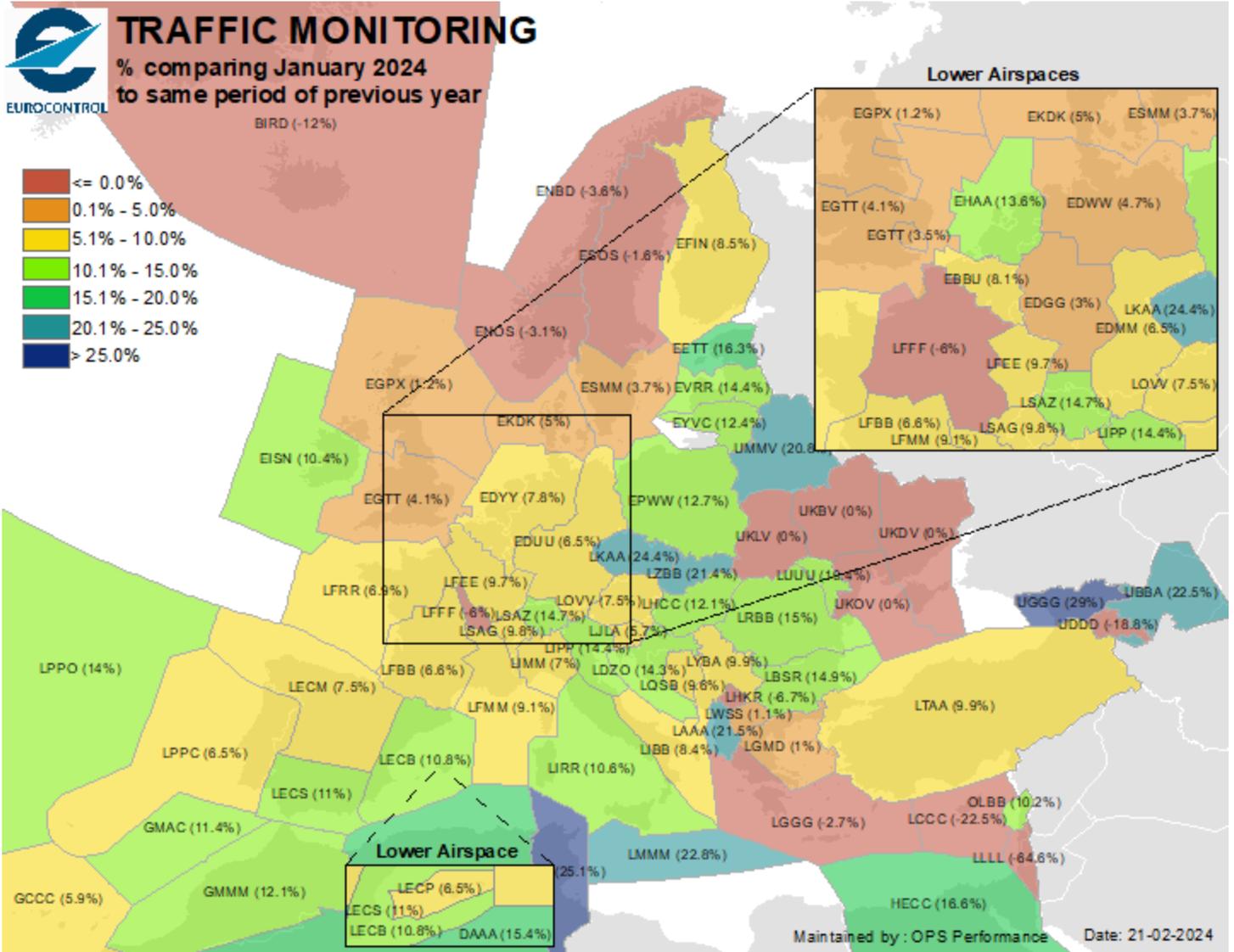- 0.1% - 5.0%
- 5.1% - 10.0%
- 10.1% - 15.0%
- 15.1% - 20.0%
- 20.1% - 25.0%
- > 25.0%

Lower Airspaces:
EGPX (1.2%), EKDK (5%), ESMM (3.7%), EGTT (4.1%), EHAA (13.6%), EDWW (4.7%), EGTT (3.5%), EBBU (8.1%), EDGG (3%), LKAA (24.4%), EDMM (6.5%), LFFF (-6%), LFEE (9.7%), LOVV (7.5%), LFBB (6.6%), LSAZ (14.7%), LFMM (9.1%), LSAG (9.8%), LIPP (14.4%)

Map labels: BIRD (-12%), ENBD (-3.6%), ENOS (-1.6%), EFIN (8.5%), ENOS (-3.1%), ESMM (3.7%), EVRR (14.4%), EETT (16.3%), EGPX (1.2%), EYVC (12.4%), EISN (10.4%), EKDK (5%), EGTT (4.1%), EDYY (7.8%), EPWW (12.7%), UMMV (20.8%), UKBV (0%), UKLV (0%), UKDV (0%), EDUU (6.5%), LKAA (24.4%), LZBB (21.4%), LUUU (18.%), LFRR (6.9%), LFEE (9.7%), LOVV (7.5%), LHCC (12.1%), UKOV (0%), UGGG (29%), LBBA (22.5%), LFFF (-6%), LSAZ (14.7%), LRBB (15%), UDDD (-18.8%), LSAG (9.8%), LJLA (5.7%), LPPO (14%), LFBB (6.6%), LIPP (14.4%), LIMM (7%), LDZO (14.3%), LYBA (9.9%), LBSR (14.9%), LECM (7.5%), LQSB (9.6%), LHKR (6.7%), LTAA (9.9%), LPPC (6.5%), LFMM (9.1%), LWSS (1.1%), LECB (10.8%), LIRR (10.6%), LAAA (21.5%), LIBB (8.4%), LGMD (1%), GMAC (11.4%), LECS (11%), OLBB (10.2%), LCCC (-22.5%), GCCC (5.9%), GMMM (12.1%), LMMM (22.8%), LGGG (-2.7%), LLLL (-64.6%), HECC (16.6%)

Lower Airspace: LECP (6.5%), LECS (11%), LECB (10.8%), DAAA (15.4%)

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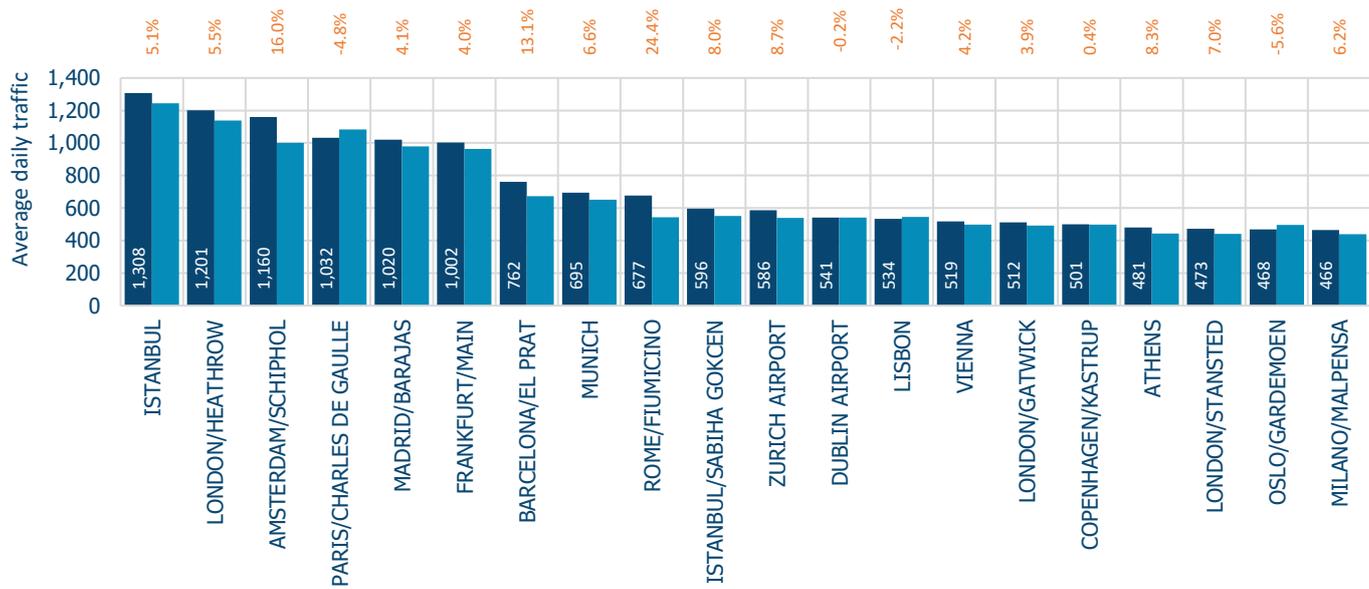
January 2024 | Top 20 ACC daily traffic

ACC	JAN 2024	% TFC DIFF
LONDON ACC	4,383	4.1%
MAASTRICHT UAC	3,970	7.8%
KARLSRUHE UAC	3,963	6.5%
ANKARA ACC	3,493	9.9%
LONDON TC	2,996	3.5%
MADRID ACC	2,908	7.5%
PARIS ACC	2,437	-6.0%
MARSEILLE ACC	2,347	9.1%
REIMS ACC	2,333	9.7%
LANGEN ACC	2,331	3.0%
WIEN ACC	2,200	7.5%
BUDAPEST ACC	2,194	12.1%
BREST ACC	2,192	6.9%
SOFIA ACC	2,117	14.9%
MUENCHEN ACC	2,113	6.5%
MILANO ACC	2,059	7.0%
ISTANBUL ACC	2,053	6.6%
SCOTTISH ACC	2,023	1.2%
BARCELONA ACC	1,902	10.8%
ROMA ACC	1,894	10.6%
BORDEAUX ACC	1,857	6.6%
BUCURESTI ACC	1,826	15.0%
ZURICH ACC	1,670	14.7%
BEOGRAD ACC	1,642	9.9%
LISBOA ACC	1,591	6.5%

Legend: ■ JAN 2024 ■ SAME OPS PERIOD Y-1 % TFC DIFF

London ACC was the busiest ACC followed by Karlsruhe UAC, Maastricht UAC and Ankara ACC. Most of the busiest ACCs had positive traffic growth compared to 2023. Paris ACC traffic decreased due to a 6-week trial of the 4-Flight system.
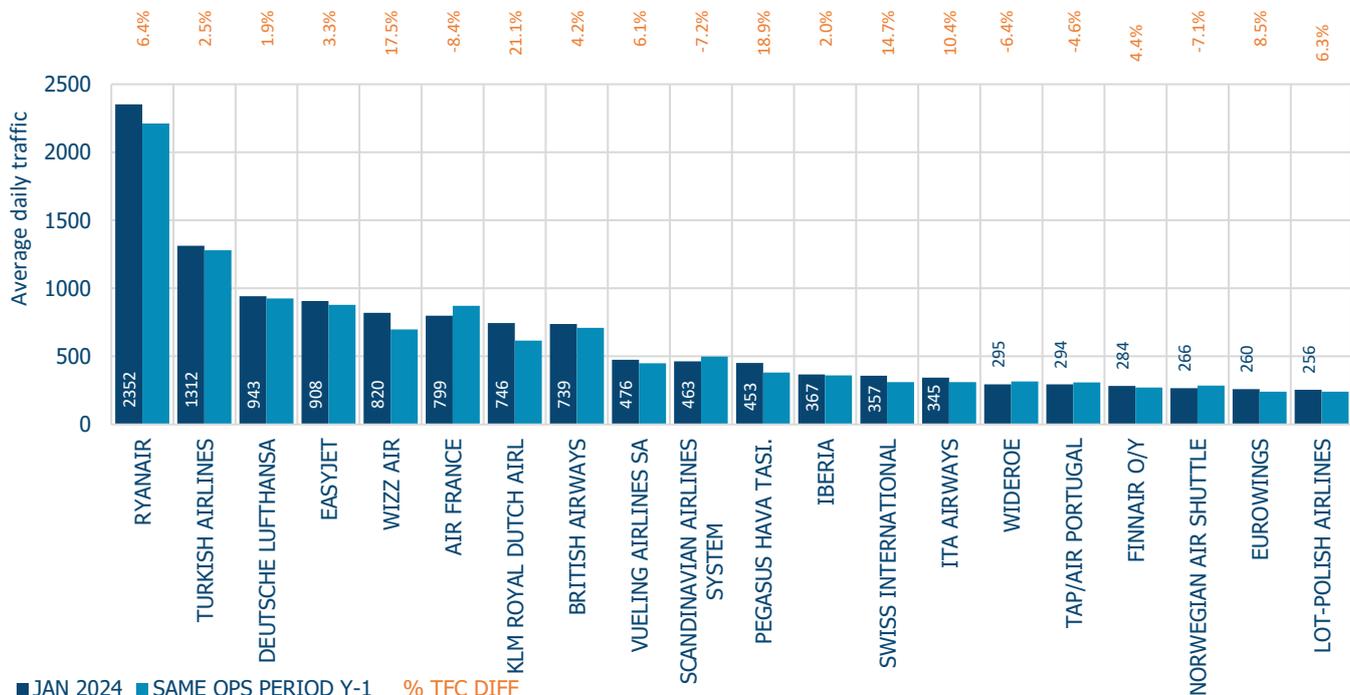
January 2024 | Top 20 Airports daily traffic

Legend: ■ JAN 2024 ■ SAME OPS PERIOD Y-1 % TFC DIFF

Airport values (JAN 2024 / % TFC DIFF):
- ISTANBUL — 1,308 — 5.1%
- LONDON/HEATHROW — 1,201 — 5.5%
- AMSTERDAM/SCHIPHOL — 1,160 — 16.0%
- PARIS/CHARLES DE GAULLE — 1,032 — -4.8%
- MADRID/BARAJAS — 1,020 — 4.1%
- FRANKFURT/MAIN — 1,002 — 4.0%
- BARCELONA/EL PRAT — 762 — 13.1%
- MUNICH — 695 — 6.6%
- ROME/FIUMICINO — 677 — 24.4%
- ISTANBUL/SABIHA GOKCEN — 596 — 8.0%
- ZURICH AIRPORT — 586 — 8.7%
- DUBLIN AIRPORT — 541 — -0.2%
- LISBON — 534 — -2.2%
- VIENNA — 519 — 4.2%
- LONDON/GATWICK — 512 — 3.9%
- COPENHAGEN/KASTRUP — 501 — 0.4%
- ATHENS — 481 — 8.3%
- LONDON/STANSTED — 473 — 7.0%
- OSLO/GARDEMOEN — 468 — -5.6%
- MILANO/MALPENSA — 466 — 6.2%

Istanbul was the busiest airport with, on average, 1,308 flights per day followed by London/Heathrow (1,201 flights/day), Amsterdam/Schiphol (1,160 flights/day), Paris/Charles de Gaulle (1,032 flights/day) and Madrid/Barajas (1,020 flights/day).

French DSNA requested Paris/Charles de Gaulle and Paris/Orly airports to reduce flights by 10% from 09 January due to 4Flight trials in Paris ACC.

January 2024 | Top 20 Air Operator groups daily traffic

Legend: ■ JAN 2024 ■ SAME OPS PERIOD Y-1 % TFC DIFF

Operator values (JAN 2024 / % TFC DIFF):
- RYANAIR — 2352 — 6.4%
- TURKISH AIRLINES — 1312 — 2.5%
- DEUTSCHE LUFTHANSA — 943 — 1.9%
- EASYJET — 908 — 3.3%
- WIZZ AIR — 820 — 17.5%
- AIR FRANCE — 799 — -8.4%
- KLM ROYAL DUTCH AIRL — 746 — 21.1%
- BRITISH AIRWAYS — 739 — 4.2%
- VUELING AIRLINES SA — 476 — 6.1%
- SCANDINAVIAN AIRLINES SYSTEM — 463 — -7.2%
- PEGASUS HAVA TASI. — 453 — 18.9%
- IBERIA — 367 — 2.0%
- SWISS INTERNATIONAL — 357 — 14.7%
- ITA AIRWAYS — 345 — 10.4%
- WIDEROE — 295 — -6.4%
- TAP/AIR PORTUGAL — 294 — -4.6%
- FINNAIR O/Y — 284 — 4.4%
- NORWEGIAN AIR SHUTTLE — 266 — -7.1%
- EUROWINGS — 260 — 8.5%
- LOT-POLISH AIRLINES — 256 — 6.3%

Five air operators had a double-digit percentage growth compared to last year.
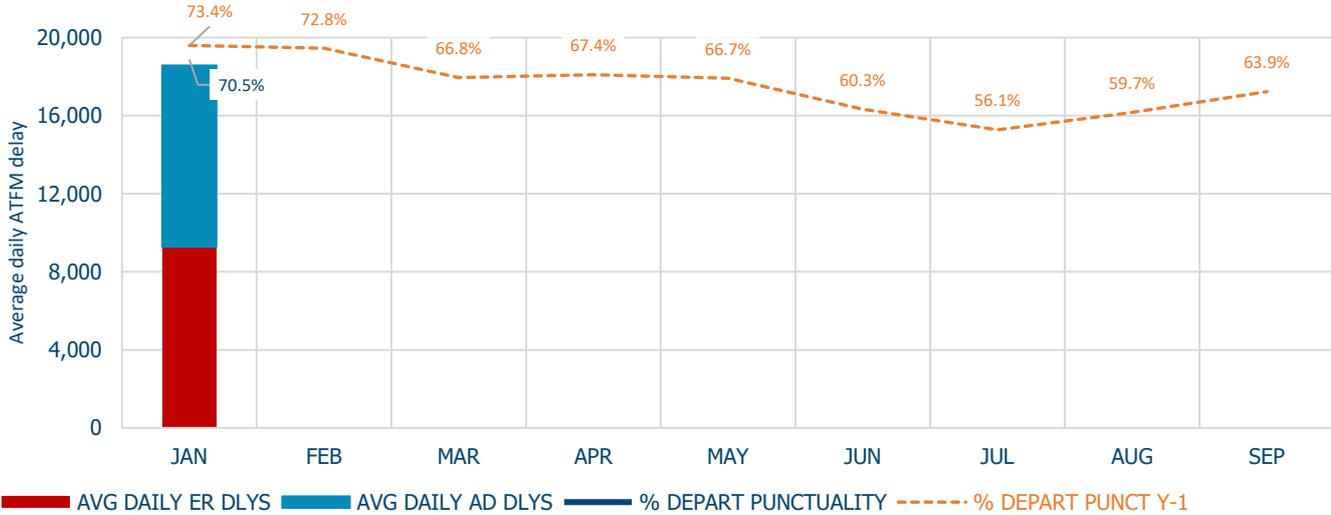
Ryanair was the busiest operator with, on average, 2,352 movements per day, followed by Turkish airlines (1,312), Lufthansa (943), easyJet (908) and Wizz Air (820).

Air France, Scandinavian airlines, Norwegian Air Shuttle traffic and Wideroe decreased compared to January 2023.

3. Departure Punctuality

### Network departure punctuality and ATFM delay

Network departure punctuality increased by 5.4 p.p in January compared to December but was lower than the 2023 level.

SE (73.1%) axis departure punctuality was higher than the network level. Out-of-Area axis was lower with 58.1%.

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 e found in the FATHOM interactive dashboard.

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

January 2024 | Top 20 Airport departure traffic and punctuality
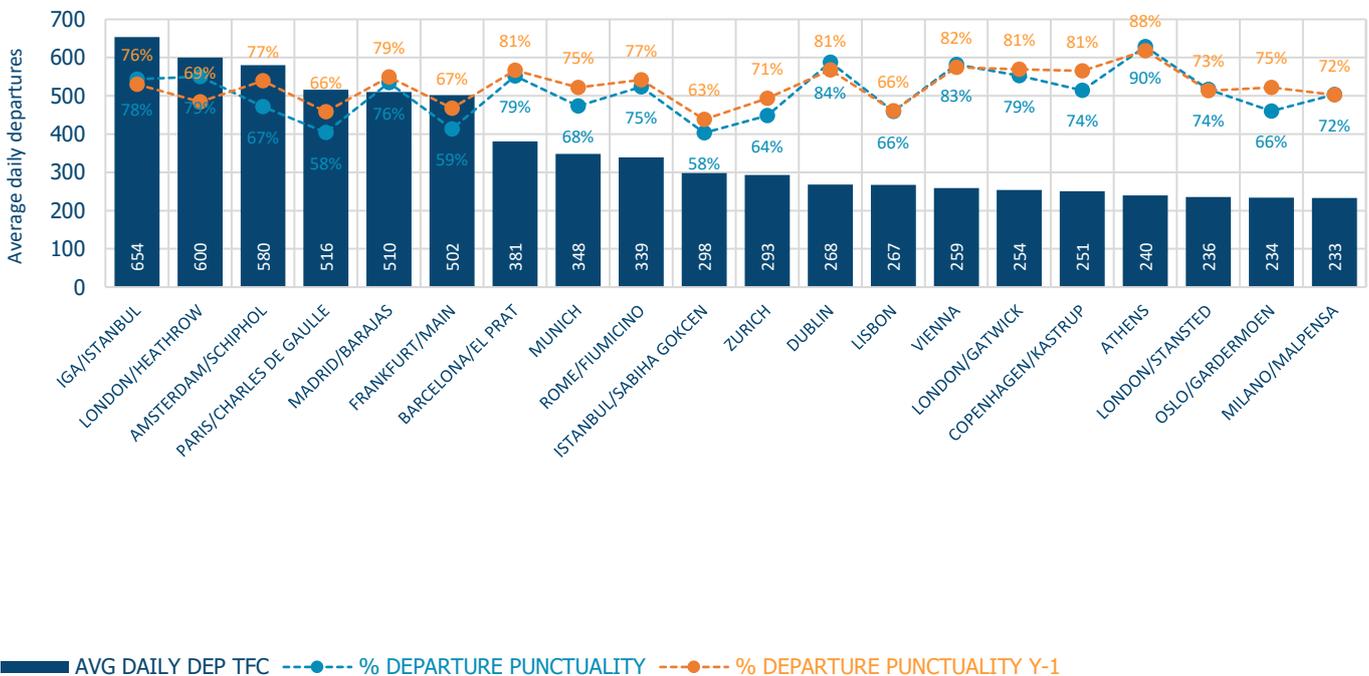
Amsterdam Schiphol was affected by weather, predominantly on 15 January where snow caused high delays, regulations for strong winds were also recorded during the month. 4-flight trials influenced performance at Paris CDG throughout the month. Lisbon was also impacted by weather (mainly low visibility) and aerodrome capacity delays. Munich saw punctuality drop, driven by freezing rain on the 17 January which significantly disrupted operations.

4.   Arrival Punctuality

Network arrival punctuality and ATFM delay

Network arrival punctuality increased by 4.4 p.p. in January compared to December. It averaged 74.7% and was lower than the same period in 2023 (-2.5 p.p.).
SE and SW axis both at 75.1% arrival punctuality were slightly higher than the network level.

January 2024| Top 20 Airport arrival traffic and punctuality
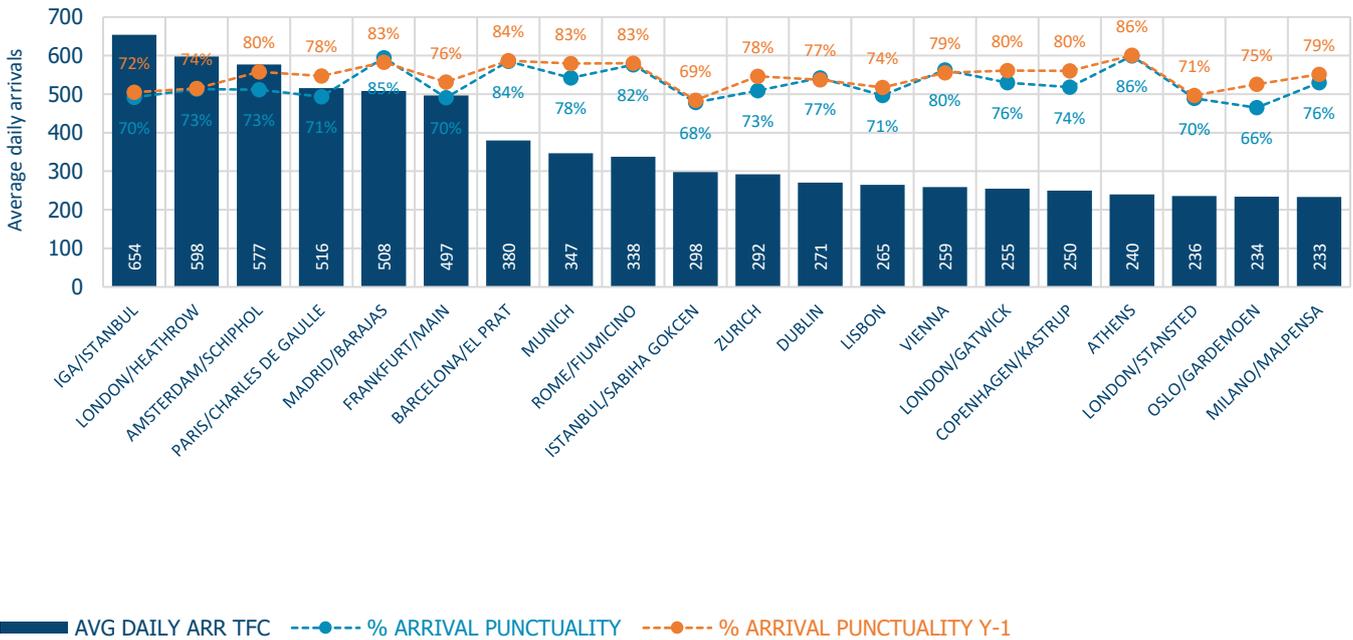
Istanbul Sabiha Gökçen suffered from weather delays (CB's, heavy rain and snow) notably on 02 & 07, 08 and 09 January. Oslo/Gardermoen was affected by snow during January with peaks in delay observed on 17, 22 and 26 of January, with the 17 being the worst for delays and disruption.

5. Operations

Network Manager

The EUROCONTROL 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.

EASA first issued a Conflict Zone Information Bulletin (CZIB) for the airspace of Israel on Sunday 8 October. NM provides a consolidated view of relevant NOTAMs on the NOP Portal and the EUROCONTROL Network Manager Operations Centre (NMOC) is working 24/7 to implement State required airspace restrictions and in support to daily airline operations for routings and delay mitigation.

The NM hosted the first 'Flight Dispatcher Days' event on 17-18 January. This was a face-to-face event for flight dispatchers and flight planners to enhance their skills and knowledge in optimising flight planning and flight management through the Network Manager system, including rejection handling and delay reduction techniques.

The NM also hosted the annual Network Manager User Forum (31 January - 01 February), an air traffic management event for aviation's operational community. Organised under the theme "All together for 2024", discussions focused on how to best manage the European aviation network in 2024.

As part of the planning for implementation of the 4-Flight system in Paris ACC on 05 Nov 2024, a 6-week Live-Trial began on 09 January. This had planned sector capacity reductions of approximately 30% and demand reduced by AO schedule cancellations and mandatory off-load routes. Due to technical issues the trial was suspended in the evening of 18 January. Following off-line testing of software updates the trial resumed on 26 January.

NMOC's E-Helpdesk received 14,013 requests in January, 10,000 from AOs, 2,000 from FMPs and 2,000 from Towers. 1,085 were tagged as concerning flights considered by the AO as 'critical'. The average delay saved per processed request was 26 minutes.

Direct actions taken by the NM Operations Centre (NMOC) reduced en-route ATFM delays by 16.2% and airport ATFM delays by 11.2%.
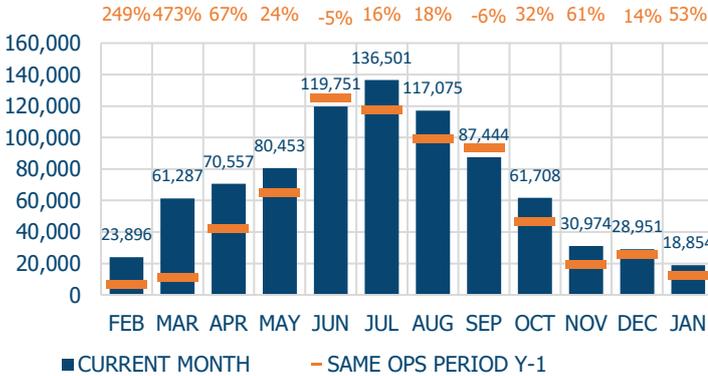
Ground

MIRROR's(i) indicator shows that the network (average) available turnaround time decreased when compared to the same period last year. The effects of the weather can be observed in January, the actual turnaround time remained above the scheduled turnaround time. Towards the end of the month turnaround performance improved as the available turnaround time exceeded the scheduled.
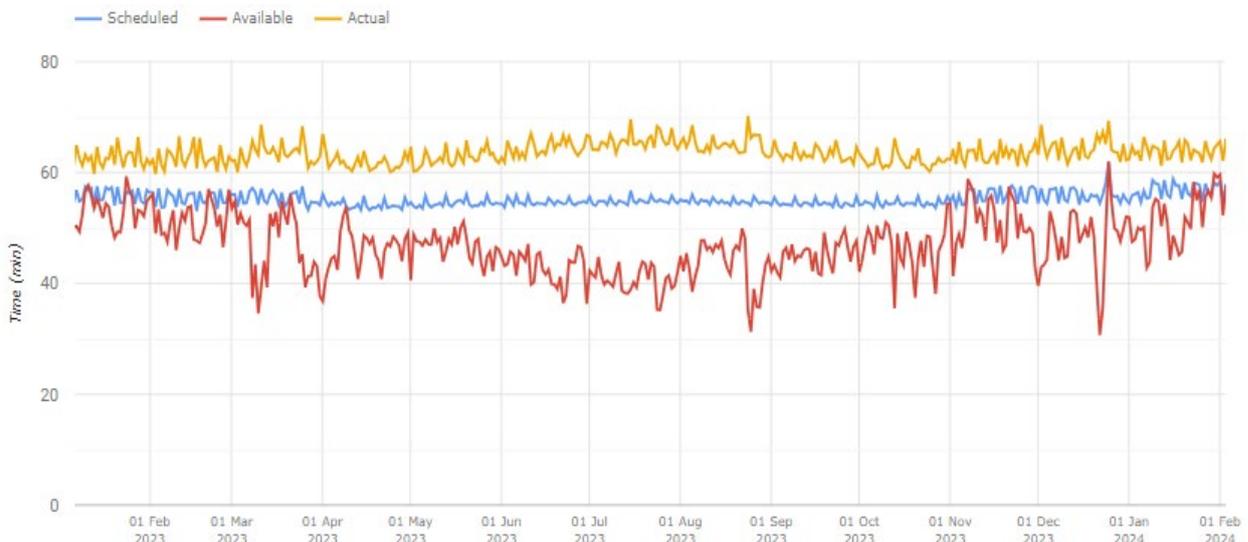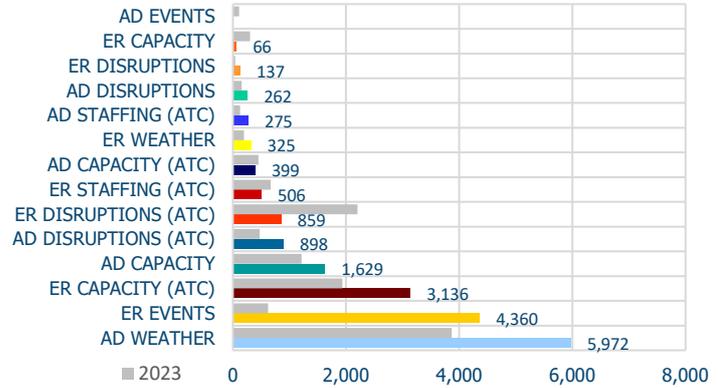
Network

There were 584,478 minutes of ATFM delay in January, 52.5% higher compared to January 2023.
En-route delays accounted for 50.2% of these ATFM delays, and airports for 49.8%.
The average en-route ATFM delay per flight for the network was 0.4 minutes in January.
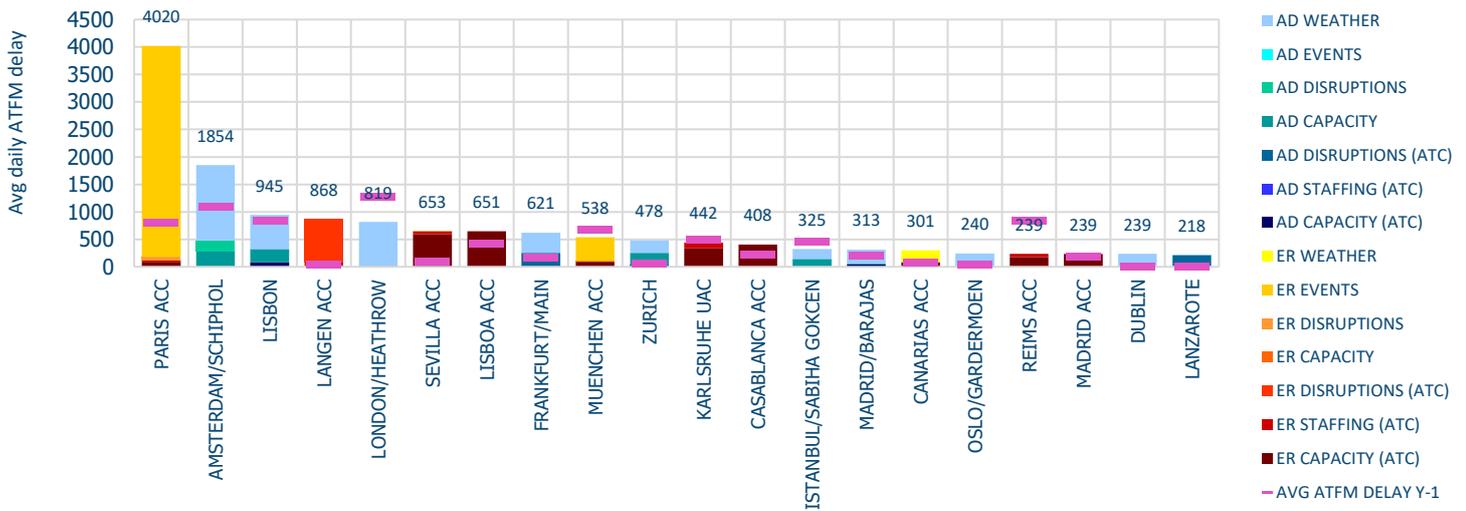Note that December ATFM delays were relatively low compared to summer.

Last 12 months average daily ATFM delays

Percentage labels: 249% 473% 67% 24% -5% 16% 18% -6% 32% 61% 14% 53%

Month	Current Month
FEB	23,896
MAR	61,287
APR	70,557
MAY	80,453
JUN	119,751
JUL	136,501
AUG	117,075
SEP	87,444
OCT	61,708
NOV	30,974
DEC	28,951
JAN	18,854

Legend: ■ CURRENT MONTH   — SAME OPS PERIOD Y-1

January 2024| Reasons for ATFM delays

Reason	2024
AD EVENTS	
ER CAPACITY	66
ER DISRUPTIONS	137
AD DISRUPTIONS	262
AD STAFFING (ATC)	275
ER WEATHER	325
AD CAPACITY (ATC)	399
ER STAFFING (ATC)	506
ER DISRUPTIONS (ATC)	859
AD DISRUPTIONS (ATC)	898
AD CAPACITY	1,629
ER CAPACITY (ATC)	3,136
ER EVENTS	4,360
AD WEATHER	5,972

Legend: ■ 2023

Top 20 delay reference locations in January 2024

Avg daily ATFM delay (minutes):

Location	Value
PARIS ACC	4020
AMSTERDAM/SCHIPHOL	1854
LISBON	945
LANGEN ACC	868
LONDON/HEATHROW	819
SEVILLA ACC	653
LISBOA ACC	651
FRANKFURT/MAIN	621
MUENCHEN ACC	538
ZURICH	478
KARLSRUHE UAC	442
CASABLANCA ACC	408
ISTANBUL/SABIHA GOKCEN	325
MADRID/BARAJAS	313
CANARIAS ACC	301
OSLO/GARDERMOEN	240
REIMS ACC	239
MADRID ACC	239
DUBLIN	239
LANZAROTE	218

Legend: AD WEATHER, AD EVENTS, AD DISRUPTIONS, AD CAPACITY, AD DISRUPTIONS (ATC), AD STAFFING (ATC), AD CAPACITY (ATC), ER WEATHER, ER EVENTS, ER DISRUPTIONS, ER CAPACITY, ER DISRUPTIONS (ATC), ER STAFFING (ATC), ER CAPACITY (ATC), — AVG ATFM DELAY Y-1

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 delays in minutes for the individual locations.

- 4Flight trials in Paris ACC generated high delays from 09 January;
- Seasonal weather impacted operations strongly at Amsterdam/Schiphol airport and London/Heathrow airports; Storm 'Henk', Storm 'Isha' and Storm 'Jocelyn' impacted Northern and Western Europe generating high ATFM delays;
- ATC capacity issues in Lisbon, Sevilla and Casablanca ACCs;
- Disruptions delay in Langen ACC due to issues with ATCO system.

Significant Events

Event

- Transition phase to new ATM System ICAS2 in München ACC generated 13,402 minutes of ATFM delay;
- 4Flight trials in Paris ACC from 09 to 31 January generated 119,143 minutes of ATFM delay;
- 2024 Annual meeting of the World Economic Forum in Davos from 12 to 19 January generated 997 minutes of ATFM delay in Zurich ACC.

Technical

- Single runway operations at Rome/Fiumicino airport from 23 to 24 January due to ALCMS (Airfield Lightning Control & Monitoring System) upgrade generated 4,492 minutes of ATFM delay;
- Issues with ATCO system in Langen ACC from 02 to 09 January generated 24,448 minutes of ATFM delay.

Industrial action

- ATC industrial action at Lanzarote and Fuerteventura airports throughout the month generated 7,691 minutes of ATFM delay;
- ATC industrial action in Bordeaux TMA from 14 to 17 January generated 2,642 minutes of ATFM delay.
- Non-ATC Industrial Action resulting in flight cancellations were recorded at Madrid/Barajas airport from 31 Dec 2023 to 07 Jan 2024; and by Brussels Airlines pilots on 13 January.

6.   Flight Efficiency

Fuel burn
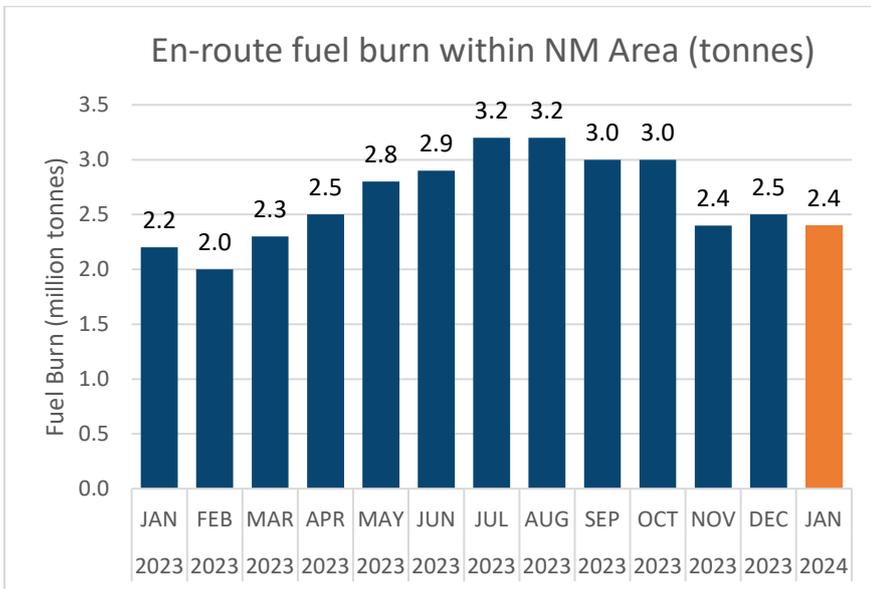
NM estimates that 2.4 million tonnes of fuel was burnt in the en-route flight phase in the NM area in January.
Traffic levels for Narrow body decreased between December and January.

Horizontal Flight Efficiency

HORIZONTAL FLIGHT EFFICIENCY

There are two horizontal flight efficiency KPIs[ii]. 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 was lower than 2023 in January and KEA was at the same level. NM is assessing the reasons for the fall in KEP since March – to be reported in the annual NOR, end Q1.

KEP evolution in NM area
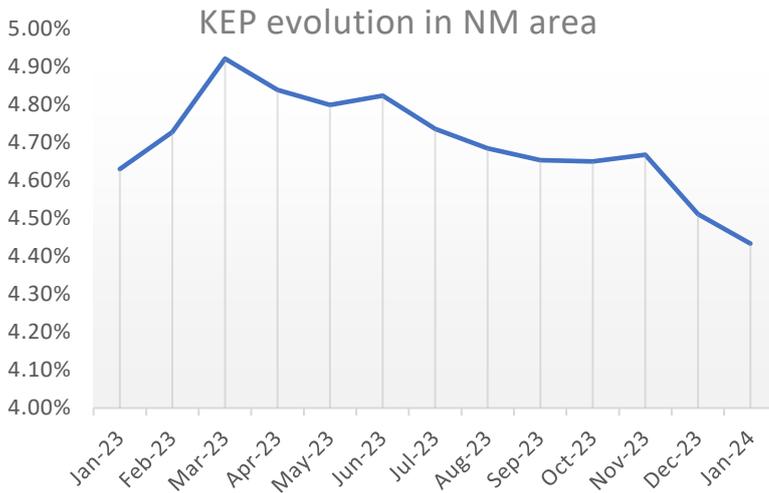
KEP indicator (4.43%) started the year lower than in 2023 (4.63%).

Over the past period, several airspace design-related changes improved connectivity, allowing better routing options in the network.

These new options were planned by AOs, leading to a better KEP. In addition, NM worked closely with AOs/CFSPs via the Flight Efficiency Taskforce to further improve their flight planning.

KEA evolution in NM Area
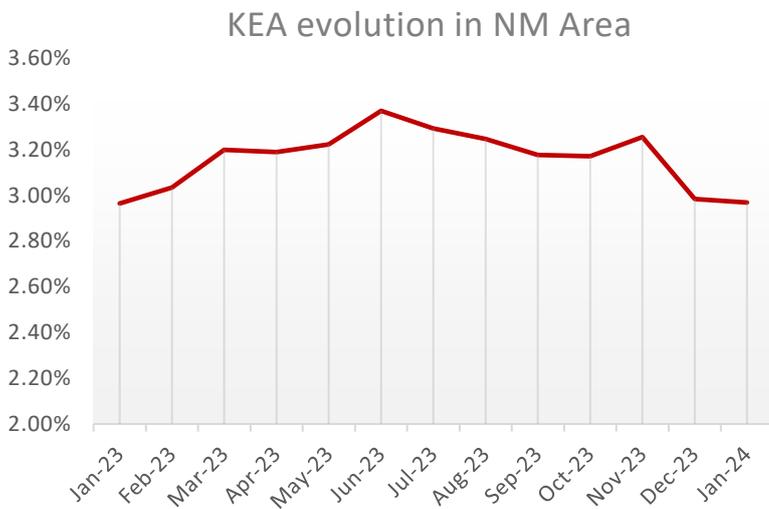
KEA indicator was at the same level as 2023 (2.97%).

7.   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**

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

Network Operations Analysis document
NM will maintain the NOR Overview for the foreseeable future. NOR Analysis remains suspended.
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 MIRROR project page for more details.*
[ii] *More information on KEP and KEA, see ANS performance page.*

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