COVID-19 IMPACT ON EUROPEAN AVIATION

EUROCONTROL Comprehensive Assessment

SUPPORTING EUROPEAN AVIATION
Headlines

- 10,562 flights (37% of 2019 levels) on Wednesday 24 March 2021.
- March traffic increasing within Network over 2 weeks (+7%, +706 flights).
- Acceleration of the increase over the last week.
- High increase over 2 weeks for Bristow Norway (+135%), easyJet (+41%), Wizz Air (+33%), Eurowings (+29%) and Lufthansa (+13%). Decrease for Ryanair (-27%).
- All cargo (+9% vs 2019). 4 freight carriers in the top 30. DHL Express is 4th.
- Domestic traffic vs 2019: Europe (-65%), US (-33%), China (+10%), Middle East (-45%).

Top 10 Aircraft Operators on Wed 24 March 2021 (daily flights)

1. Turkish Airlines
   - Operated 664 flights
   - ↓47% of same day in 2019
   - +7% over 2 weeks

2. Air France
   - Operated 357 flights
   - ↓69% of same day in 2019
   - +1% over 2 weeks

3. Wideroe
   - Operated 303 flights
   - ↓17% of same day in 2019
   - +4% over 2 weeks

4. DHL Express
   - Operated 274 flights
   - ↑10% of same day in 2019
   - ↓4% over 2 weeks

5. Pegasus
   - Operated 256 flights
   - ↓39% of same day in 2019
   - +0% over 2 weeks

6. KLM
   - Operated 229 flights
   - ↓66% of same day in 2019
   - ↓4% over 2 weeks

7. Lufthansa
   - Operated 224 flights
   - ↓85% of same day in 2019
   - ↓13% over 2 weeks

8. Qatari Airways
   - Operated 182 flights
   - ↓24% of same day in 2019
   - ↓3% over 2 weeks

9. SAS
   - Operated 151 flights
   - ↓85% of same day in 2019
   - ↓2% over 2 weeks

10. Iberia
    - Operated 135 flights
    - ↓62% of same day in 2019
    - ↓15% over 2 weeks

Traffic Situation

Traffic over the last 7 days is "\[64\%" Compared to equivalent days in 2019

Top 10 Busiest States on Wed 24 March 2021
(Dep/Arr flights and variation over 2 weeks)
### Top 10 Busiest Airports

<table>
<thead>
<tr>
<th>Top 10 Airports</th>
<th>Average flights per day (week 18-24/3)</th>
<th>Average flights per day (week 18-24/3) vs 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>IGA Istanbul Airport</td>
<td>568</td>
<td>Not yet in operation in early 2019</td>
</tr>
<tr>
<td>Paris/Charles-De-Gaulle</td>
<td>456</td>
<td>-65%</td>
</tr>
<tr>
<td>Frankfurt</td>
<td>440</td>
<td>-67%</td>
</tr>
<tr>
<td>Amsterdam</td>
<td>411</td>
<td>-69%</td>
</tr>
<tr>
<td>Istanbul/Sabiha Gokcen</td>
<td>384</td>
<td>-35%</td>
</tr>
<tr>
<td>Madrid/Barajas</td>
<td>370</td>
<td>-67%</td>
</tr>
<tr>
<td>London/Heathrow</td>
<td>319</td>
<td>-75%</td>
</tr>
<tr>
<td>Oslo/Gardermoen</td>
<td>198</td>
<td>-71%</td>
</tr>
<tr>
<td>Leipzig/Halle</td>
<td>194</td>
<td>-11%</td>
</tr>
<tr>
<td>Athens</td>
<td>192</td>
<td>-58%</td>
</tr>
</tbody>
</table>

### Market Segments

- **Low cost**: ↓87%
- **Traditional**: ↓70%
- **Business Aviation**: ↓18%
- **Non-Scheduled/Charter**: ↑2%
- **All Cargo**: ↑9%

### Economics

- **Fuel price**
  - 159 Cents/gallon (Jan-Feb 2021)
  - 172 cents/gallon on 12 Mar 21
- **Passengers**
  - 0.92 million pax (11 March 2021)
  - -4.8 million Vs. 2019 (-84%)

### Traffic Flow

- **7,760 flights**: +8% over past 2 weeks
- **-65%** compared to 2019

Source: IATA/Platts, ACI
**Overall traffic situation at network level**

- **10,562 flights** on Wednesday 24 March.
- **+7%** with **+706 flights** over 2 weeks (Wednesday 10 March).
- **+5%** with **+513 flights** over 1 week (Wednesday 17 March).
- **36%** of 2019 traffic levels.
Current situation and scenarios

Traffic at -65% on the first 17 days of March, above the latest EUROCONTROL traffic scenarios published on 28 January 2021 mainly due to:

- Very active cargo traffic.
- Higher number of operations for top airlines than anticipated.

Note that a significant proportion of flight operations for some of the largest airlines are actually non-commercial, i.e. training flights and circular flights to maintain pilot ratings.

After having reached a minimum at network level in the 2nd week of February, the traffic has shown a positive steady trend since mid February which has accelerated over the last week.
### Aircraft operators (Daily flights)

#### Top 10

<table>
<thead>
<tr>
<th>Rank evolution over 2 weeks</th>
<th>Top 10 Aircraft Operators on Wed 24-03-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aircraft Operator</td>
<td>Flights</td>
</tr>
<tr>
<td>TURKISH AIRLINES</td>
<td>664</td>
</tr>
<tr>
<td>AIR FRANCE</td>
<td>357</td>
</tr>
<tr>
<td>WIDEROE</td>
<td>303</td>
</tr>
<tr>
<td>DHL EXPRESS</td>
<td>274</td>
</tr>
<tr>
<td>PEGASUS HAVA TASIL.</td>
<td>256</td>
</tr>
<tr>
<td>KLM ROYAL DUTCH AIRL</td>
<td>229</td>
</tr>
<tr>
<td>DEUTSCHE LUFTHANSA</td>
<td>224</td>
</tr>
<tr>
<td>QATAR AIRWAYS COMP.</td>
<td>182</td>
</tr>
<tr>
<td>SCANDINAVIAN AIRLINES SYSTEM</td>
<td>151</td>
</tr>
<tr>
<td>IBERIA</td>
<td>135</td>
</tr>
</tbody>
</table>

- Stability of the ranking.
- High increase for Turkish Airlines over 2 weeks (+7%) mainly driven by domestic traffic.
- High increase for Lufthansa (+13%) mainly driven by many flows in Europe.
- High increase for Iberia (+15%) mainly driven by domestic flows, notably between Madrid and Tenerife and Las Palmas.
4 freight carriers within the top 30. DHL Express 4th.

High increase for Bristow Norway (+135%), easyJet (+41%), Wizz Air (+33%), Eurowings (+29%) and Lufthansa (+13%). High decrease for Ryanair (-27%).

British Airways 17th, easyJet 29th, Ryanair 30th and Wizz Air 37th.
Aircraft operators

Aircraft operators

Latest news

European airlines

- **Austrian Airlines** resumes services to London following the expiry of the Austrian government ban on passenger flights from the UK.
- **Eurowings** planning to hire around 130 cabin crew to meet summer demand, the positions mostly to be filled from other Lufthansa Group carriers.
- **Finnair** agrees a hybrid load of up to €400 million from the Finnish government.
- **IAG** issues €1.2 billion in senior unsecured bonds at coupons of 2.75% and 3.75% and signs a revolving credit facility for $1.75 billion.
- **Lufthansa** to resume Cape Town service and increase Johannesburg frequency.
- **Norwegian** restructuring plan reportedly approved by shareholders.
- **SWISS** plans to add more flights to Spain over Easter.

Worldwide airlines

- **Ryanair** to base ten aircraft at Bologna Airport to serve a network of 64 destinations and up to 270 weekly frequencies.

- **Aeroflot Group** February passenger numbers down 41.8% (domestic -9.6%, international -84.0%).
- **Air China** to purchase 5 A320-200neos and 13 A321-200LRs.
- **American Airlines** increasing transatlantic schedule from late March.
- **ANA** plans to operate six A380 sightseeing flights from Tokyo Narita in April/May.
- **Japan Airlines Group** plans to operate 66% of planned schedules in April and 73% in May.
- **South African Airways** – business rescue practitioners aim to return control to management by the end of March; resumption of regular air services being planned.
**States (Daily Departure/Arrival flights)**

**Top 10**

<table>
<thead>
<tr>
<th>Rank evolution over 2 weeks</th>
<th>State</th>
<th>Flights (Dep/Arr)</th>
<th>Δ over 2 weeks</th>
<th>% over 2 weeks</th>
<th>% vs 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Germany</td>
<td>1887</td>
<td>+223</td>
<td>+13%</td>
<td>-66%</td>
</tr>
<tr>
<td></td>
<td>France</td>
<td>1663</td>
<td>+88</td>
<td>+6%</td>
<td>-59%</td>
</tr>
<tr>
<td></td>
<td>Turkey</td>
<td>1273</td>
<td>+68</td>
<td>+6%</td>
<td>-44%</td>
</tr>
<tr>
<td></td>
<td>Spain</td>
<td>1122</td>
<td>+98</td>
<td>+10%</td>
<td>-69%</td>
</tr>
<tr>
<td></td>
<td>United Kingdom</td>
<td>980</td>
<td>+27</td>
<td>+3%</td>
<td>-81%</td>
</tr>
<tr>
<td></td>
<td>Italy</td>
<td>766</td>
<td>-48</td>
<td>-6%</td>
<td>-74%</td>
</tr>
<tr>
<td></td>
<td>Norway</td>
<td>748</td>
<td>+60</td>
<td>+9%</td>
<td>-51%</td>
</tr>
<tr>
<td></td>
<td>Netherlands</td>
<td>538</td>
<td>+49</td>
<td>+10%</td>
<td>-67%</td>
</tr>
<tr>
<td></td>
<td>Switzerland</td>
<td>428</td>
<td>+48</td>
<td>+13%</td>
<td>-67%</td>
</tr>
<tr>
<td></td>
<td>Belgium</td>
<td>385</td>
<td>+46</td>
<td>+14%</td>
<td>-58%</td>
</tr>
</tbody>
</table>

- Stability of the ranking over 2 weeks.
- Highest increase for Germany (+13%) mainly driven by domestic flows, in particular small aircraft.
- High increase for Spain (+10%), France (+6%), Turkey (+6%) and Norway (+9%).
- Slight decrease for Italy (-6%) mainly driven by domestic flows and small aircraft.
Strong increase for Austria (+38% over 2 weeks), half of it due to domestic traffic.

On 24 March 2021, traffic levels per States record declines ranging from -83% (Ireland) to -31% (Armenia), compared to same day in 2019.
Airbus and Rolls-Royce partner with DLR and Neste on the use of 100% SAF in an A350.

Airbus flies its final production A380 to Hamburg for the application of its Emirates livery.

Embraer made a net loss of $464 million in 2020 (2019: loss of $218 million); it delivered 44 commercial jets and 86 executive jets.

IATA DG Alexandre de Juniac comments that the state aid for the airlines sector will prevent consolidation in the coming three to five years.

European Commission seeking to work with the US to take into account non-CO2 environmental impacts from aviation when setting climate policy and standards.

EU Digital Green Certificate is welcomed by a number of organisations including ACI Europe, Austrian Airlines, A4E, ASD, CANSO, ERA, EUROCONTROL, IATA, ITAA (Irish Travel Agents Association), CityJet, WTTC (World Travel & Tourism Council).
The main traffic flow is the intra-Europe flow with 7,760 flights on Wednesday 24 March, which is increasing (+8%) over 2 weeks.

Intra-Europe flights are at -65% compared to 2019 while intercontinental flows are at -57%.

<table>
<thead>
<tr>
<th>REGION</th>
<th>10-03-2021</th>
<th>24-03-2021</th>
<th>% vs. 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intra-Europe</td>
<td>7 192</td>
<td>7 760</td>
<td>+8%</td>
</tr>
<tr>
<td>Europe&lt;-&gt;Asia/Pacific</td>
<td>408</td>
<td>413</td>
<td>+1%</td>
</tr>
<tr>
<td>Europe&lt;-&gt;Mid-Atlantic</td>
<td>69</td>
<td>67</td>
<td>-3%</td>
</tr>
<tr>
<td>Europe&lt;-&gt;Middle-East</td>
<td>555</td>
<td>584</td>
<td>+5%</td>
</tr>
<tr>
<td>Europe&lt;-&gt;North Atlantic</td>
<td>403</td>
<td>427</td>
<td>+6%</td>
</tr>
<tr>
<td>Europe&lt;-&gt;North-Africa</td>
<td>272</td>
<td>306</td>
<td>+13%</td>
</tr>
<tr>
<td>Europe&lt;-&gt;Other Europe</td>
<td>283</td>
<td>302</td>
<td>+7%</td>
</tr>
<tr>
<td>Europe&lt;-&gt;South-Atlantic</td>
<td>55</td>
<td>58</td>
<td>+5%</td>
</tr>
<tr>
<td>Europe&lt;-&gt;Southern Africa</td>
<td>153</td>
<td>159</td>
<td>+4%</td>
</tr>
<tr>
<td>Non Intra-Europe</td>
<td>2 198</td>
<td>2 316</td>
<td>+5%</td>
</tr>
</tbody>
</table>
9 of the top 10 flows are domestic.

Highest increase for the flows within Germany (+32%) mainly due to small aircraft.

Increase for the flows within Spain (+13%) mainly due to Canary Fly, small aircraft and Iberia Express.

Increase of the flow within Norway (+6%) mainly due to Bristow Norway.

Decrease for the flows within Italy (-14%) mainly due to small aircraft.

<table>
<thead>
<tr>
<th>Rank evolution over 2 weeks</th>
<th>Top 10 Country-Pair on Wed 24-03-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country-Pair</td>
<td>Dep/Arr Flights</td>
</tr>
<tr>
<td>France &lt;-&gt; France</td>
<td>819</td>
</tr>
<tr>
<td>Norway &lt;-&gt; Norway</td>
<td>615</td>
</tr>
<tr>
<td>Turkey &lt;-&gt; Turkey</td>
<td>585</td>
</tr>
<tr>
<td>Spain &lt;-&gt; Spain</td>
<td>563</td>
</tr>
<tr>
<td>Germany &lt;-&gt; Germany</td>
<td>551</td>
</tr>
<tr>
<td>United Kingdom &lt;-&gt; United Kingdom</td>
<td>307</td>
</tr>
<tr>
<td>Italy &lt;-&gt; Italy</td>
<td>287</td>
</tr>
<tr>
<td>Sweden &lt;-&gt; Sweden</td>
<td>157</td>
</tr>
<tr>
<td>Greece &lt;-&gt; Greece</td>
<td>155</td>
</tr>
<tr>
<td>France &lt;-&gt; Germany</td>
<td>107</td>
</tr>
</tbody>
</table>
Country pairs (Daily Departure/Arrival flights)

Latest traffic situation

The busiest non-domestic flows were:

- **France-Germany** (107 flights, +5% over 2 weeks).
- **Germany-Spain** (104, +9%).
- **UK-US** (95, +3%).
- **Russia-Turkey** (94, +11%).
- **Germany-UK** (92, +5%).
- **Germany-US** (86, +6%).
Outside Europe

USA

Peak in COVID-19 cases was reached early January in the US but declined steadily since. Number of new cases in Brazil is exceeding the USA values.

US domestic recorded a decline of 33% (vs 2019) and international traffic recorded a decline of 43% (vs 2019) on 23 March. Bookings are gradually improving on rising vaccination rates and easing travel restrictions.

On 23 March, US airline passenger volumes were 46% below 2019 levels with domestic down 44% and international down 63%.

The domestic US load factor has improved recently, averaging at 71% on 23 March vs 88% a year earlier. It was 64.5% a week ago.
After the huge drop on Chinese New Year (12 Feb), there are now clear signs of strong domestic traffic growth and the number of Chinese domestic flights has now resumed to “pre-COVID” levels. On 22 March, domestic traffic recorded just above 13,000 flights (+10% compared to January 2020 levels).

On 23 March, international traffic from and to Middle-East recorded 1,401 flights (-54% compared to Feb 2020).

Overflights are stable around 361 flights (-15% compared to Feb 2019).

China

Outside Europe

Middle East

Intra-Middle-East traffic recorded around 1,538 daily flights on 23 March (-45% compared to Feb 2020).

On 23 March, international traffic from and to Middle-East recorded 1,401 flights (-54% compared to Feb 2020).

Overflights are stable around 361 flights (-15% compared to Feb 2019).

China

International flights and overflights are still suppressed, they were stable on previous weeks with 1,407 and 519 flights respectively (-65% and -67% vs 1 Jan 2020).
### Top 10 Airports on Wed 24-03-2021

<table>
<thead>
<tr>
<th>Airport</th>
<th>Dep/Arr Flights</th>
<th>( \Delta ) over 2 weeks</th>
<th>% over 2 weeks</th>
<th>% vs 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>IGA Istanbul Airport</td>
<td>566</td>
<td>+33</td>
<td>+6%</td>
<td>Not appl</td>
</tr>
<tr>
<td>Paris/Charles-De-Gaulle</td>
<td>462</td>
<td>+25</td>
<td>+6%</td>
<td>-64%</td>
</tr>
<tr>
<td>Frankfurt</td>
<td>420</td>
<td>+23</td>
<td>+6%</td>
<td>-70%</td>
</tr>
<tr>
<td>Amsterdam</td>
<td>408</td>
<td>+17</td>
<td>+4%</td>
<td>-69%</td>
</tr>
<tr>
<td>Madrid/Barajas</td>
<td>395</td>
<td>+39</td>
<td>+11%</td>
<td>-65%</td>
</tr>
<tr>
<td>Istanbul/Sabiha Gokcen</td>
<td>364</td>
<td>+14</td>
<td>+4%</td>
<td>-37%</td>
</tr>
<tr>
<td>London/Heathrow</td>
<td>293</td>
<td>+0</td>
<td>+0%</td>
<td>-78%</td>
</tr>
<tr>
<td>Leipzig/Halle</td>
<td>238</td>
<td>+15</td>
<td>+7%</td>
<td>-9%</td>
</tr>
<tr>
<td>Cologne/Bonn</td>
<td>215</td>
<td>+7</td>
<td>+3%</td>
<td>-47%</td>
</tr>
<tr>
<td>Athens</td>
<td>214</td>
<td>+41</td>
<td>+24%</td>
<td>-55%</td>
</tr>
</tbody>
</table>

- **Stability of the ranking over 2 weeks with the exception of Athens taking the 10th rank.**
- **All top 10 airports showed an increase over 2 weeks.**
- **Highest increase for Athens (+24%) due to many flows.**
- **High increase for Madrid (+11%) mainly due to domestic (Iberia Express in particular).**
- **Stability for Heathrow (0%).**
Avinor partners with the Norwegian CAA, Norsk Industri and SINTEF to develop an innovation and testing centre for zero and low emission aviation initiatives.

Berlin Brandenburg Airport proposes that shareholders provide €1.9 billion of support of which €1.1 billion is intended as partial debt relief; projects that it will handle 10.7 million passengers in 2021, a decline of almost 70% on 2019.

Birmingham Airport launches free lateral flow testing service for employees.

Brussels Airport February passenger numbers 90.5% down, cargo 20.6% up.

Heathrow Airport February passenger numbers 91.5% down, cargo 12.8% down.

Milan Malpensa Airport February passenger numbers 87.7% down year-on-year (domestic -74.4%, international -90.6%).

Schiphol Airport February passenger numbers 89.3% down, cargo 7.2% up.
Large increase for **Vienna** over 2 weeks (+33%) due to many flows.

Large increase for **Bergen** (+32%) mainly due to Bristow Norway and CHC Helikopter Service.

Large increase for **Tel Aviv** (+30%) due to many flows.
ACI recorded just below 918,000 passengers on 11 March 2021, a loss of 4.8 million passengers compared to the equivalent day in 2019 (i.e. -84%).

In 2020, ACI Europe reported passenger traffic fell by 70.4% while freight traffic decreased by 11.8% at European* airports.

* Russia included.
On 24 March 2021, all segments showed unchanged trends since mid-January 2021 (vs 2019):

- **All-cargo** is the only segment consistently growing, posting a +9% increase. **Charter** moved into positive territory (+2%).
- **Business Aviation** recorded a decrease of -18%.
- **Traditional** and **Low-Cost**, while accounting the majority of flights, recorded (stable) declines at -70% and -87% respectively.
Inoculations against COVID-19 have started at the end of 2020 as shown with the daily number of COVID-19 vaccination doses administered per 100 people on the left hand-side graph.

On the right hand-side one: only Israel, Monaco, UK, Malta and Serbia have reported that more than 25 doses per hundred people had been administered by 23 March 2021.

Graphs are showing data for the 41 Member and 2 Comprehensive Agreement States of EUROCONTROL.
Jet fuel prices have started to rise since last Autumn, from around 100 cts/gal in October 2021 to 170 cts/gal early March. They decreased down to 159 cts/gal on 19 March 2021.

Underlying reason for the rise in oil prices rise which is explained by constraints in supply (OPEC+ extended the existing oil production cuts through April 2021), combined with supply disruptions in the United States, and an attack of an oil terminal in Saudi Arabia.
To further assist you in your analysis, EUROCONTROL provides the following additional information on a daily basis (daily updates at approximately 7:00 CET for the first item and 12:00 CET for the second) and every Friday for the last item:

1. EUROCONTROL Daily Traffic Variation dashboard:
   www.eurocontrol.int/Economics/DailyTrafficVariation (or via the COVID-19 button on the top of our homepage www.eurocontrol.int)
   • This dashboard provides traffic for Day+1 for all European States; for the largest airports; for each Area Control Centre (ACC); and for the largest airline operators.

2. COVID Related-NOTAMS with Network Impact (i.e. summary of airspace restrictions):
   https://www.public.nm.eurocontrol.int/PUBPORTAL/gateway/spec/index.html
   • The Network Operations Portal (NOP) under “Latest News” is updated daily with a summary table of the most significant COVID-19 NOTAMs applicable at 12.00 UTC.

3. NOP Recovery Plan.
   https://www.public.nm.eurocontrol.int/PUBPORTAL/gateway/spec/index.html
   • This report, updated every Friday, is a special version of the Network operation Plan supporting aviation response to the COVID-19 Crisis. It is developed in cooperation with the operational stakeholders ensuring a rolling outlook.

For more information please contact aviation.intelligence@eurocontrol.int