EUROCONTROL\textquotesingle s CENTRAL ROLE
For European Aviation

Air Traffic Network Manager for all of Europe
11.1 million flights 2019

ATC Financing - €10 billion p.a.

Maastricht Air Navigation Service Provider

Civil-Military coordination

Air Traffic Expert support to EU bodies

Pan-European – 43 States
Supporting European Aviation

EU Support

- Network Manager
- SESAR ATM R&D
- Performance Review Body
- EASA
- European Defence Agency
- Intern. Coordination ICAO, ECAC, FAA
- DG MOVE, GROW, CONNECT, CLIMA, HOME

Technical Support to EU

EU Single European Sky


- To modernise & defragment European ATC
- Increase Capacity
- Improve Safety
- Lower Costs
- Protect Environment

ATC in Europe

Cost €10 billion per year

Paid for by Airlines as Route Charges

Collected by EUROCONTROL

To modernise & defragment European ATC

Supporting European Aviation
### En-Route Charges

**Billed by EUROCONTROL CRCO**

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<th>Top-15 Airlines</th>
<th>2019 (EUR Millions)</th>
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### Monthly Traffic trend 2019-2020

**2019: Traffic +0.9%**

11.1 million flights

**2020 (Jan/ Feb): Traffic -1.5%**

Comparison to same month last year

Rolling 12 month trend
Network Delays 2019

En Route Network Delays
9% Better than 2018

BUT 88% worse than 2017

CRISIS SITUATION UNSUSTAINABLE

Network Measures - Summer 2019
New Traffic Flows to Reduce Network Delays

900 Re-routed flights per day
1,300 Level-capped flights per day
19-02-2020

En Route ATFM Delays

= 72% of total ATFM delays

Share of total en-route ATFM delay (%) - EUROCONTROL Member States
January - December 2019

17.2 million minutes en-route ATFM delay
(−9.0% vs. 2018)

Source: EUROCONTROL/PRU
https://anrperformance.eu

Economic Cost of Delays:
- 2018 + 2019 (est.)

Cost of Delays
• €26.9 billion (All-causes)
• €5 billion due to ATFM

Cost of Cancellations
• €6.2 billion

Total Cost
• €33.1 billion

Passengers Impacted
• 650 million

Source: EUROCONTROL/PRU
https://anrperformance.eu
Aircraft Are Becoming More Efficient & Quieter

![Diagram showing the noise level (LPA in dBA) and year of first flight for various aircraft models, indicating a trend towards quieter aircraft over time.]

Source: EUROCONTROL


Typical Short and Medium Haul: Boeing 727-200, Boeing 737-200, Airbus A310, Boeing 767-200, Airbus A320, Boeing 737-800, Boeing 737 Max, Airbus A320neo
CO₂ Emissions 2019 Vs 2017

CO₂ Growth Per State (Departing Flights)

CO₂ +7.5% Traffic +3.5%

Top 30 European Airlines - Relative Share of CO₂ and Traffic, 2019

% Share CO₂ % Share Traffic

Short-haul LCC airlines

Source: EUROCONTROL
ATM Share of Transport Emissions

% of total transport GHG emissions by mode

- Aviation: 13.9%
- Road transport: 71.7%
- Maritime: 13.4%
- Railways: 0.5%
- Other transport...

ATM can influence roughly 6-10% of the total CO₂ emissions from aviation within ECAC

Inefficient Routes Examples

- Dublin - London City: 99 extra km, 25.7%
- Zurich - Amsterdam: 67 extra km, 13.4%
- Barcelona - Frankfurt: 100 extra km, 10.3%
Europe’s Airspace Is Inefficient

European Airspace is fragmented

- Lack of real network
- Longer/ Lower Routings
- ATC Bottlenecks
- Staffing & Capacity

Need SESII+ Delivered Now

Network Centric & Digital European Sky

Implement Wise Persons Group in full
Decarbonisation: Top 5 Options

1. Change the European Network

2. Fund transition to Sustainable Aviation Fuels

3. Develop highly-efficient, large-capacity, short-haul aircraft

4. Undertake a total fleet renewal by 2050

5. Hybridisation, acting as a bridge to electrification of the fleet, especially short-haul aircraft

EUROCONTROL - 2020 & Beyond

Support **Single European Sky** & coordinate with partners

Support States & Industry - Best **Technical** expertise and coordination

Help delivery **Sustainable** approach to aviation
Thank you
Eamonn Brennan, Director General
@eurocontrolDG