

Supporting  
European  
Aviation



# Network Manager Operations Centre

Welcome!

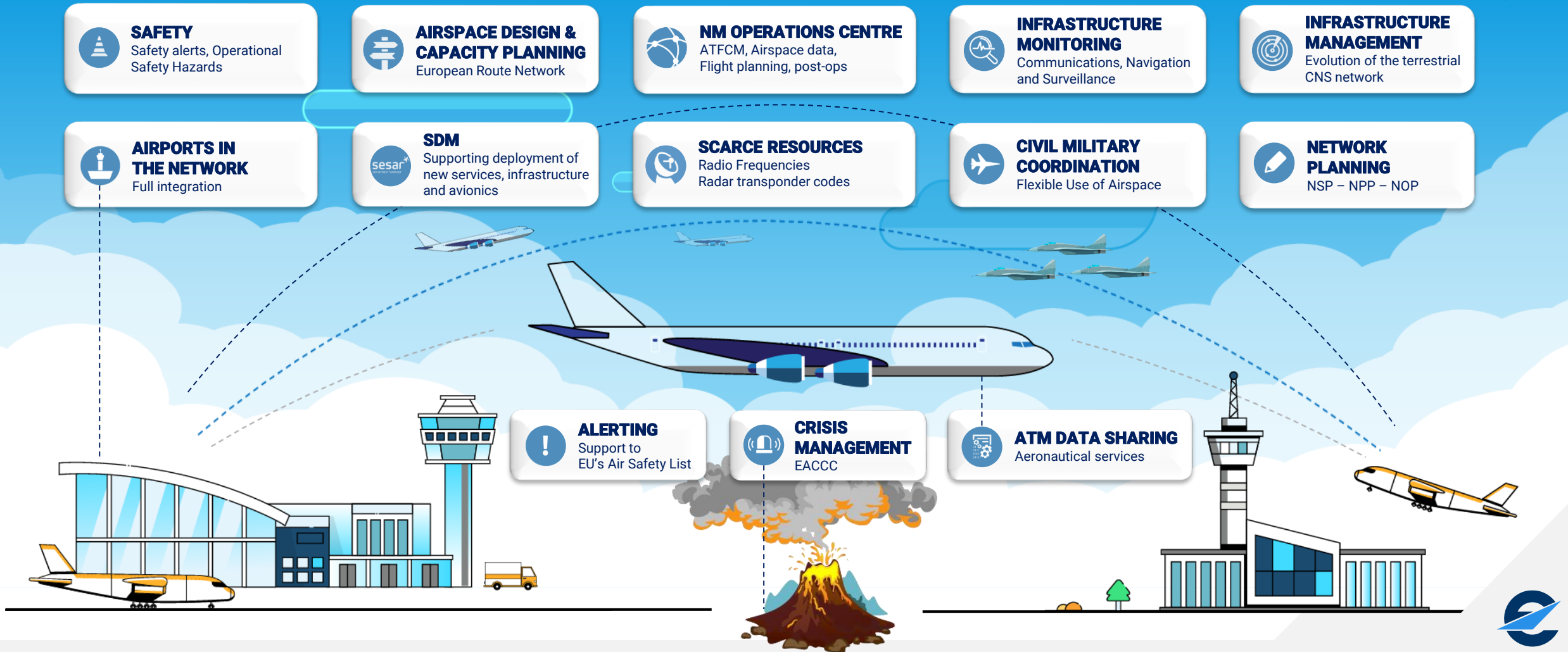
10<sup>th</sup> March 2025



NETWORK  
MANAGER



# Connecting the NETWORK to deliver improved performance





# Managing **ONE SINGLE** Aviation Network over Europe



**10.2 million**  
Flights per year  
(2023)

**6,664**  
Airspace users

**60**  
FMPs

**44**  
States

## NETWORK OPERATIONS

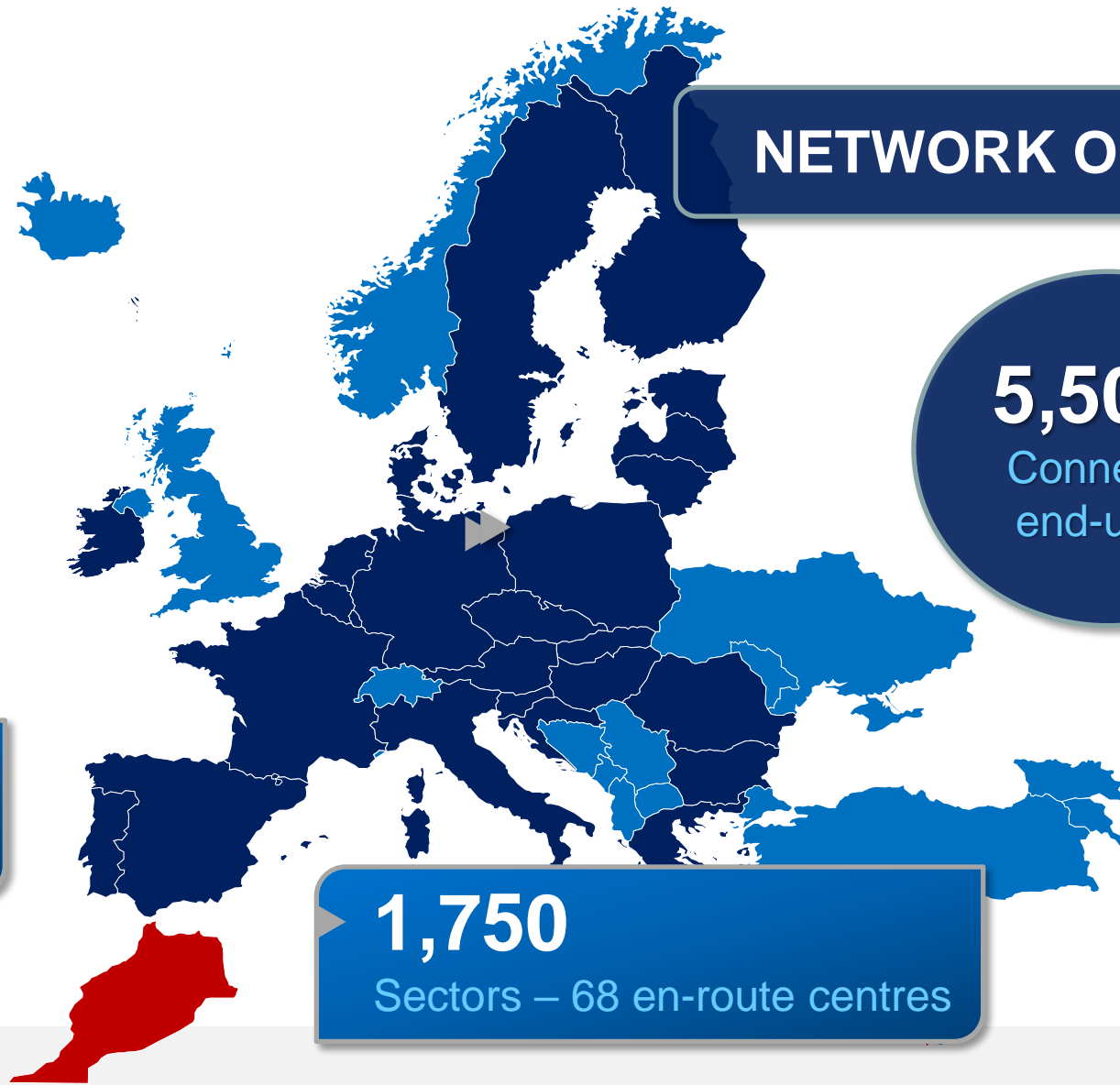
**5,500+**  
Connected  
end-users

**10.2 million**  
Flights per year  
(2023)

Peak 2024  
**35,710**  
Flights per day

**1,750**  
Sectors – 68 en-route centres

**525**  
Airports



# THE EUROPEAN AIR TRAFFIC MANAGEMENT SYSTEM



**11.5**

Geographic area  
(million km<sup>2</sup>)



**37**

Number of  
civil ANSPs



**17,794**

Number of  
air traffic controllers



**55,130**

Total staff



**15.3**

Flight hours  
controlled (million)



**68**

Number of en-route  
facilities



**280**

Number of terminal  
facilities/approach control



**525**

Airports with (normally) >10  
flights a day

*Pre-pandemic figures*

# Europe – a complex Aviation Network, 44+

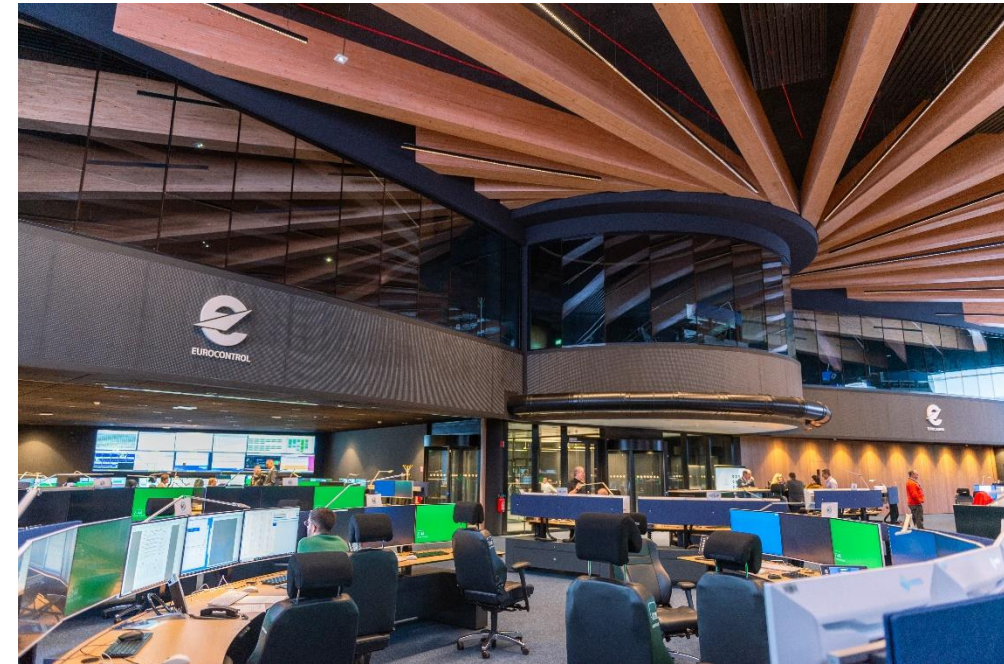
- Methodologies to assess sector and airport capacities in ACCs
- Unit rates (route charges)
- MET services providers
- Military State authorities
- Technological innovation must be coordinated with stakeholders
- System/procedures implementation: long process (Free Route Airspace, Airport CDM)





# What does the Network Manager Operations Centre do?

- Passengers travel without delay
- Pilots plan & operate the shortest, most optimal route, avoiding or using Military areas
- Air traffic controllers get amounts of traffic they can handle safely



- Manage any disruption or crisis impacting aviation in Europe
- 147 staff, 27 nationalities

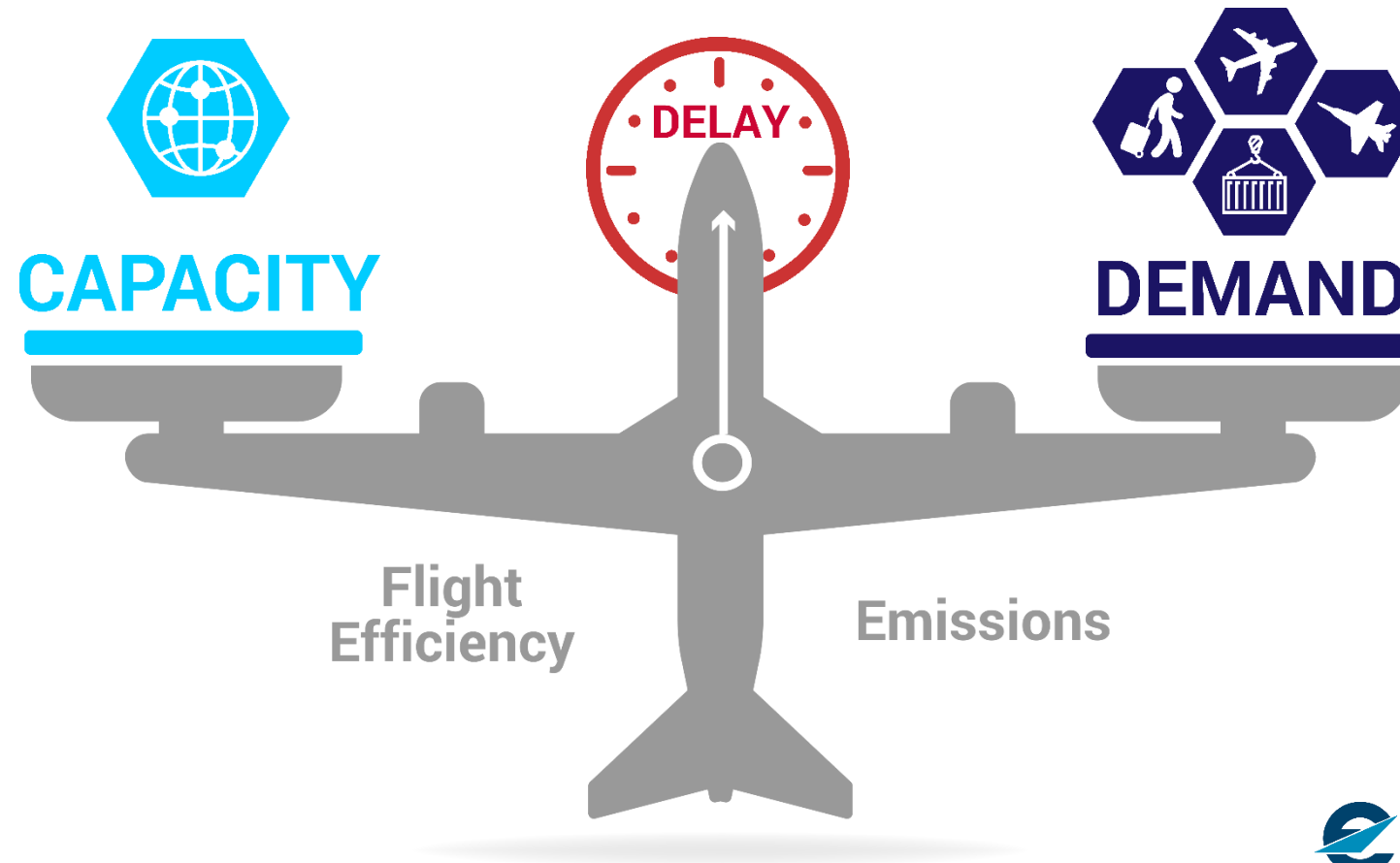


Network  
Manager



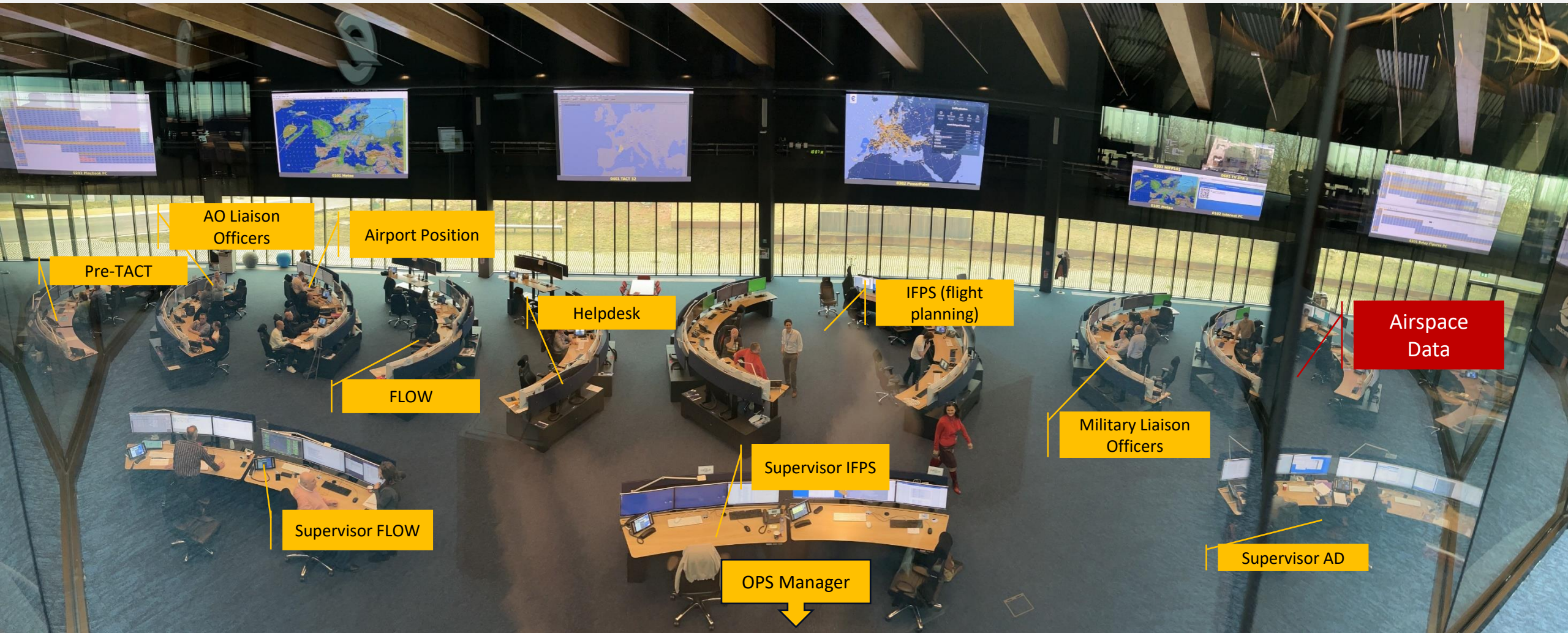
Supporting European Aviation

# NETWORK OPERATIONS





# Organisation of the OPS room





**EUROCONTROL ROUTE NETWORK CHART (ERN Chart)**

23 March 2025

**UPPER AIRSPACE**

**AIRSPACES**

- FIR/IR Boundary
- FRA - F04
- FRA - Night
- AMC-Managed Area
- Non-AMC-Managed Area

**ATS ROUTES**

- Standard
- FRA
- NavAid
- Waypoint
- Permanent
- Permanent & Conditional
- Conditional
- By ATC Only
- Closed

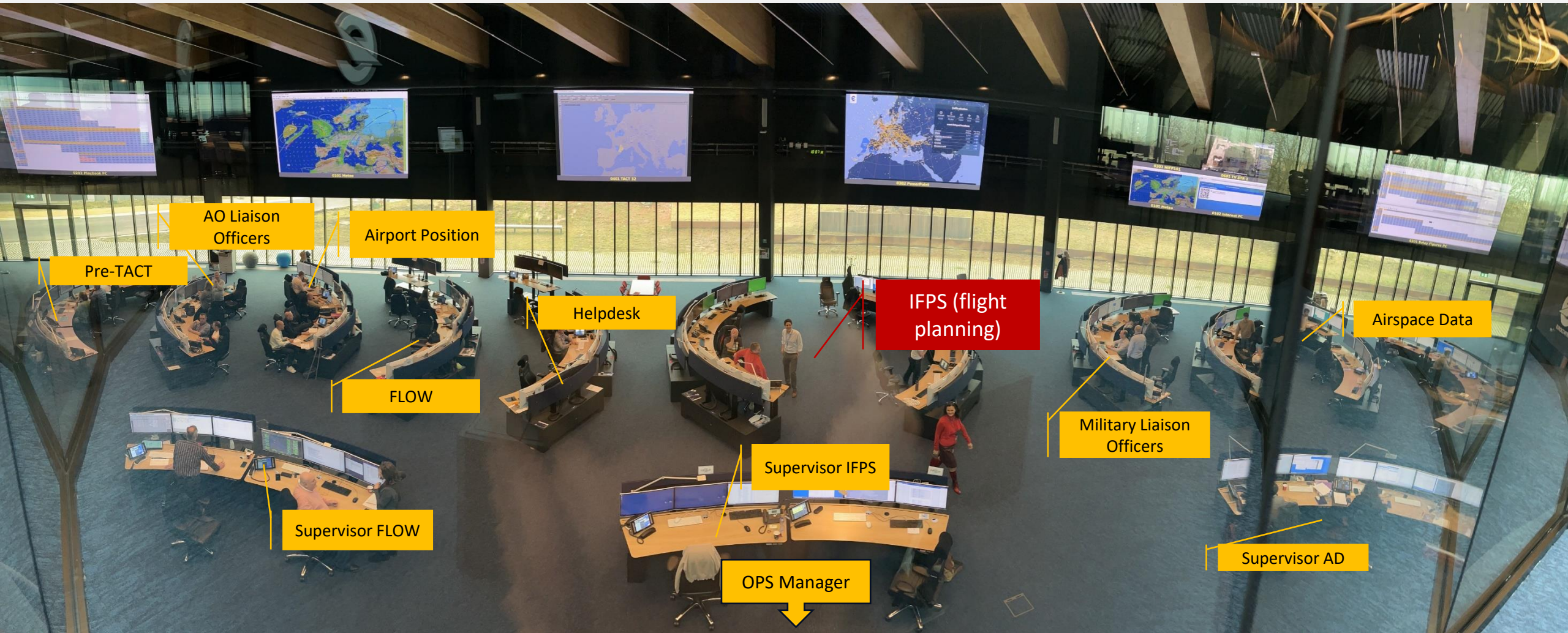
**Free Route Airspace Availability**

Category	Availability
Class A	Not Available
Class B	Not Available
Class C	Not Available
Class D	Not Available
Class E	Not Available
Class F	Not Available
Class G	Not Available
Class H	Not Available
Class I	Not Available
Class J	Not Available
Class K	Not Available
Class L	Not Available
Class M	Not Available
Class N	Not Available
Class O	Not Available
Class P	Not Available
Class Q	Not Available
Class R	Not Available
Class S	Not Available
Class T	Not Available
Class U	Not Available
Class V	Not Available
Class W	Not Available
Class X	Not Available
Class Y	Not Available
Class Z	Not Available
Class AA	Not Available
Class AB	Not Available
Class AC	Not Available
Class AD	Not Available
Class AE	Not Available
Class AF	Not Available
Class AG	Not Available
Class AH	Not Available
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Class AJ	Not Available
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Class AR	Not Available
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Class BC	Not Available
Class BD	Not Available
Class BE	Not Available
Class BF	Not Available
Class BG	Not Available
Class BH	Not Available
Class BI	Not Available
Class BJ	Not Available
Class BK	Not Available
Class BL	Not Available
Class BM	Not Available
Class BN	Not Available
Class BO	Not Available
Class BP	Not Available
Class BQ	Not Available
Class BR	Not Available
Class BS	Not Available
Class BT	Not Available
Class BU	Not Available
Class BV	Not Available
Class BW	Not Available
Class BX	Not Available
Class BY	Not Available
Class BZ	Not Available
Class CA	Not Available
Class CB	Not Available
Class CC	Not Available
Class CD	Not Available
Class CE	Not Available
Class CF	Not Available
Class CG	Not Available
Class CH	Not Available
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Class CJ	Not Available
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Class CL	Not Available
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Class DT	Not Available
Class DU	Not Available
Class DV	Not Available
Class DW	Not Available
Class DX	Not Available
Class DY	Not Available
Class DZ	Not Available
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Class EB	Not Available
Class EC	Not Available
Class ED	Not Available
Class EE	Not Available
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Class EI	Not Available
Class EJ	Not Available
Class EK	Not Available
Class EL	Not Available
Class EM	Not Available
Class EN	Not Available
Class EO	Not Available
Class EP	Not Available
Class EQ	Not Available
Class ER	Not Available
Class ES	Not Available
Class ET	Not Available
Class EU	Not Available
Class EV	Not Available
Class EW	Not Available
Class EX	Not Available
Class EY	Not Available
Class EZ	Not Available
Class FA	Not Available
Class FB	Not Available
Class FC	Not Available
Class FD	Not Available
Class FE	Not Available

## levels



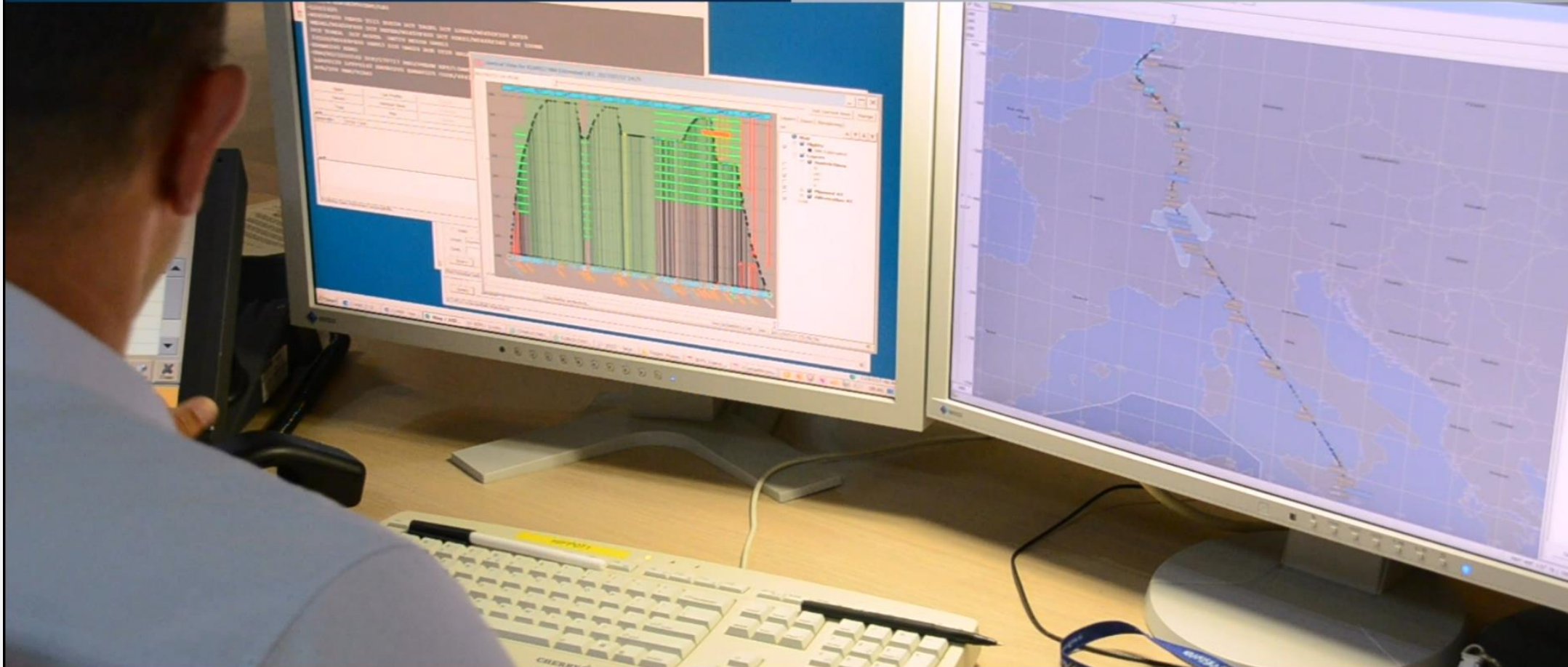
# Organisation of the OPS room





# NETWORK MANAGER OPERATIONS CENTRE

# FLIGHT PLANNING SERVICES



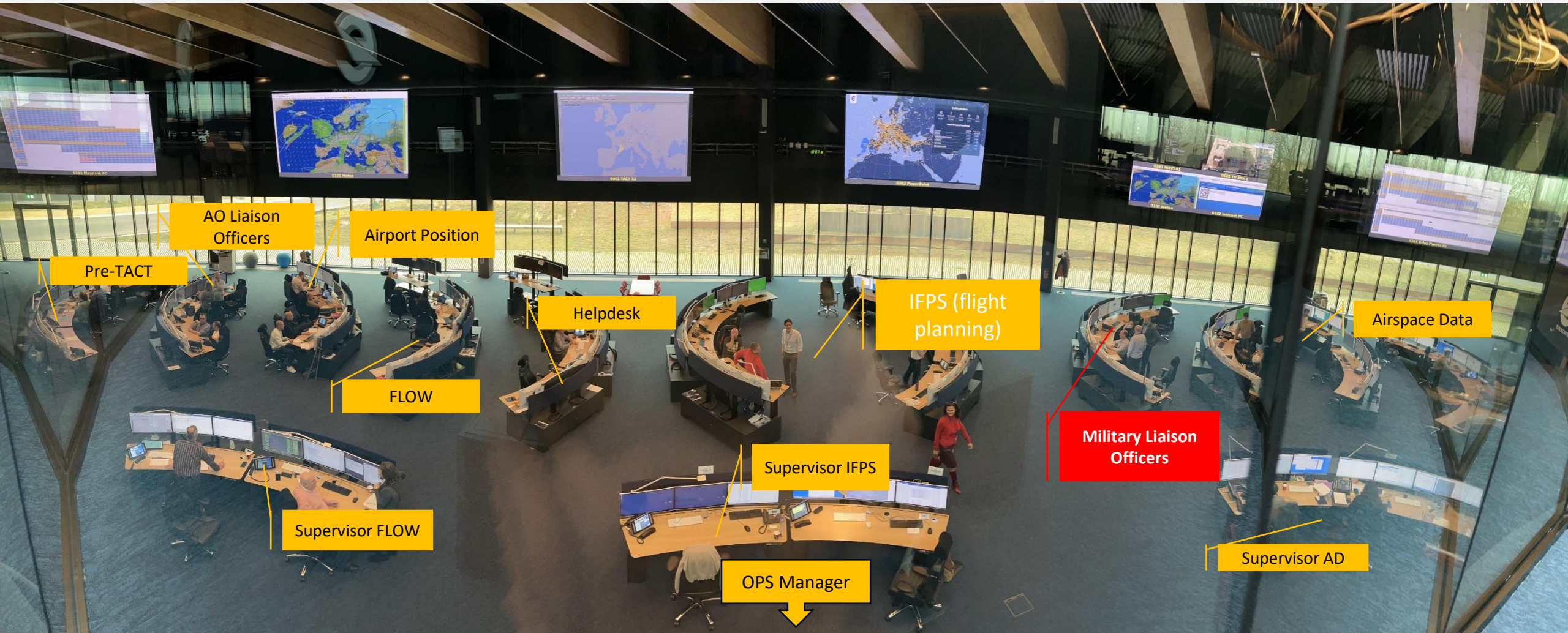
providing flight plan data to ATC units until **20 minutes** before take-off

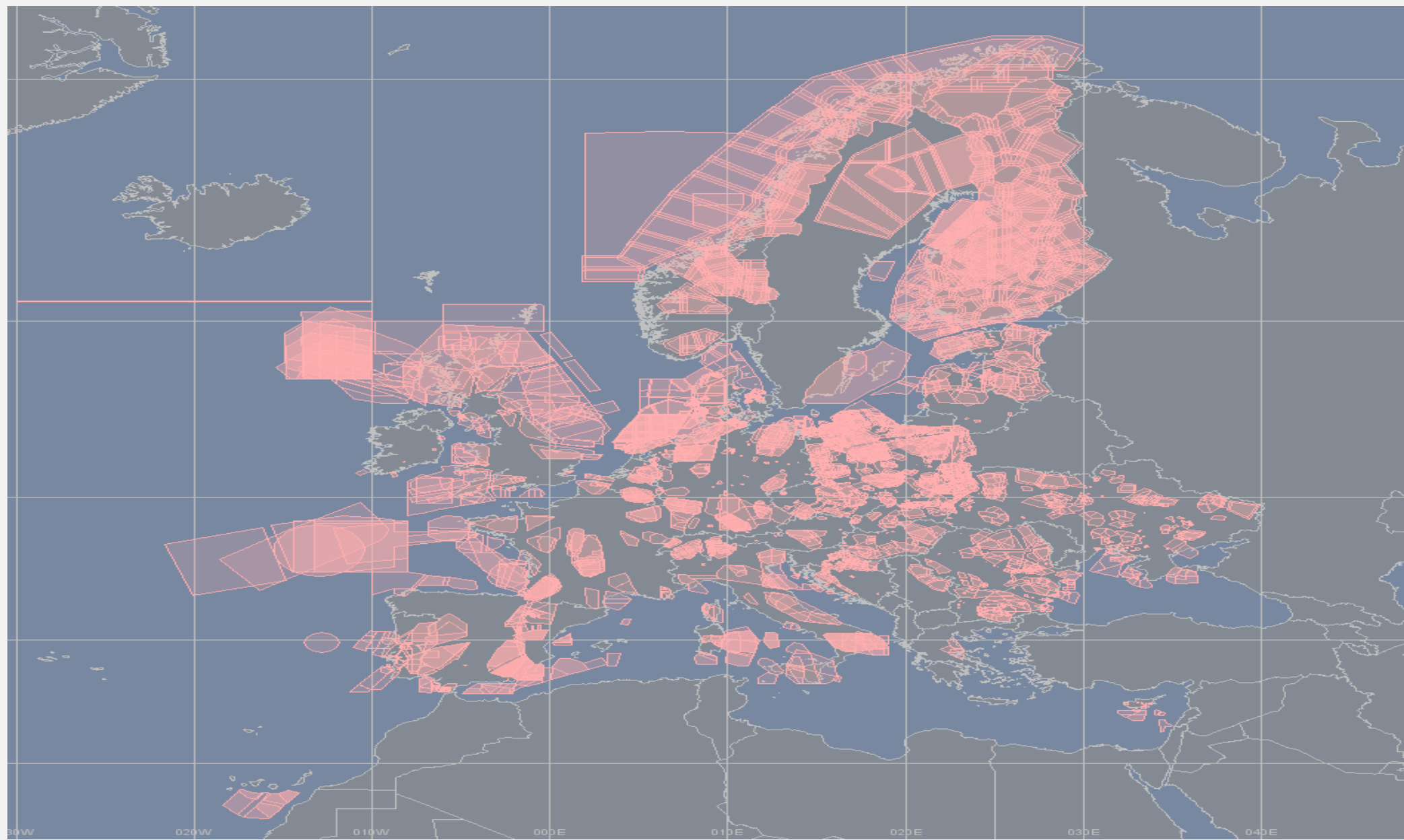
# NMOC Flight Planning Domain





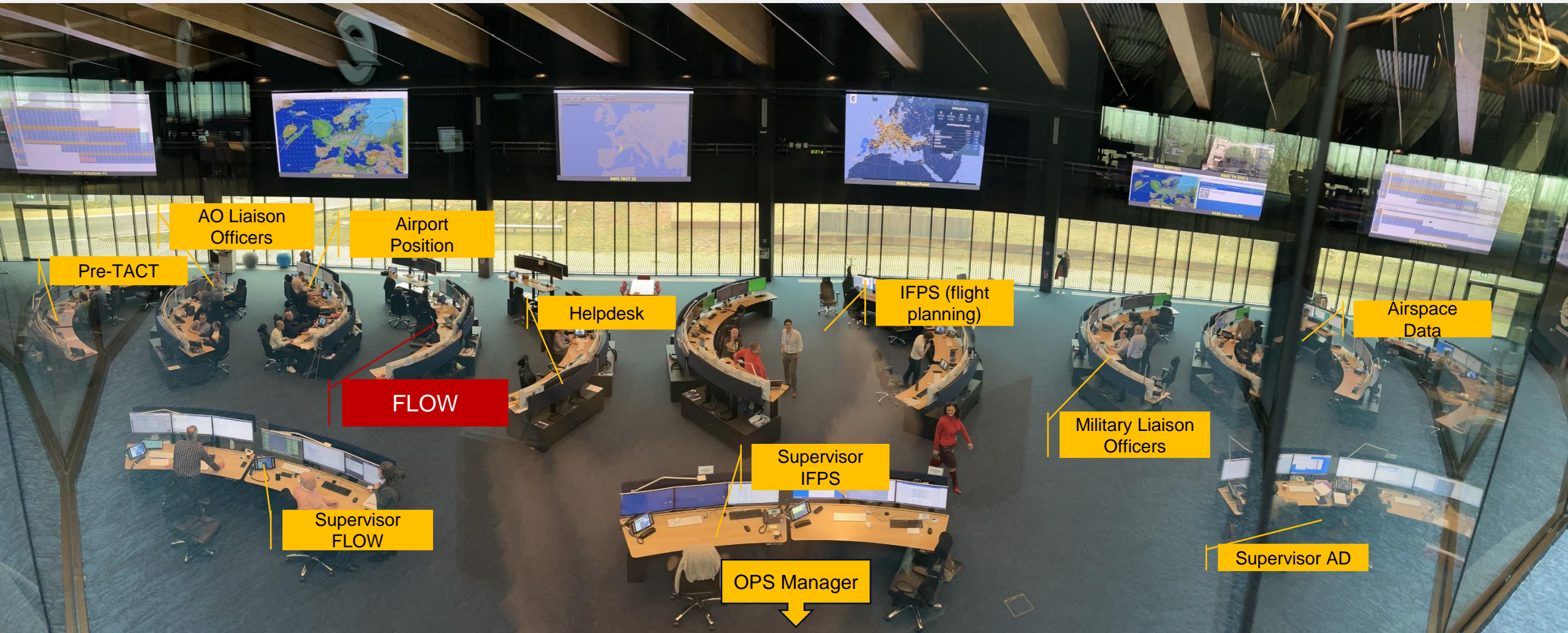
# Organisation of the OPS room





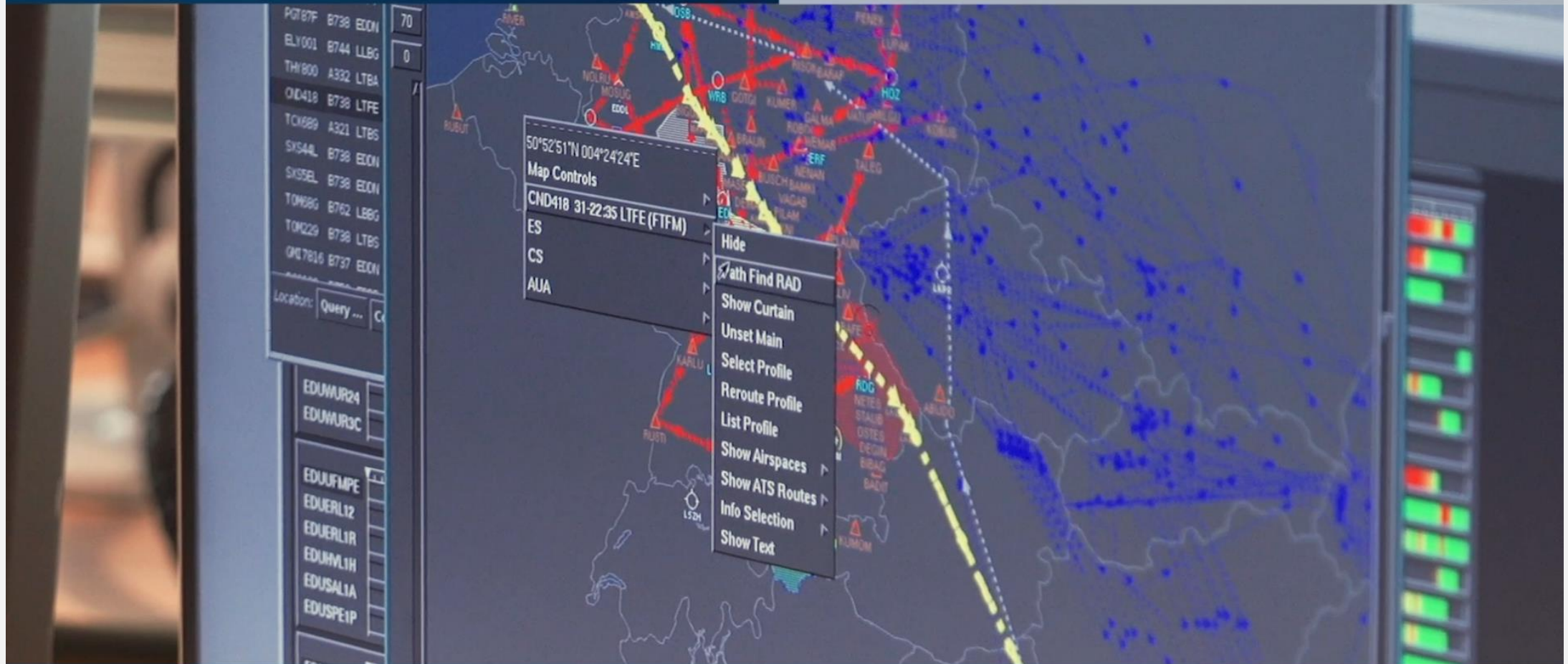


# Organisation of the OPS room





# NETWORK MANAGER OPERATIONS CENTRE PRE-TACTICAL FLOW MANAGEMENT OPERATIONS



special events

World Cup

Olympic Games

ski axis



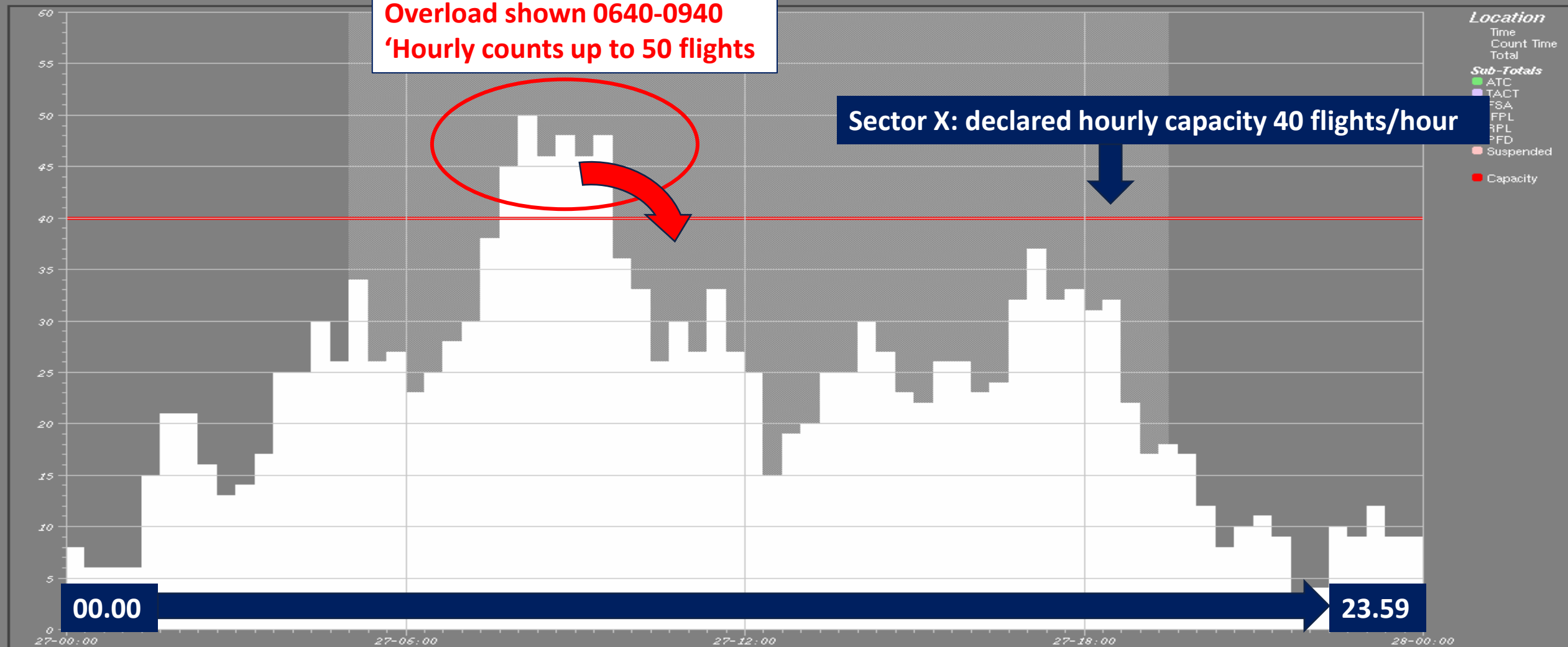


Display Scale Activations Compare Graph Scenario

Flights / Hour every 20 min (Load) entering  
Traffic Volume  
Low45) between 27-00:00 and 28-00:40.

Last Updated: 26-15.

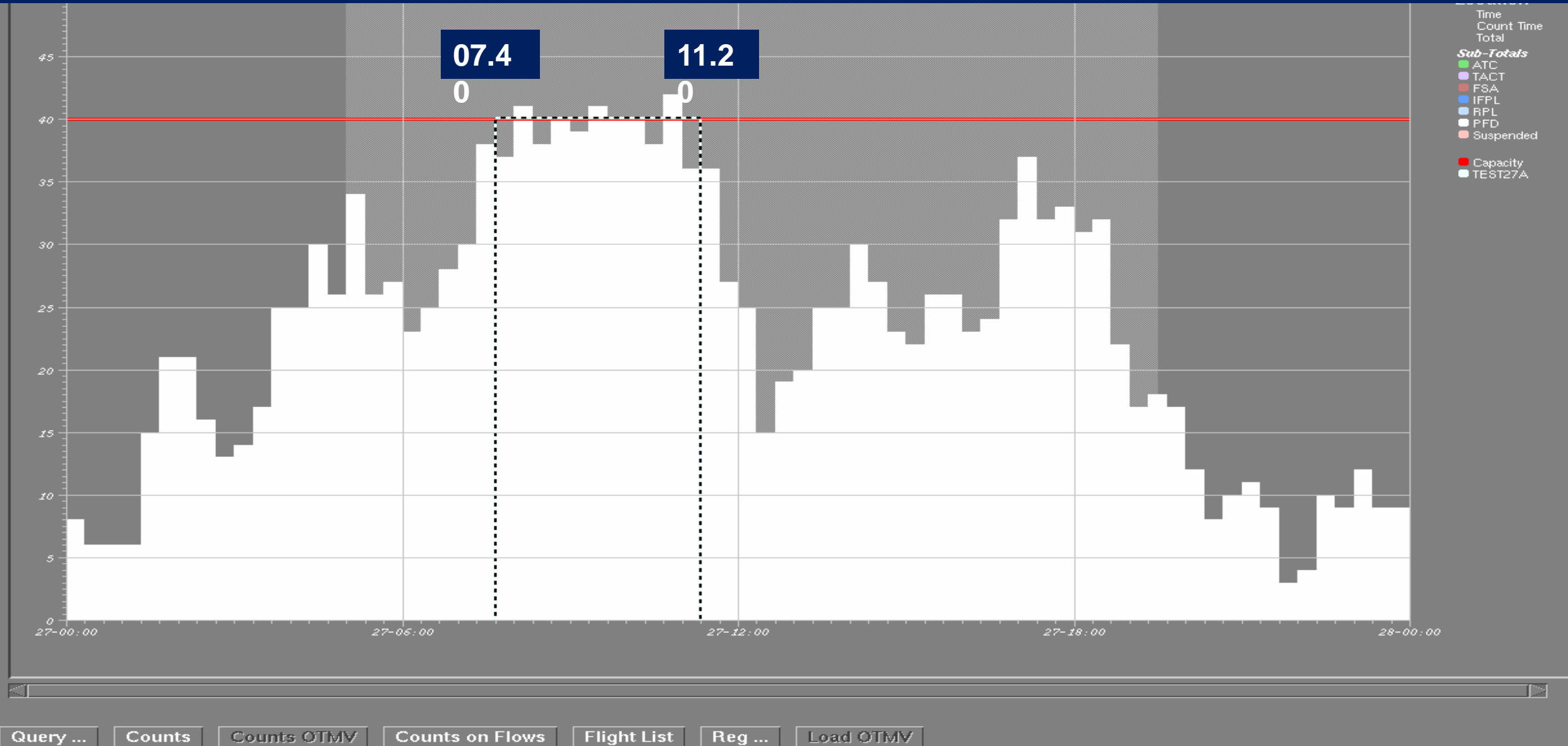
Count Type Load





# ATFM regulation applied from 0740-1120

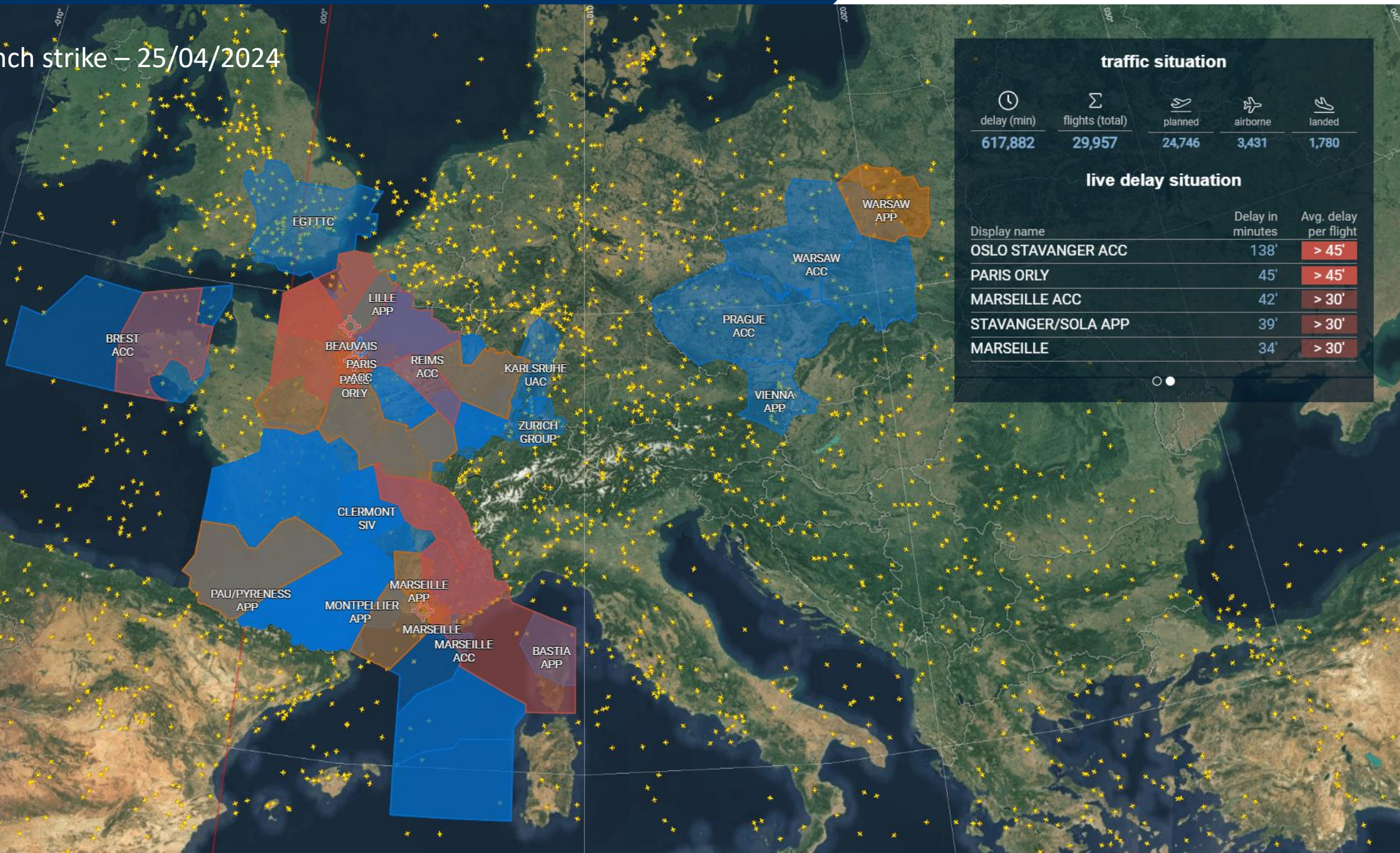
## 1,794 min of ATFM delay, Peak delay 48 min







# French strike – 25/04/2024



## traffic situation

🕒  
delay (min)  
**617,882**

Σ  
flights (total)  
**29,957**

✈️  
planned  
**24,746**

✈️  
airborne  
**3,431**

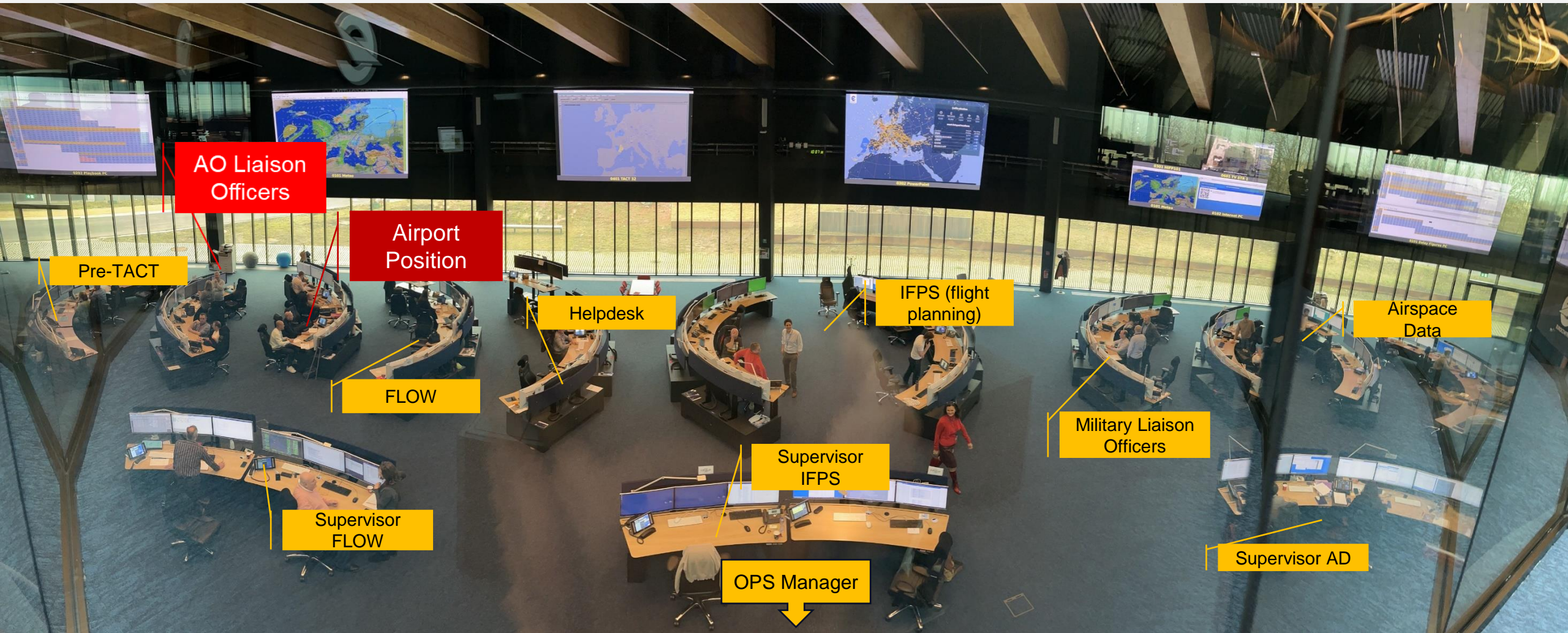
✈️  
landed  
**1,780**

## live delay situation

Display name	Delay in minutes	Avg. delay per flight
OSLO STAVANGER ACC	138'	> 45'
PARIS ONLY	45'	> 45'
MARSEILLE ACC	42'	> 30'
STAVANGER/SOLA APP	39'	> 30'
MARSEILLE	34'	> 30'



# Organisation of the OPS room





# Airport Function



Recovery phases following diversions



First rotation flights