



SAFE SKIES.
**SUSTAINABLE
FUTURE.**



ICAO APAC/MID ATFM-FF-ICE Seminar 2025

Dubai, UAE, 23 – 26 February 2025

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EUROCONTROL
Network Manager

01

EUROCONTROL

Story about the
Network Manager



- 1960s
- 1980s
- 1990s
- 2000s
- 2010s
- 2020s

42 Member States & the European Union

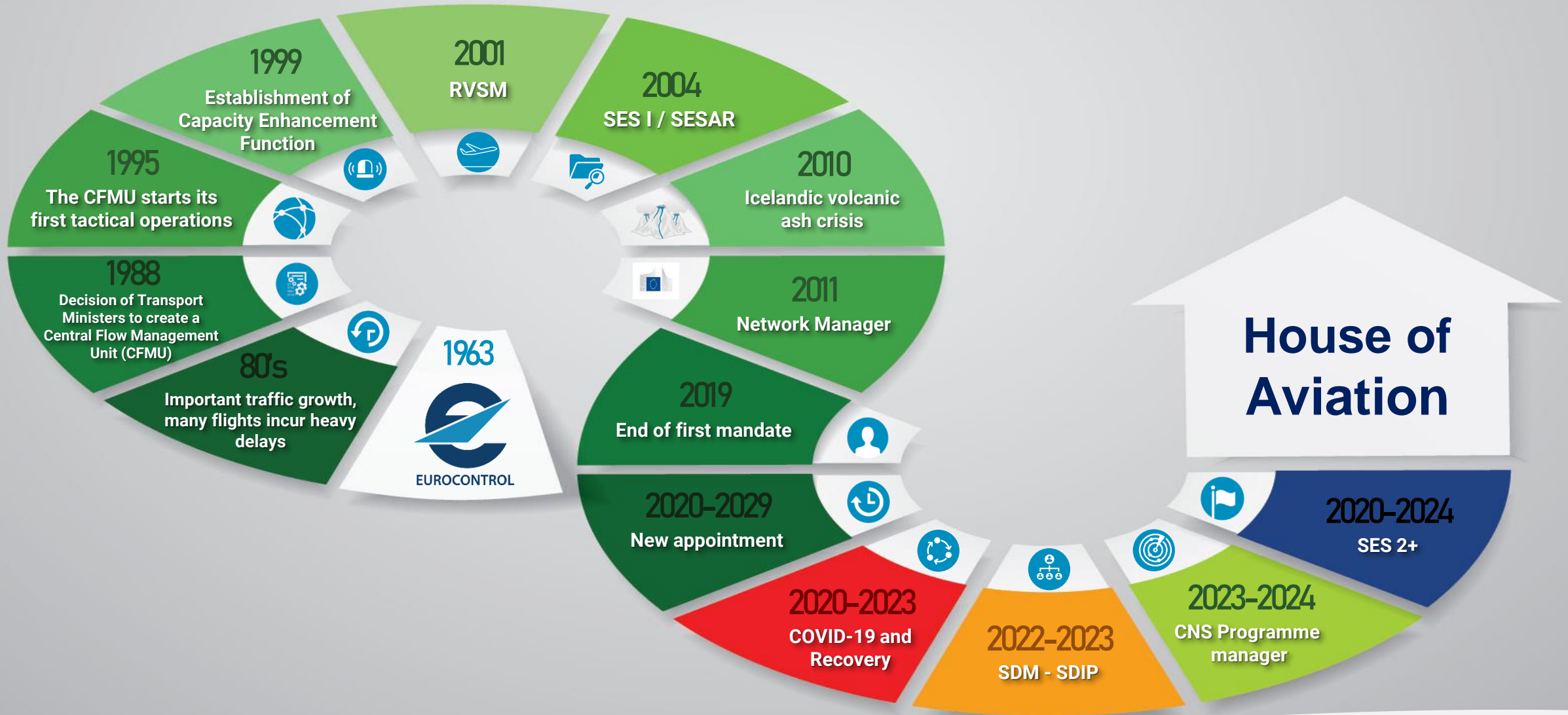
2 'Comprehensive Agreement' States: Morocco & Israel

Jordan coming soon

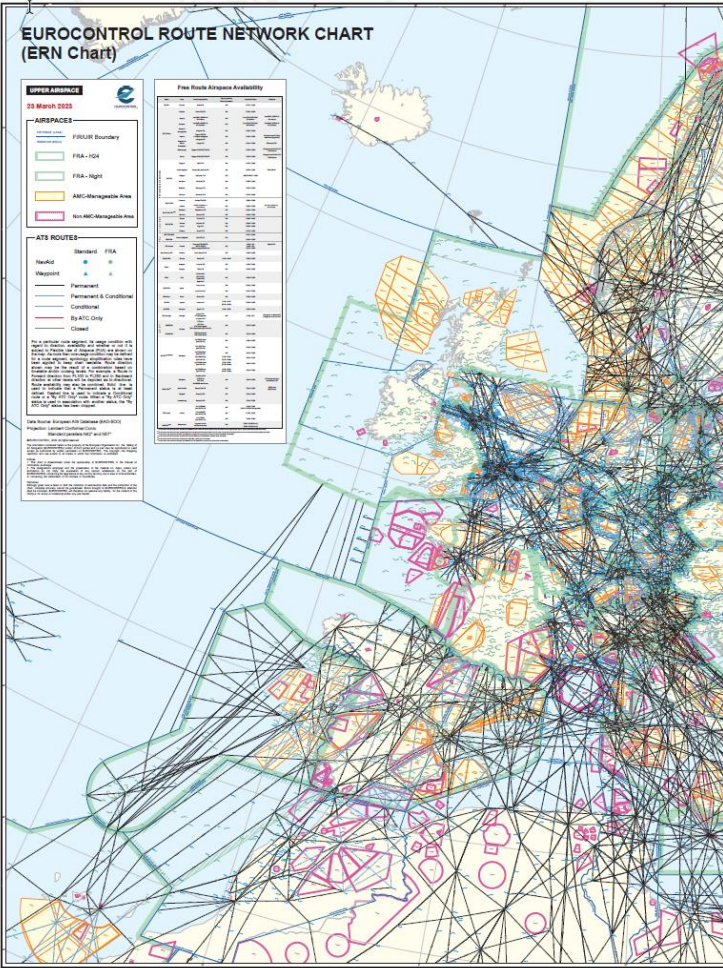


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The story about EUROCONTROL Network Manager

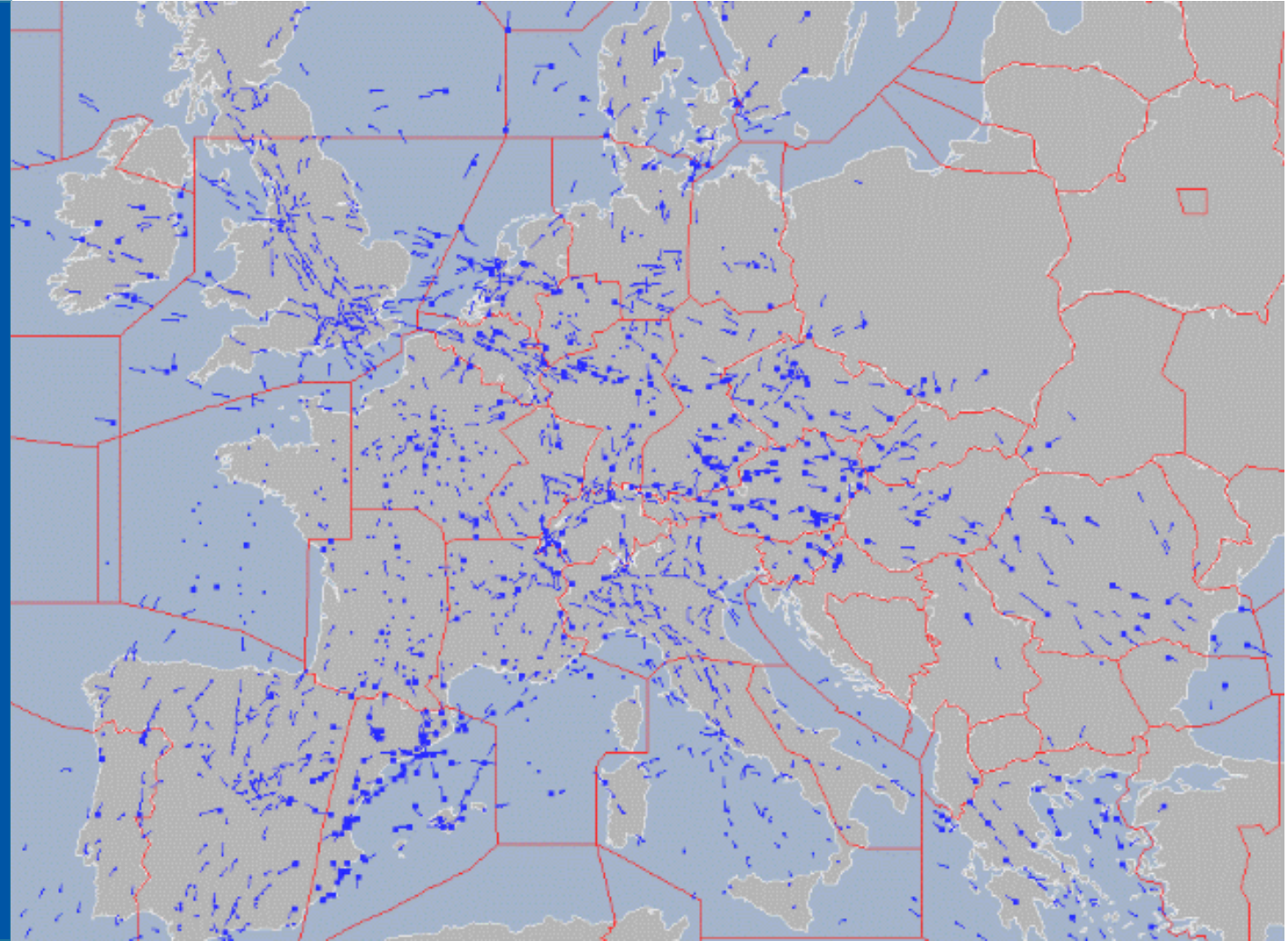


The Network Manager in pictures

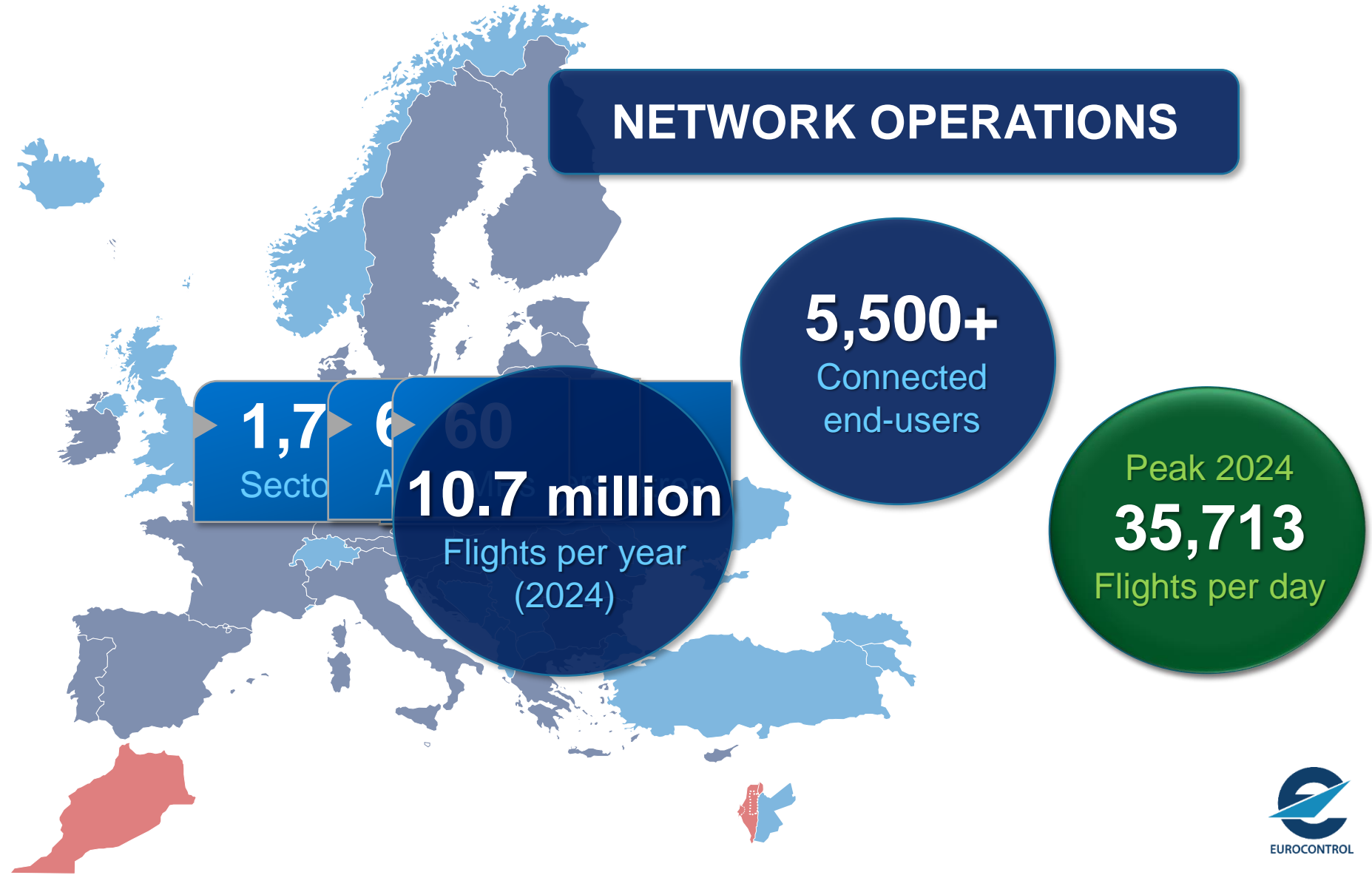


02 The need for ATFM

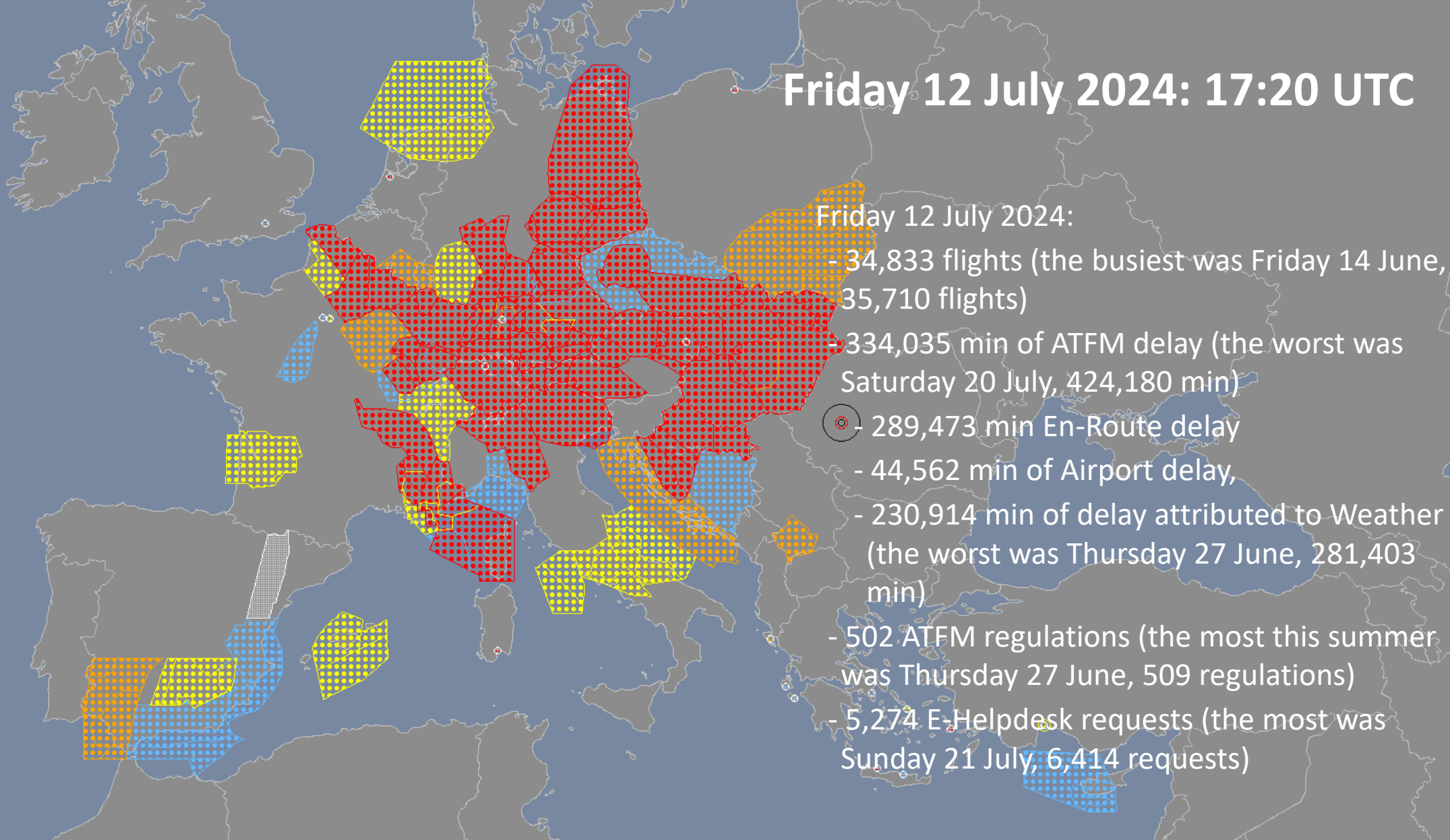
European
Perspective



Managing ONE SINGLE Aviation Network over Europe



Friday 12 July 2024: 17:20 UTC



Friday 12 July 2024:

- 34,833 flights (the busiest was Friday 14 June, 35,710 flights)
- 334,035 min of ATFM delay (the worst was Saturday 20 July, 424,180 min)
- 289,473 min En-Route delay
- 44,562 min of Airport delay,
- 230,914 min of delay attributed to Weather (the worst was Thursday 27 June, 281,403 min)
- 502 ATFM regulations (the most this summer was Thursday 27 June, 509 regulations)
- 5,274 E-Helpdesk requests (the most was Sunday 21 July, 6,414 requests)



European Aviation Network Challenge



VS

TRAFFIC

CAPACITY

2024

2025

+ 5.2%

2030

40-45000?

NO MAGIC SOLUTION

NO such thing as a
LOCAL PROBLEM



PARTNERSHIP

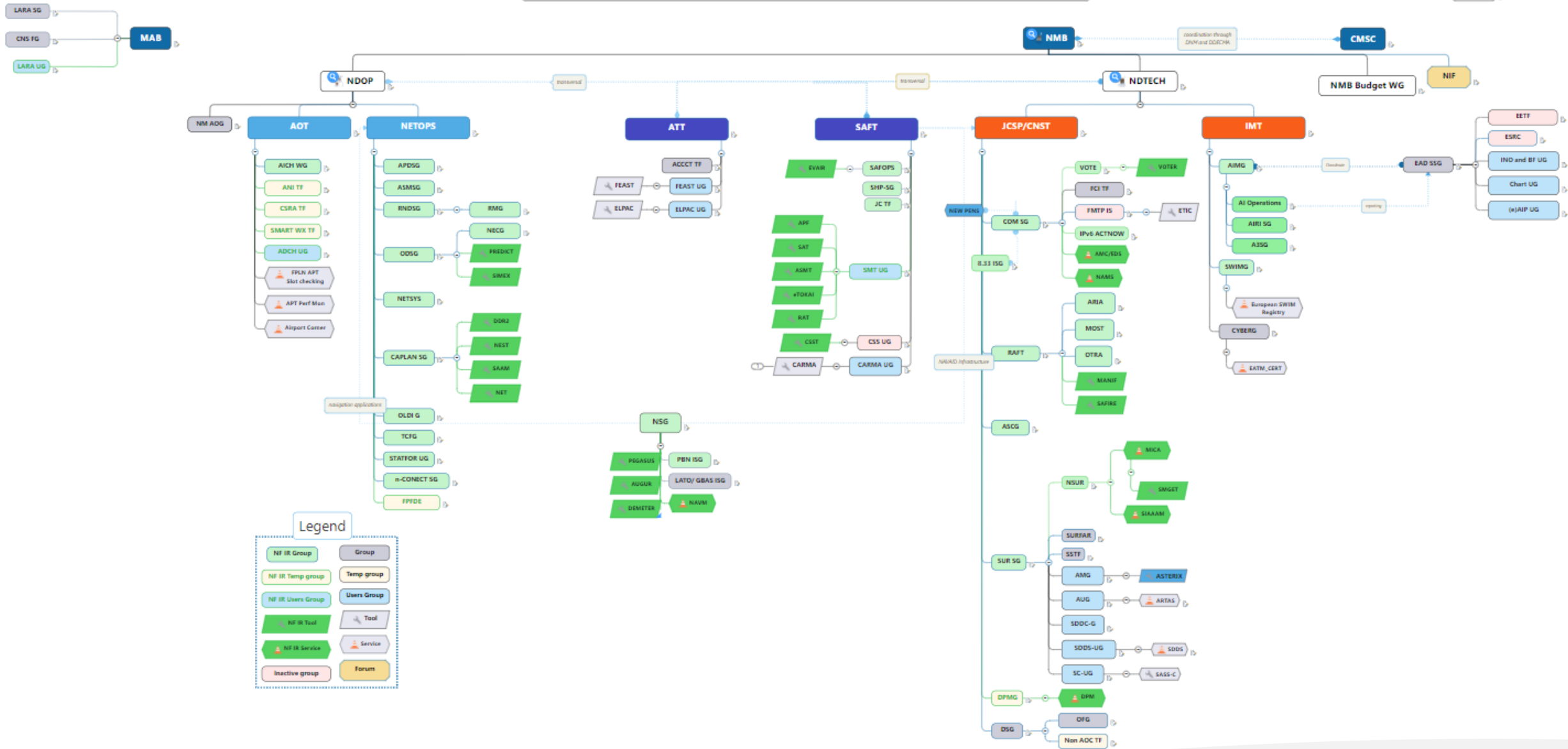


NETWORK COOPERATIVE DECISION MAKING



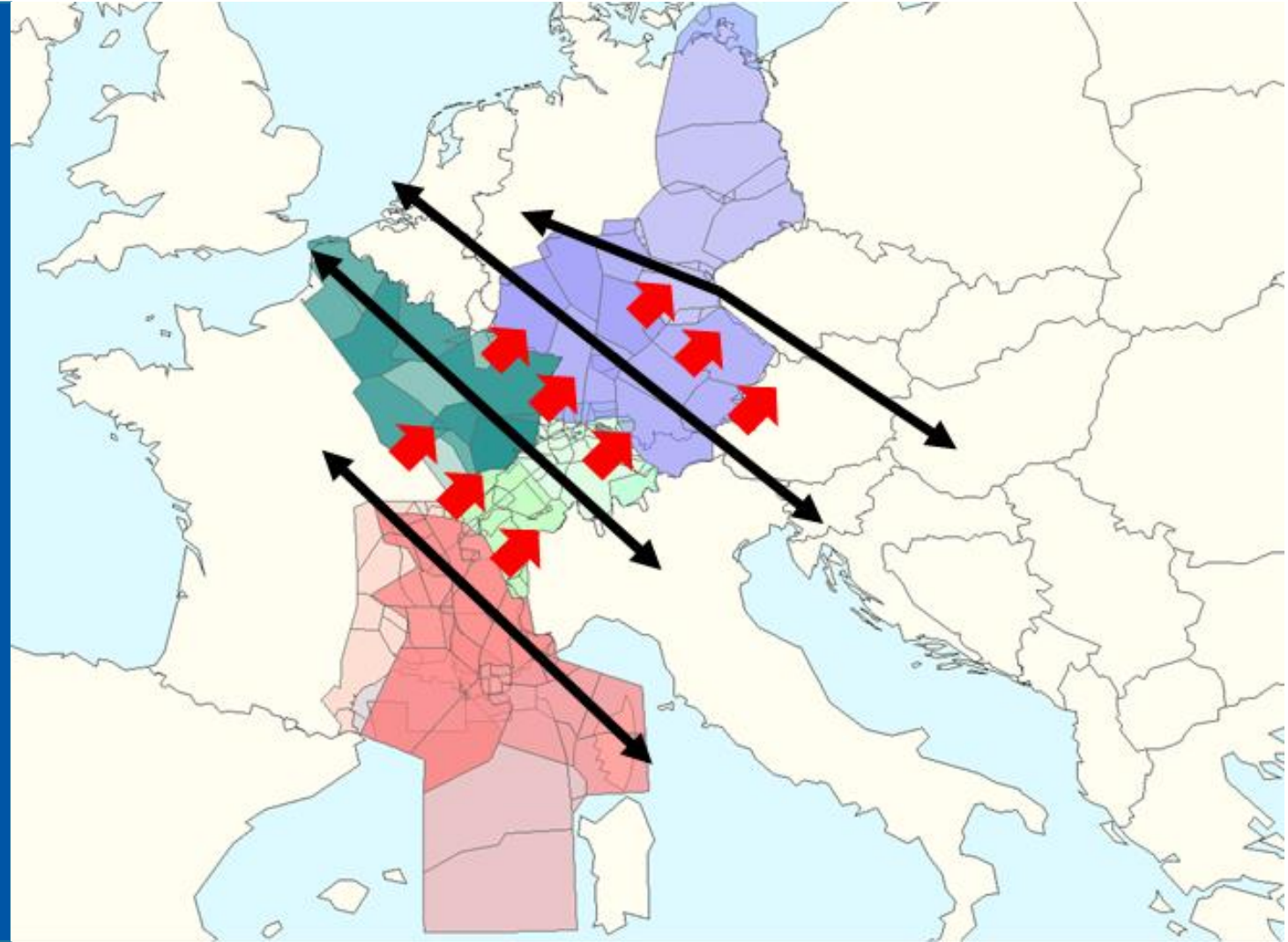
EUROCONTROL and NM WORKING ARRANGEMENTS

Contact: 

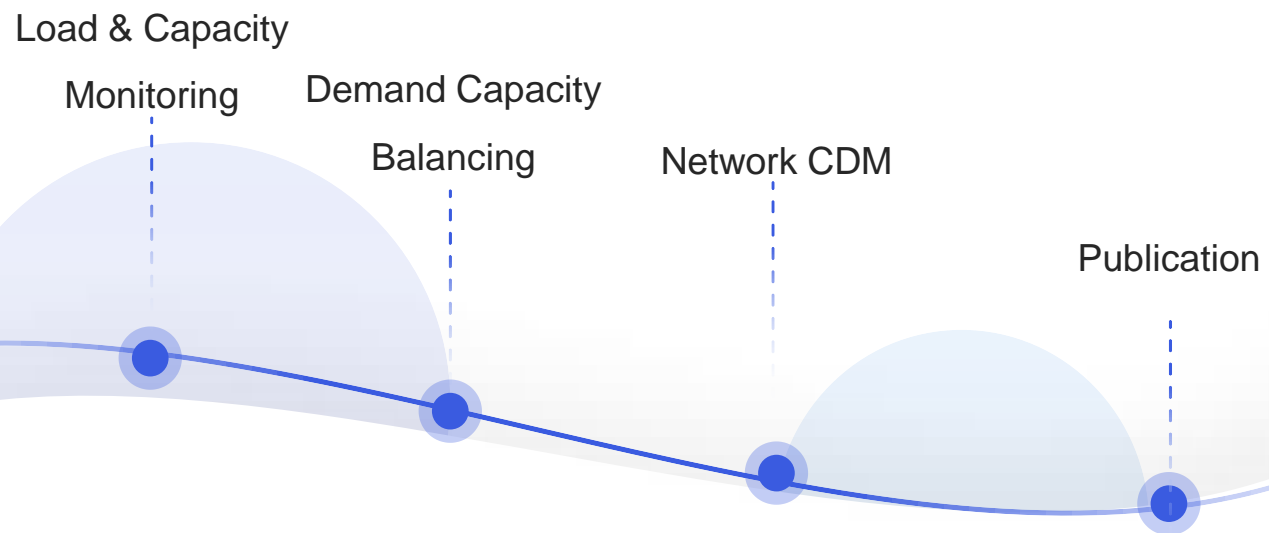


03
Cross-border
ATFM Solutions

European
Perspective

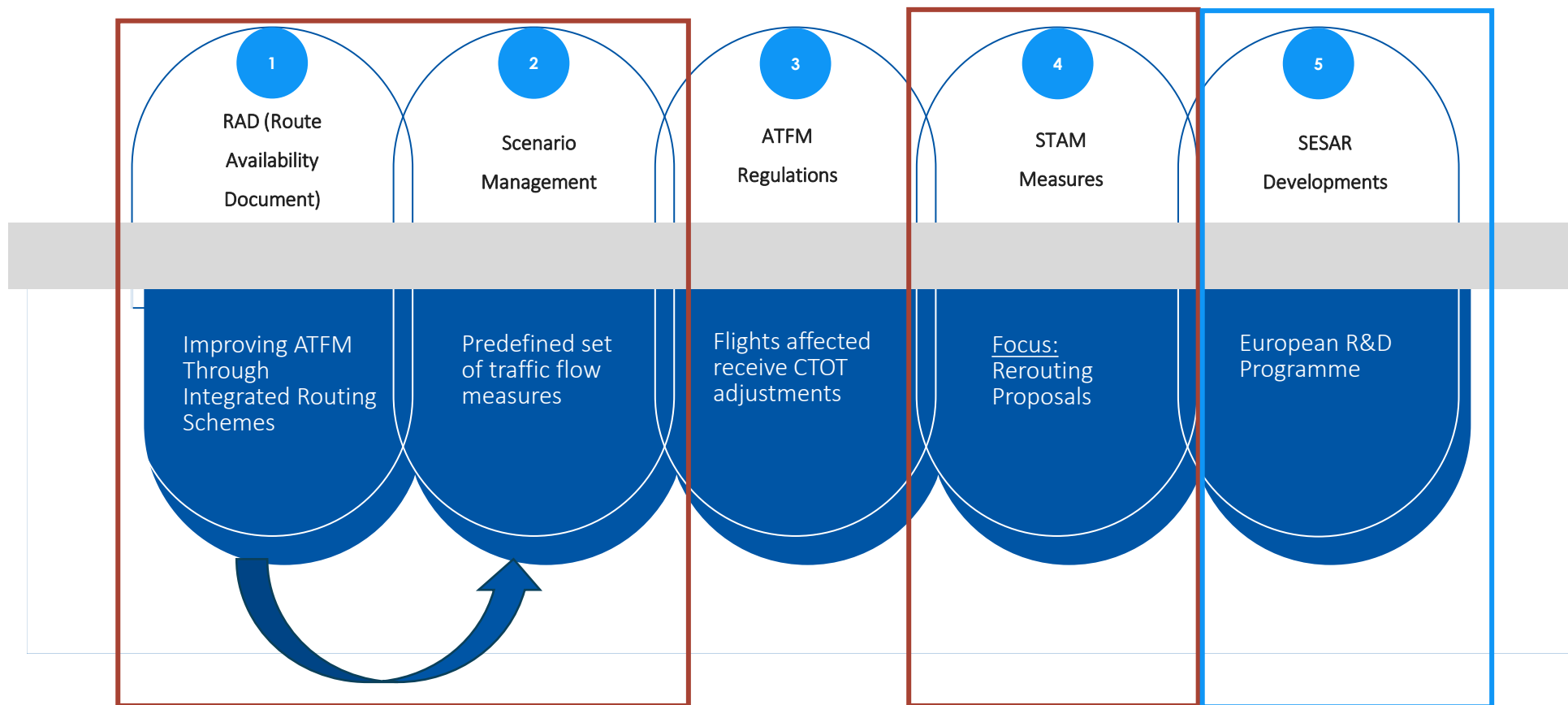


ATFM Management Process



ATFM Solution Toolset

Focus: Cross-border ATFM solutions



Route Availability Document (RAD)

Improving ATFM Through Integrated Routing Schemes

Objective: The RAD aims to improve ATFCM by providing a single, integrated routing scheme that maximizes capacity and reduces complexity

Basic Principles: It organizes traffic into specific flows to make the best use of available capacity and assists the Network Manager in identifying re-routing options to reduce delays

Continuous Review: The RAD is subject to continuous review and updates each AIRAC cycle.

Flight Planning: The RAD defines restrictions on routes and points, and aircraft operators must plan flights in accordance with these restrictions.



Transition to Dynamic RAD

Real-Time Adjustments

Dynamic RAD enables **real-time modifications** to airspace and route restrictions.

Optimized Air Traffic Flow

It helps airlines to **find the most efficient routes** while avoiding congestion or restricted airspace.

Improved Flexibility

Airlines can adjust their flight plans dynamically, considering **weather, military airspace usage, and other temporary restrictions**.

Enhanced Predictability

Reduces unexpected delays by providing **up-to-date route availability** based on current traffic conditions.





Scenario Management

Predefined Set of Flow Measures

Scenario: Predefined set of traffic flow measures used to manage air traffic efficiently under specific conditions.

Level Capping

Level capping is a scenario used to manage vertical spacing between aircraft, ensuring safe altitude levels.

Rerouting

Rerouting involves changing an aircraft's planned route to optimize air traffic flow and avoid congestion.

Other Scenarios

Various other scenarios exist within ATFCM to address specific air traffic management challenges, enhancing safety and efficiency.

Short-term ATFM Measures (STAM)

Focus: Rerouting Proposal

Objective: Providing AOs with **optional** rerouting options to streamline operations.

Reroutings sent by AOLO to highly penalised flights

Reception of STAM RRP

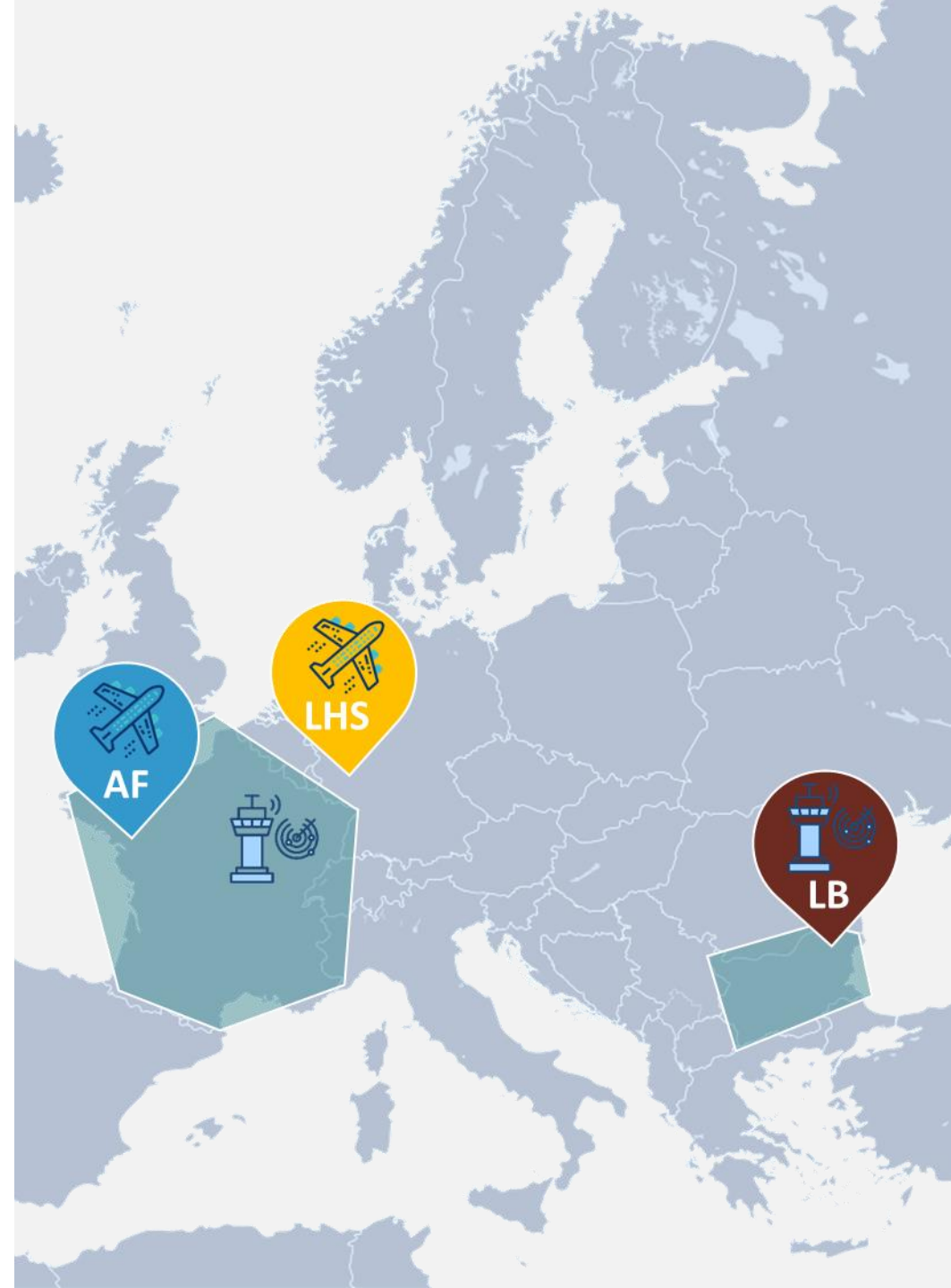
- Air France (Aircraft Operator)
- Lufthansa systems (CFSP)

Scenario- based

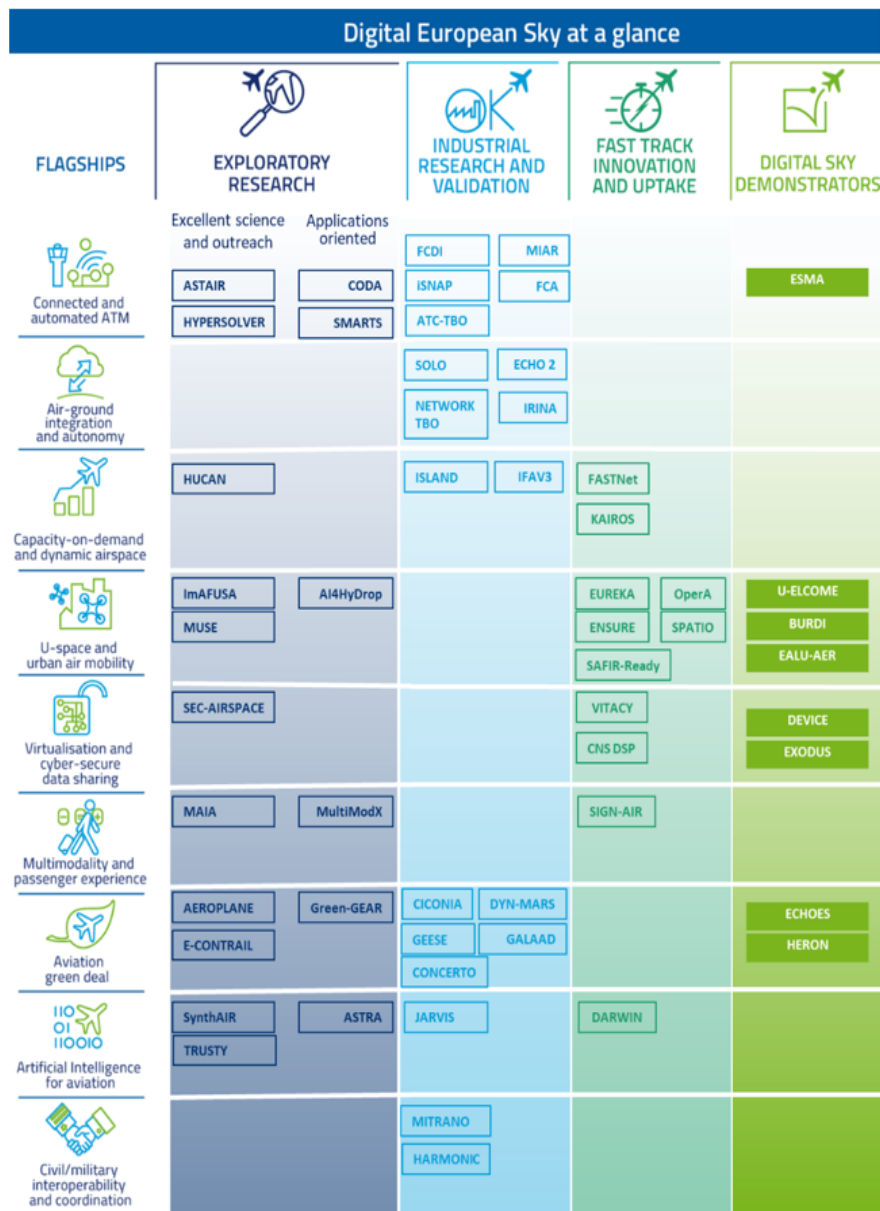
- In progress: BULATSA

Ad-hoc

- In progress: DSNA



Single European Sky ATM Research (SESAR)



PROJECT	CODE	TYPE	FLAGSHIP
CICONIA	INO-S-PC-CICO	Industrial research	Aviation green deal
CONCERTO	INO-S-PC-CONC	Industrial research	Aviation green deal
GEESE	INO-S-PC-GEEC	Industrial research	Aviation green deal
HERON	DSD-H-ER-ON00	Digital sky demonstrator	Aviation green deal
ECHO-2	INO-S-PC-ECHO	Industrial research	Air-ground integration & autonomy
NETWORK TBO	INO-S-PC-NETW	Industrial research	Air-ground integration & autonomy
ISLAND	INO-S-PC-ISLA	Industrial research	Capacity on demand & dynamic airspace
FASTNET	INO-S-PC-FAST <i>no ACD contribution foreseen</i>	Fast track	Capacity on demand and dynamic airspace
MITRANO	INO-S-PC-MITR	Industrial research	Civ-mil interoperability & coordination
HARMONIC	INO-S-PC-HARM	Fast track	Civ-mil interoperability & coordination
SMARTS	INO-S-PC-SMAR <i>Passive contribution</i>	Exploratory research	Capacity on demand and dynamic airspace
ASTRA	<i>no ECTL participation</i> <i>Passive ACD contribution</i>	Exploratory research	Artificial intelligence for aviation
HYPERSOLVER	INO-S-PC-HYPE <i>Passive contribution</i>	Exploratory research	Connected & automated ATM
GREEN GEAR	INO-S-PC-GREE <i>Passive contribution</i>	Exploratory research	Aviation green deal
DEVICE	INO-S-PC-DEVI	Digital sky demonstrator	Virtualization & cyber-secure data sharing
EXODUS	INO-S-PC-EXOD	Digital sky demonstrator	Virtualization & cyber-secure data sharing

Network of Networks

Information Exchange and Cooperation

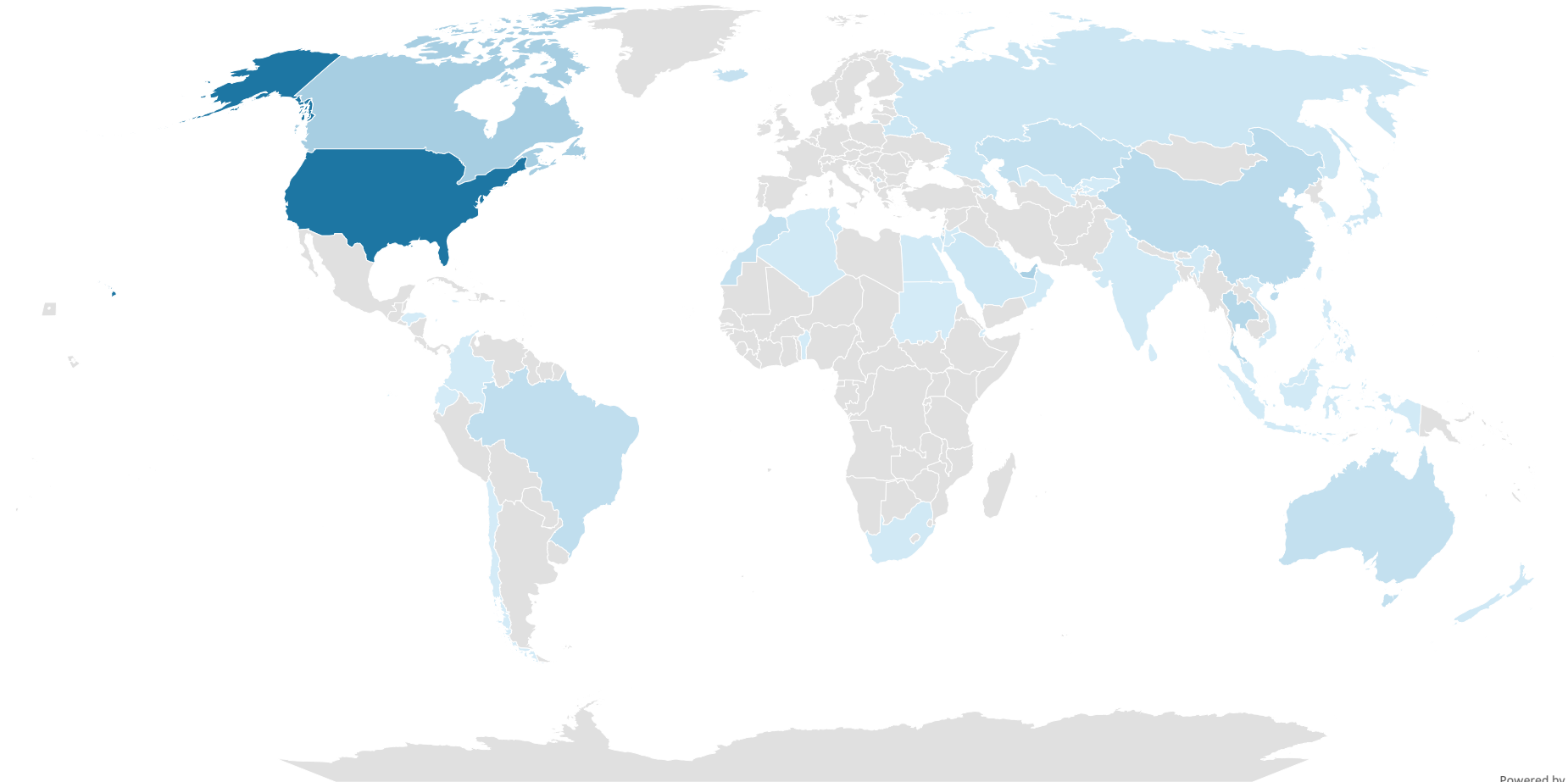


Eurocontrol's global Outreach

Number of agreements

111

1



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Takeaway

Consider specific, concrete, implementable and realistic actions that can contribute to operational efficiency and offer opportunities for all partners by being better connected with each other.

The vision for Global ATFM – A set of interlinked operational ATFM regions



Thank You

