Connecting APOCs to the ATM Network

APOC Exchange

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Why do airports need to connect?

- 'Airports are a component part of the European ATM Network' as stated in Commission Implementing Regulation (EU) 2019/123.

- Airports are the Nodes of the Network.

- The 'network' supports the movement of aircraft from one airport to another.

- Capacity is not infinite. Airports have limitations as does the network.

- Connection, like communication is two-way.
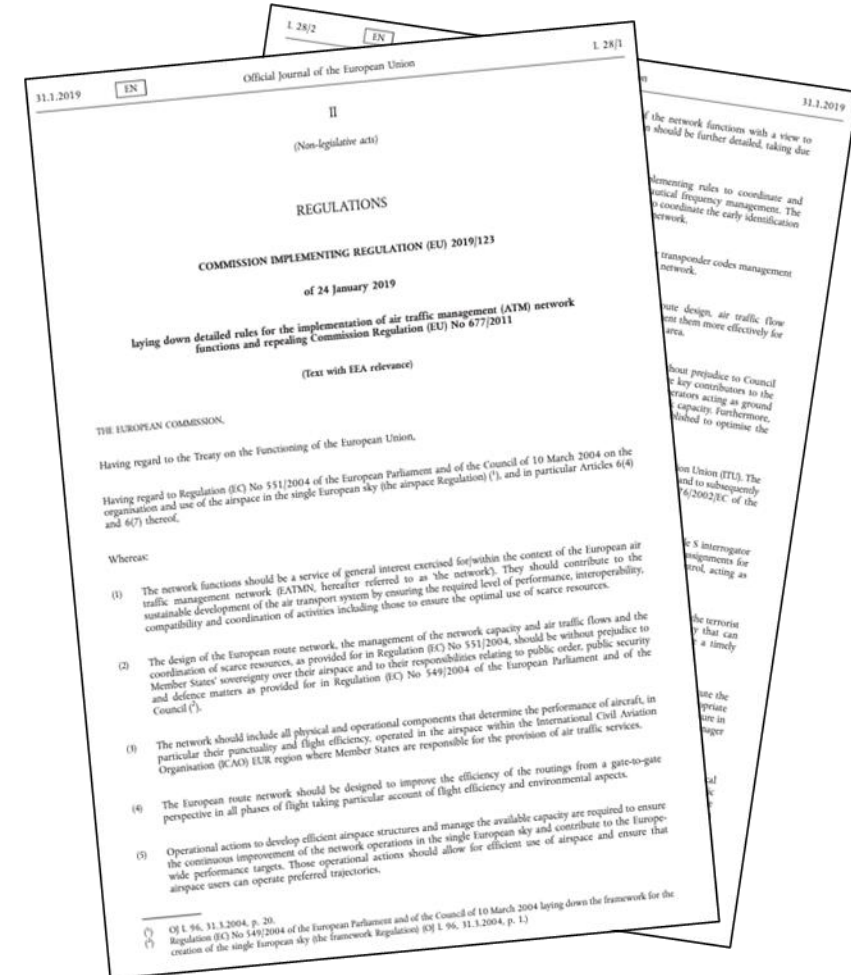
Let's keep it simple

- Definition of an APOC:-

Copilot

An **Airport Operations Centre (APOC)**, also known as an **Airport Operations Control Center (AOCC)**, is the central hub of an airport where various activities are coordinated to ensure the safe and efficient functioning of the airport. Here are some key functions and roles of an APOC:

1. **Air Traffic Management:** Monitoring the movement of aircraft on the ground and in the airspace surrounding the airport to ensure safe and orderly flow of air traffic [1].
2. **Resource Allocation:** Managing airport gates, aircraft parking stands, and runway capacity to minimize delays and reduce congestion [1].
3. **Real-time Decision-making:** Operating 24/7 to respond promptly to changing circumstances and ensure seamless airport operations [1].
4. **Communication and Coordination:** Serving as the central point of communication between airlines, ground handling services, customs, security, and other airport agencies [1].
5. **Safety and Compliance:** Ensuring compliance with aviation regulations and maintaining a safe operating environment [1].
6. **Crisis Management:** Coordinating the airport's response during emergencies or crises [1].

The APOC plays a crucial role in managing the complexities of airport operations and responding to dynamic challenges that arise on a day-to-day basis [2].

- The collaborative decision making entity for airport operations. Single point of input and output.

Let's keep it simple

Airports are one of the three aviation 'asset owners' .....

- Airports   The fixed asset
- Airlines   The moving asset
- ATC   The facilitating asset

- Airports   APOC   (AirPort Operations Centre)
- Airlines   OCC   (Operational Control Centre)
- ATC   ACC   (ATC Control Centre)

How do we connect?
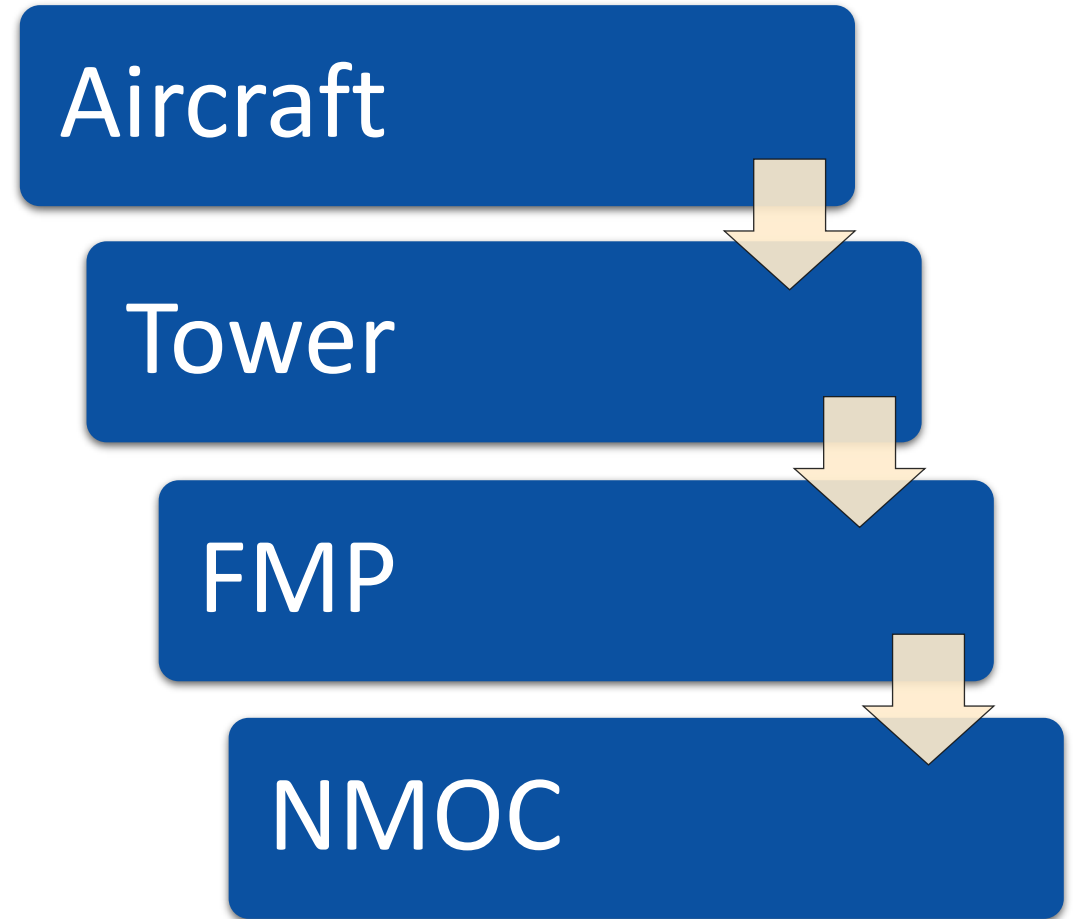
- Data Communication

A-CDM

iAOP

eAOP

AOP – NOP Integration

How do we connect?

- ATC Verbal Communication

Aircraft

Tower

FMP

NMOC

How do we connect?

- Airport / Network Tactical Communication

APOC to NMOC

NMOC to APOC

NMOC Airport Function

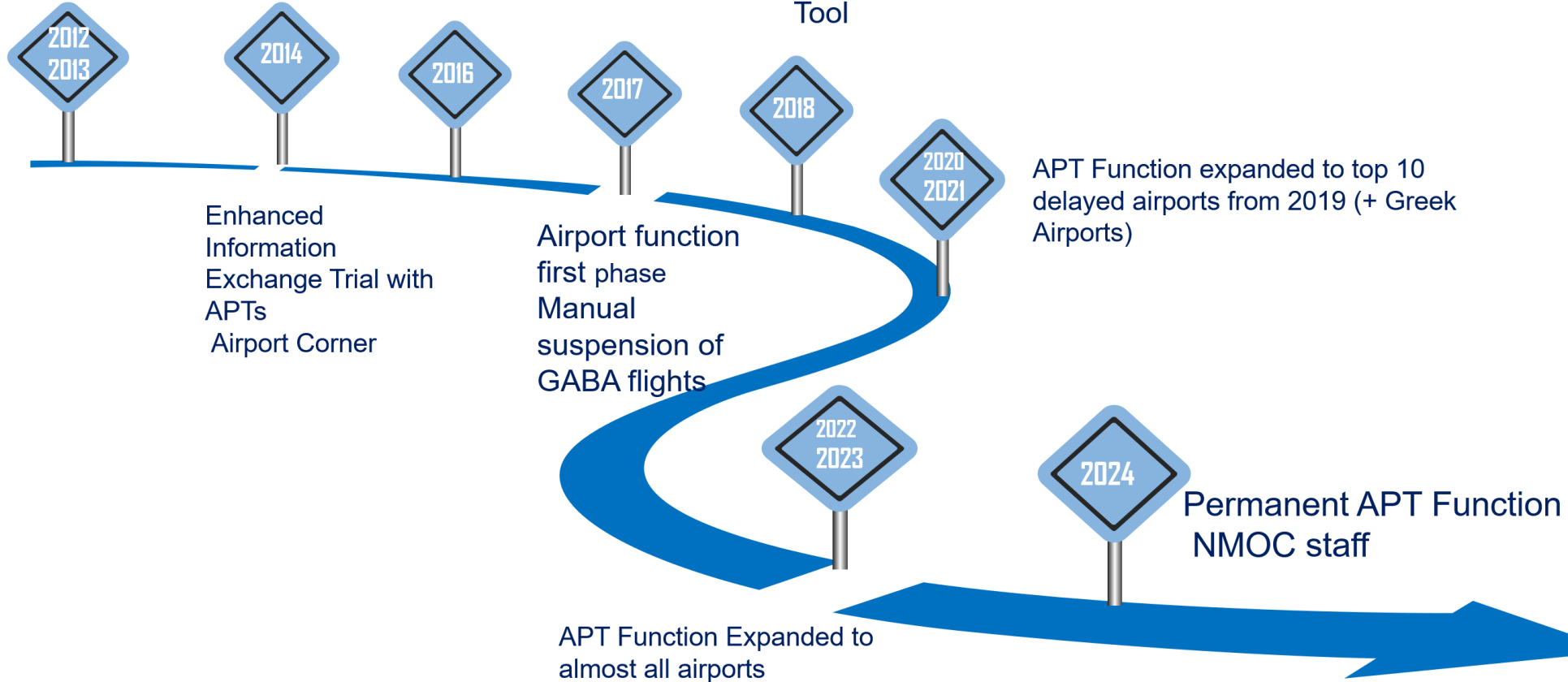|		
The Airport Operators 'network help desk'	Single point of contact APOC-NMOC	Single point of contact NMOC-APOC
Communicate the Airport Operator's view to the CDM process of Network Management	Supports Airport Operators in managing their operation	Provide the best tactical service to the Airport Operator

NMOC Airport Function

Hellenic Airports Procedure Arrivals Punctuality and Airport Slot Adherence

2012 2013

Airport Position first trial Greek Islands

2014

Enhanced Information Exchange Trial with APTs Airport Corner

2016

2017

Airport function first phase Manual suspension of GABA flights

Airport Corner Diversion Capability Tool

2018

2020 2021

APT Function expanded to top 10 delayed airports from 2019 (+ Greek Airports)

2022 2023

APT Function Expanded to almost all airports

2024

Permanent APT Function NMOC staff

ACI
EUROPE
AIRPORTS COUNCIL
INTERNATIONAL

NMOC Airport Function

AF Position

- Since summer 2021 an all-year-round service.
- Working position in the centre of the NMOC.
- Back-office up to D-2.
- Ops Room D-1 & Tactical.

Focus windows

- Seasonal
- 8 weeks to 2 weeks
- D-14 to D-2 day
- D-1 and D0 (pre-tact / tactical)

Seasonal Coordination

- Monitoring of 190+ Coordinated and Facilitated airports (EUACA data) plus working closely with larger non-coordinated airports.
- Preparing seasonal operational plans.
  - Summer Greek islands
  - Winter ski destination
- Event planning.
  - World Economic Forum
  - Head-of-State visits
  - Sporting events (Football, Olympic Games)
  - Close relationship with UEFA
- Engagement with the GABA community.

Daily Tasks

Pre-Tactical phase (D-1)
- An Airport D-1 DCB report is provided to NMOC Pre-tact highlighting airport where expected demand exceed the published arrival capacity.
- Actions are reviewed in NMOC briefings and including any advance weather info, revised and prepared for implementation.
- Airport Operators and other stakeholders are informed and the Airport Function is prepared for implementation of actions allocated to it.

Tactical phase (D0)
- First Rotation prioritization.
- Monitoring of airport slot adherence (when requested by the relevant authority).
- Identification of problematic flights.
- Prediction & mitigation of night curfew issues.
- Support to airports & mitigation of delays.
- Coordinate with airports when adverse operating conditions or special events.
- Support to seasonally small airports (e.g. Greek Islands).
- Monitor Airport Corner Events.
- Airport Hotline.

Airport Curfew Watch

- Airport Function monitors the flow of aircraft throughout the day and will identify evening arrivals that are at risk of a curfew infringement.

- Focus on airfields with known 'hard' curfews.

- Liaise with Airport Operators.

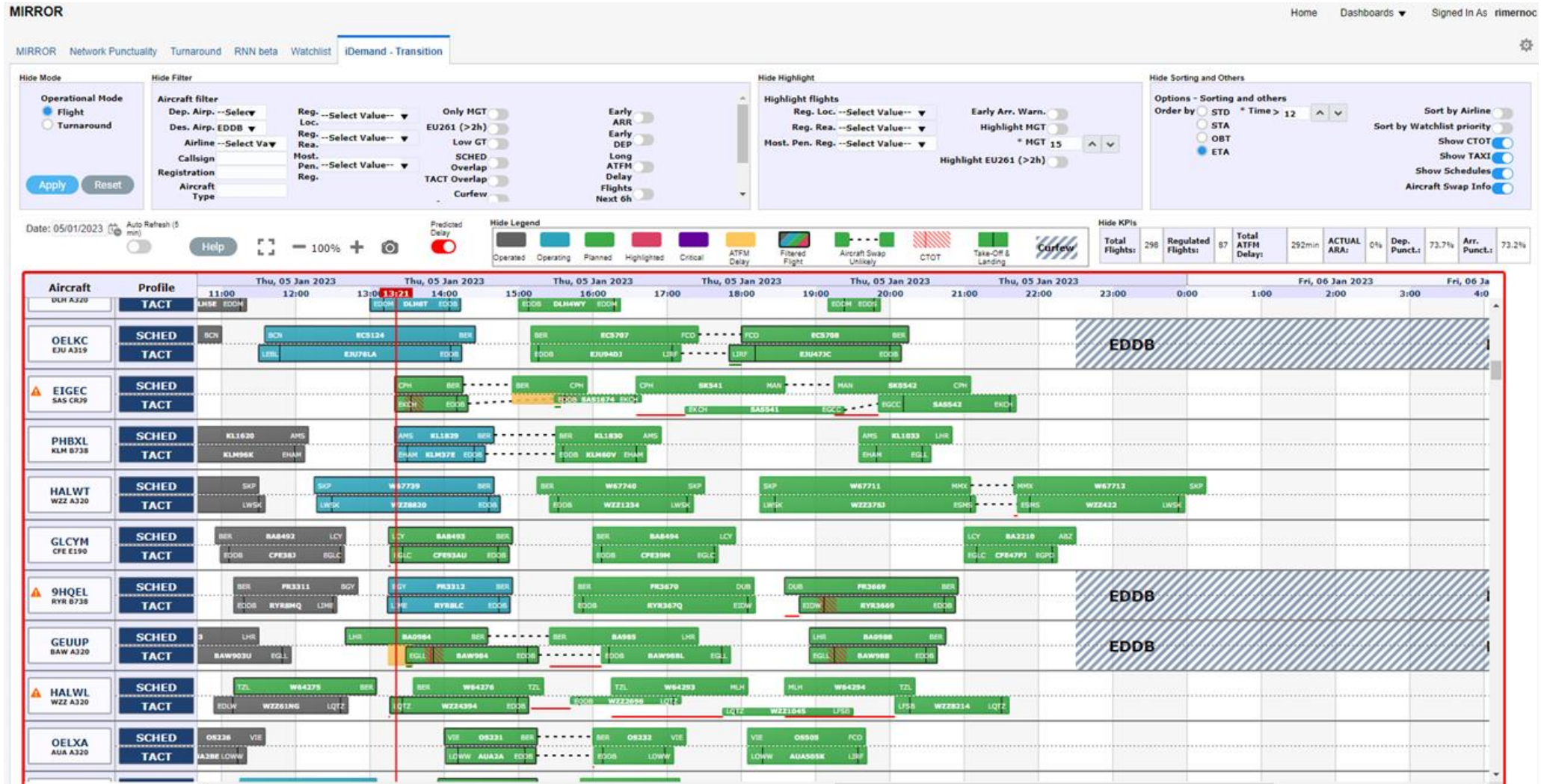- Look for ATFM improvements and coordinate with NM Flow.
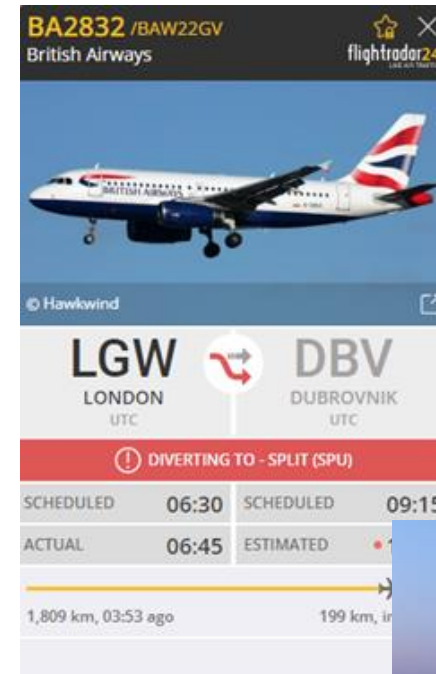
Airport Curfew Watch

Jun-Aug 2023 share of Airport Function night curfew alerts by airport
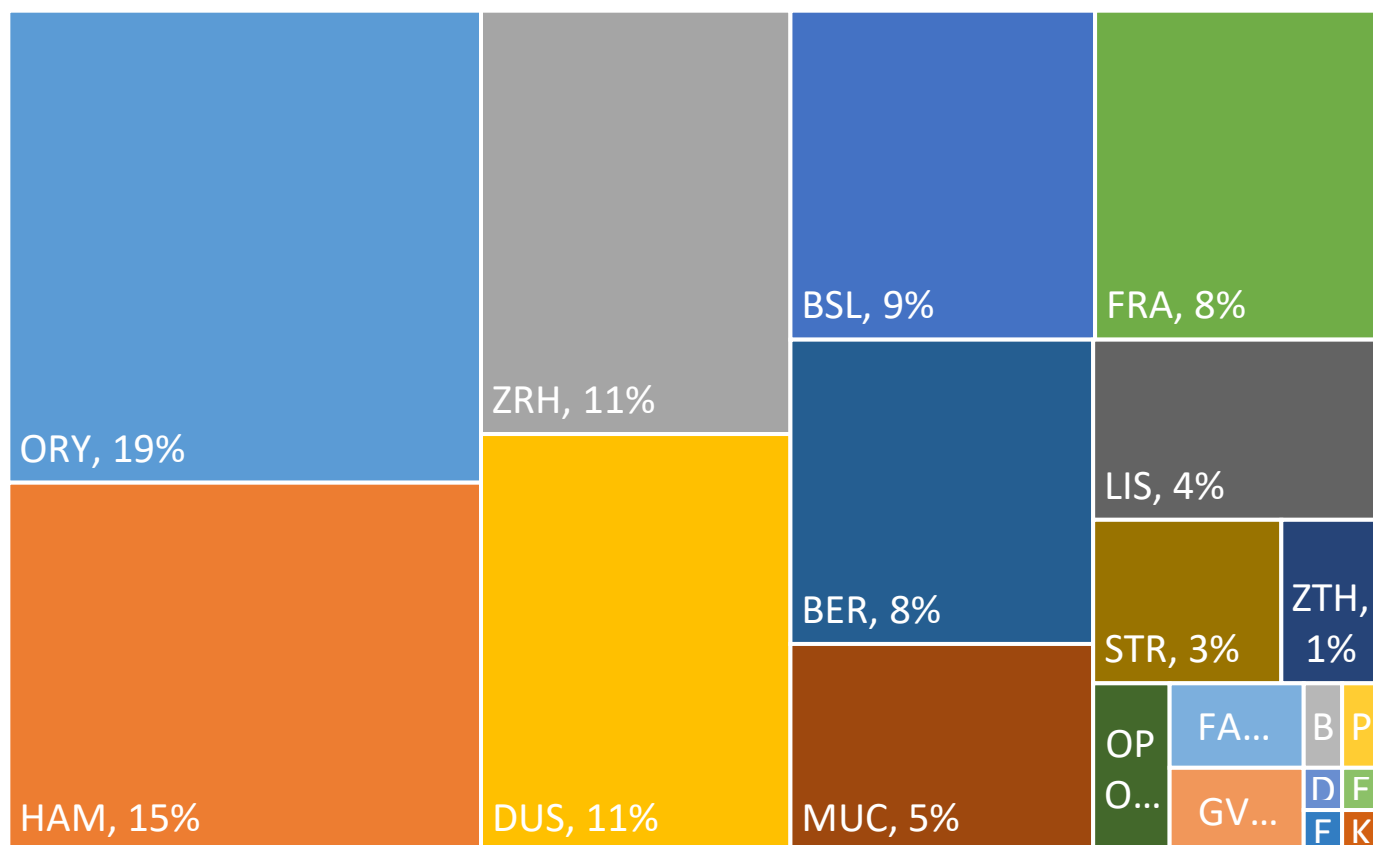
- On 78 days (out of 92) curfew alerts were sent out.

- On average 9 alerts/day (excl. days without alerts).

- 10 airports generated +95% of the curfew alerts.

Airport Function Tools (MIRROR)

Airport Function Tools (Airport Corner)

- Contacts (phone / email)
- Runway capacity
- Events

APOC-NMOC-APOC Communication

Anything that is happening on airport that will affect the network.	Anything that is happening in the network that will have an affect on the airport.	Regular tactical updates (verbal comms).	Collaborative planning for next days.
Airport Operators have a direct input to the tactical decisions of NMOC.	Supplements the formal ATC communication lines.	Additional information about an event or situation.	Common situational awareness (MIRROR tool).

Airport Operator NM Weekly Briefing

- A verbal briefing presentation is scheduled every week

- Every Thursday at 15:00 CET during the summer season.

- Bi-weekly verbal / virtual briefing during winter season

- These briefings do not last more than 30 minutes. Airports are strongly encouraged to attend. Any request for invitation can be addressed to

- nm.airports@eurocontrol.int or bruno.desart@eurocontrol.int

- A pdf briefing report is updated every week and available for download on the Airport Corner and Airport Corner for Airlines.

NMOC Airport Function – Summer 2025

Airport Function Key to integrate Airports
- Permanent NMOC Position
- New Validation integrated within NMOC Competency Scheme

Airport Function Consolidation
- Direct access to NM systems (ETFMS, NOP, SIMEX, MIRROR, etc)
- Enhanced support to Airports
- Provide assistance to AOs
- Expand Daily tasks: A-CDM issues, Diversion Capability, Cross-border Wx

Added value: Airports Operations Expertise in NMOC.
- Airport Function Position is available 0600-2200 CET all year.
- NM.Airports@eurocontrol.int
- Airport Hotline: +32 2 729 1190 / VCS: +32 2 745 1903

Thank you

www.aci-europe.org   www.airportcarbonaccreditation.org