

Supporting  
European  
Aviation



# CDM@DSNA

## NM Performance Review

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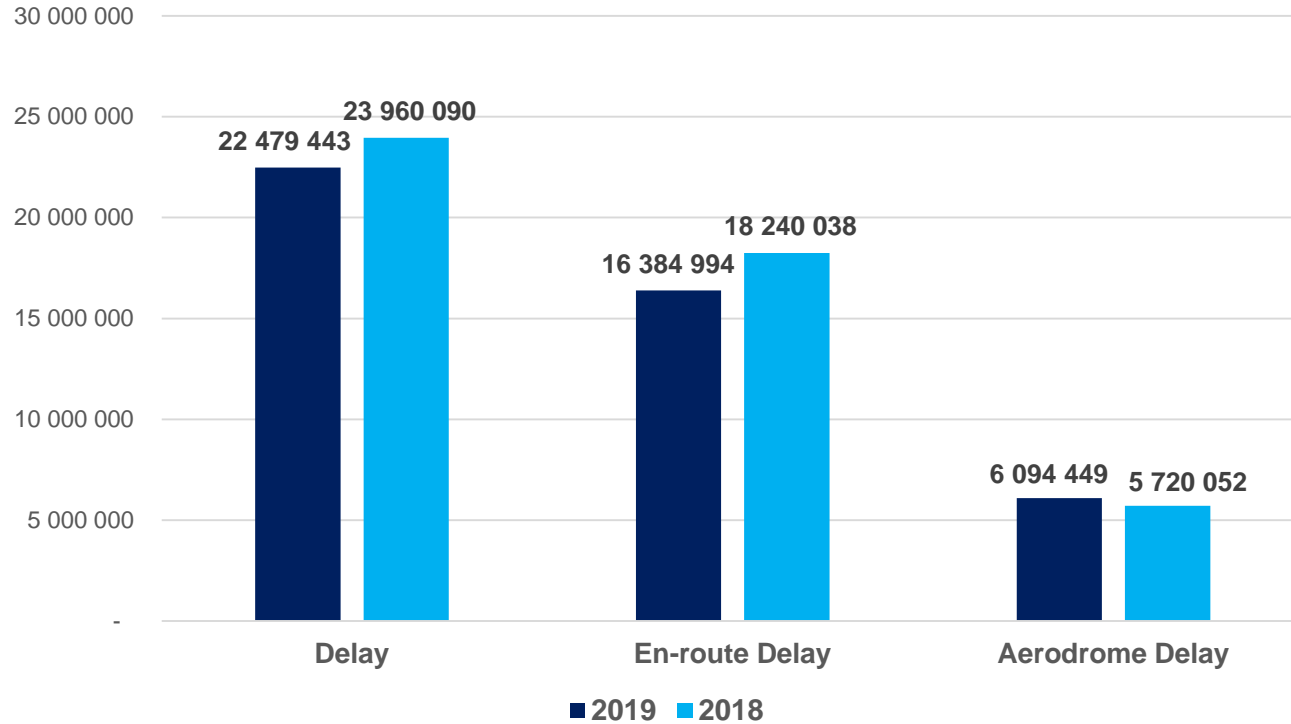


NETWORK  
MANAGER



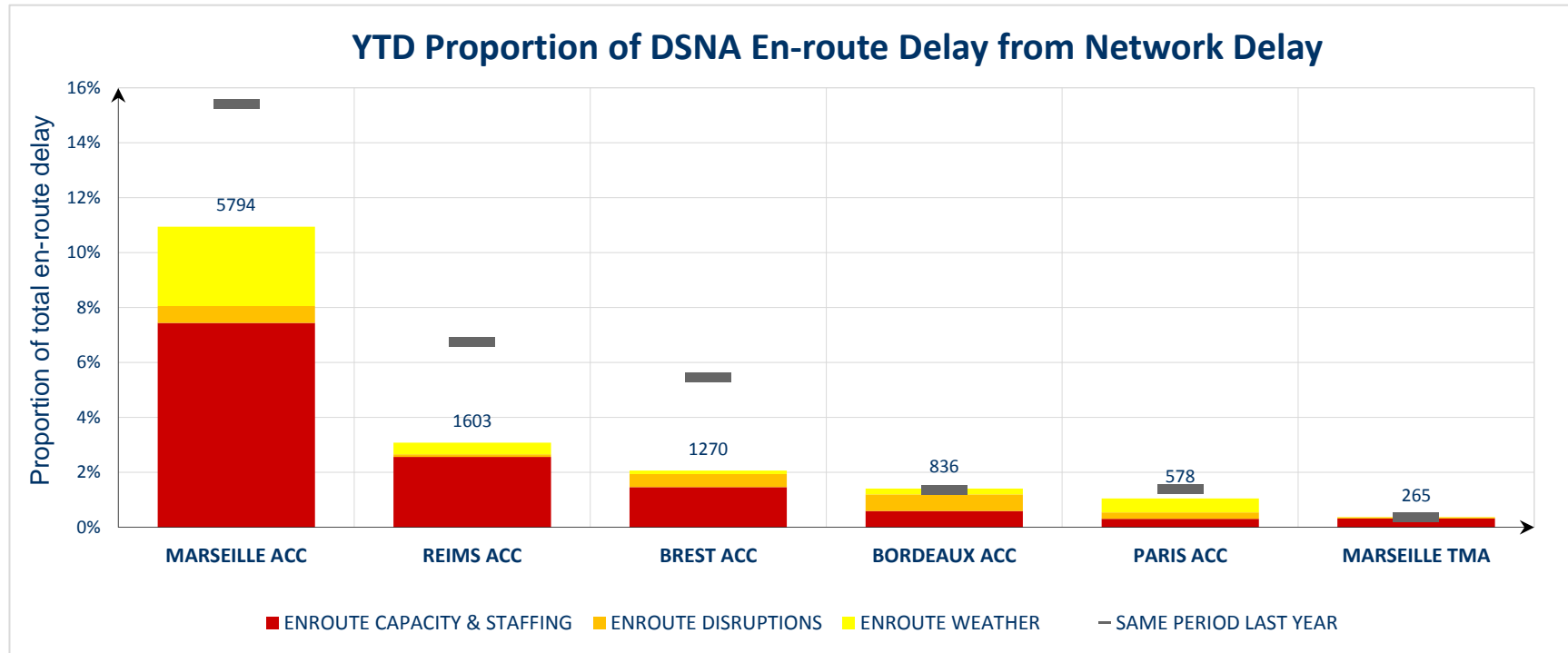
# YTD Network Performance

## YTD Network Delays



## YTD Network Performance

Traffic	9,776,480	↑	+1.1% (vs 2018)
En-route Delays	72.9%	↓	-3.2% (vs 2018)
Aerodrome Delays	27.1%	↑	+13.4% (vs 2018)



## Traffic

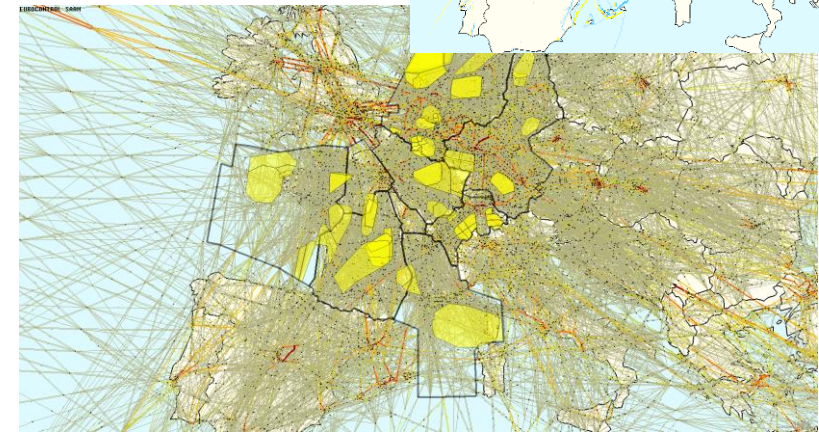
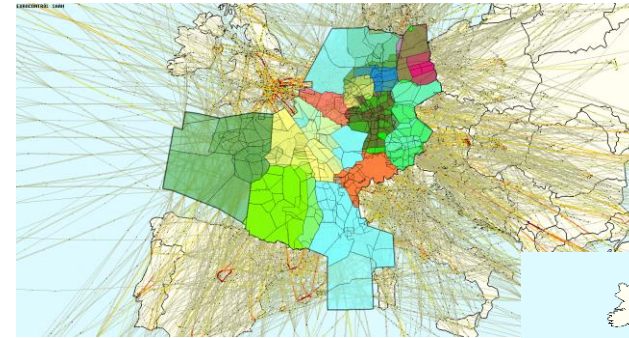
- Growth above average in Marseille and Brest
- Fewer flights in Reims – eNM/S19 objective
- Stable in other ACCs

## Delays

- DSN delays reduced
- Delay reduction of a third in Marseille – fewer strikes and thunderstorms.
- Reduction of over half the delays in Reims and Brest.

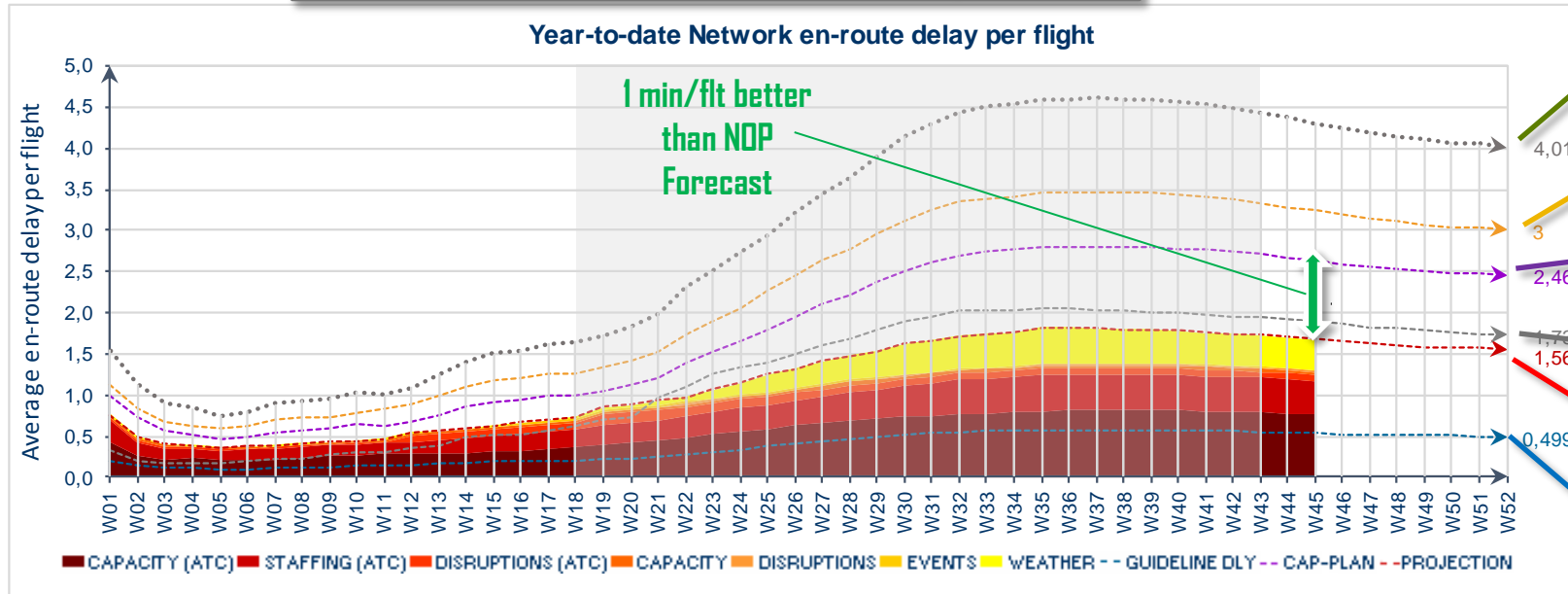
# DSNA Strategic Contributions to the Network

- Active participation in the FABEC Airspace Re-configuration Project
  - Further adaptations of existing projects required
  - Full exploitation of the FRA potential strongly recommended
- Beneficiary of the eNM/Summer 2019 measures
  - Further measures required in 2020 for Reims and Marseille ACCs
- Higher delivery in 201 than original planned
  - Further efforts required in the coming years
- Good cooperation with NM on airspace design matters
- Good cooperation with NM on Flexible Use of Airspace
- Close cooperation expected on Operational Excellence
- Active DSNA participation in all NM Working arrangements



# 2019 performance to date - Network Capacity

Year-to-date Network en-route delay per flight (2019)



- NOP Forecast without measures
- Network crisis
- NOP Forecast
- 2018
- Current delay trend
- SES Target

- En-route delays to-date - **1.71 min/flight**
- En-route delays to-date (per flight) **36% lower** than the NOP forecast for 2019
- En-route delays to-date (per flight) **12% lower** than in 2018
- **1.2% traffic growth** since the beginning of the year

# Summer 2019 main takeaways

Summer 2019 operations are proceeding better than expected, thanks to several factors, among which:



Implementation of measures stemming from the NM seven initiatives campaign



Enhanced coordination with operational Stakeholders



Fewer industrial actions



Better procedures for network management and weather conditions



**Measures should be maintained also in Summer 2020** in order to continue to improve operations performance. This will generate benefits for the whole Network guaranteeing economic benefits for Airlines in the short term.

NM measures will facilitate the **transition towards a structured approach** to reach an agile and scalable ATM Network.

## Better summer season

- less delay for a vast majority of ANSPs
- stable situation
- less volatility and increased predictability
- sufficient time available to react to unforeseen situations
- **Measures** proved to be **efficient** and most of them will be **re-conducted**
- **Unexpected high delays** in Hungary and Austria
- **Delay reattribution** important
- **Better performance** than expected for DFS and DSNA

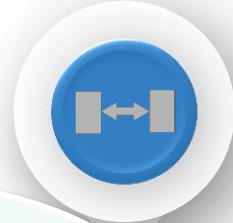
# The Outlook

## The 2019 Seven Initiatives campaign

Need for enhanced operational stakeholders  
Network perspective



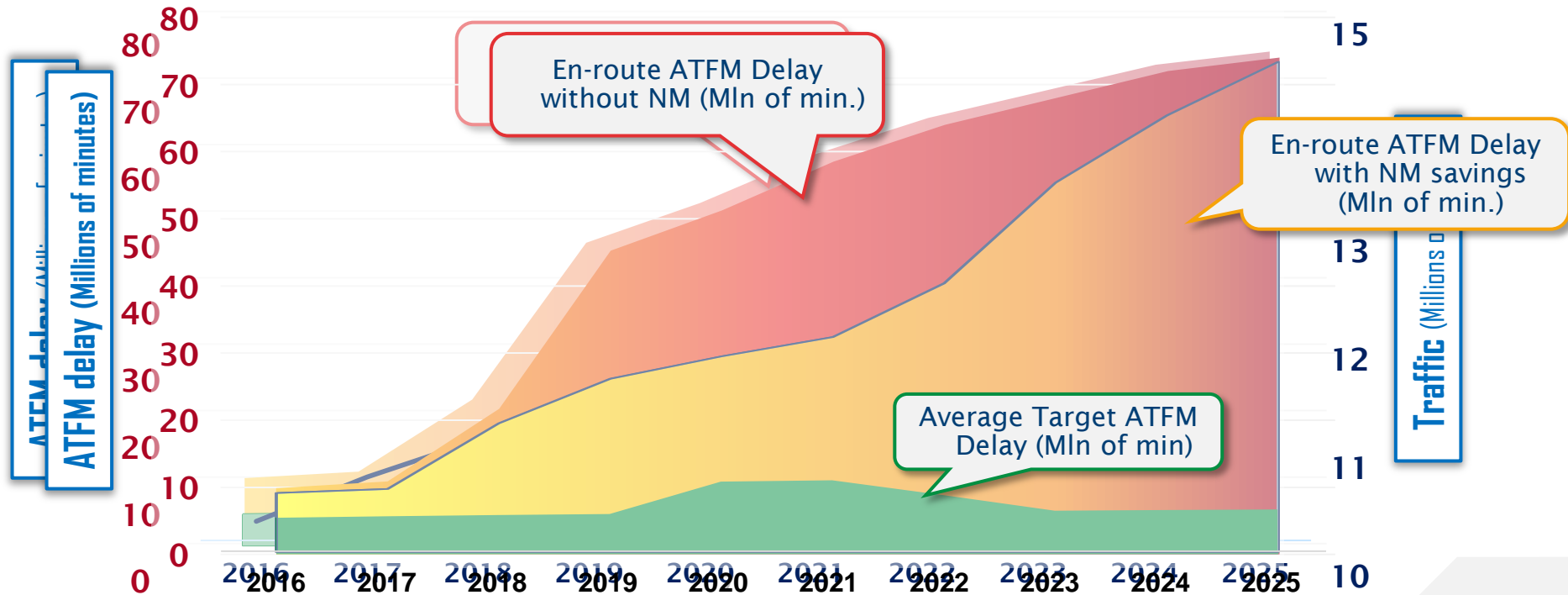
Need for enhanced operational and technological gaps



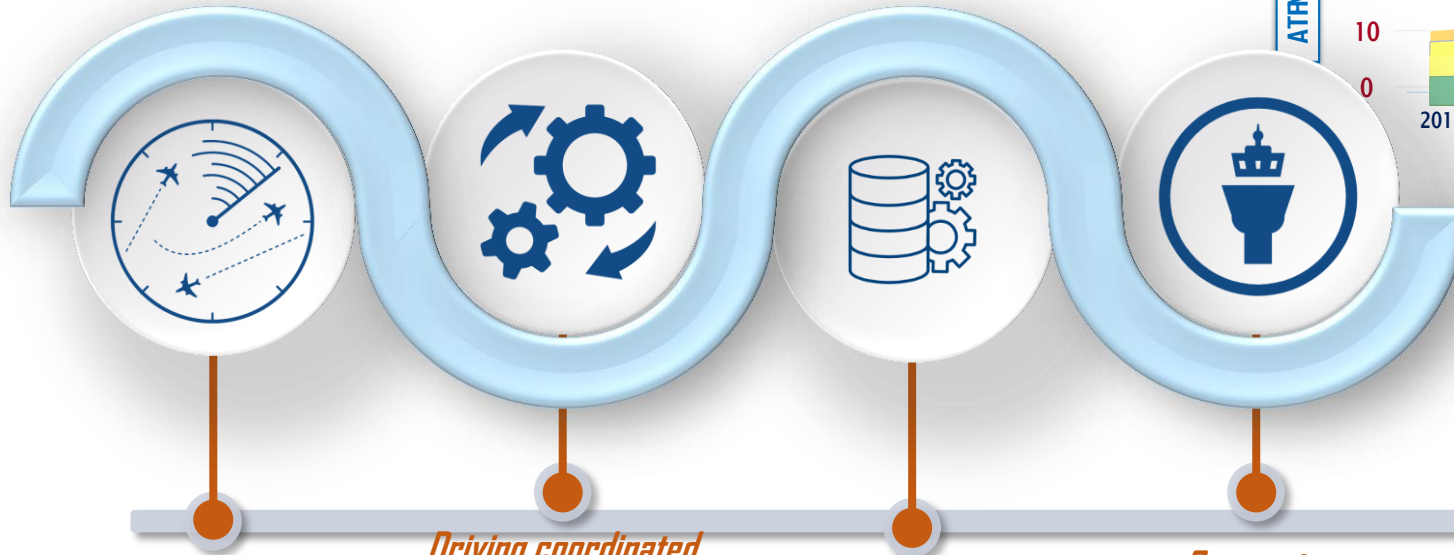
## Need to Continue & Boost

Need for enhanced operational and technological gaps

### Main issues



# The Vision Moving Forward



*Managing airspace density and air traffic flows both at strategic and tactical level*

*Driving coordinated implementation of airspace improvements, operational concepts and technologies*

*Monitoring European operational infrastructures*

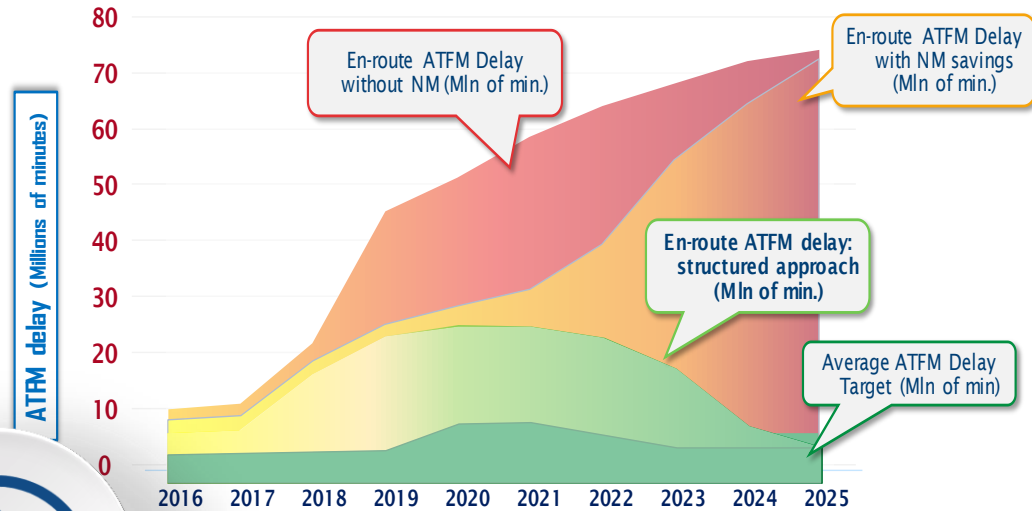
*Supporting Infrastructure service provision*

***Make strategy everyone's job***

**Continue**

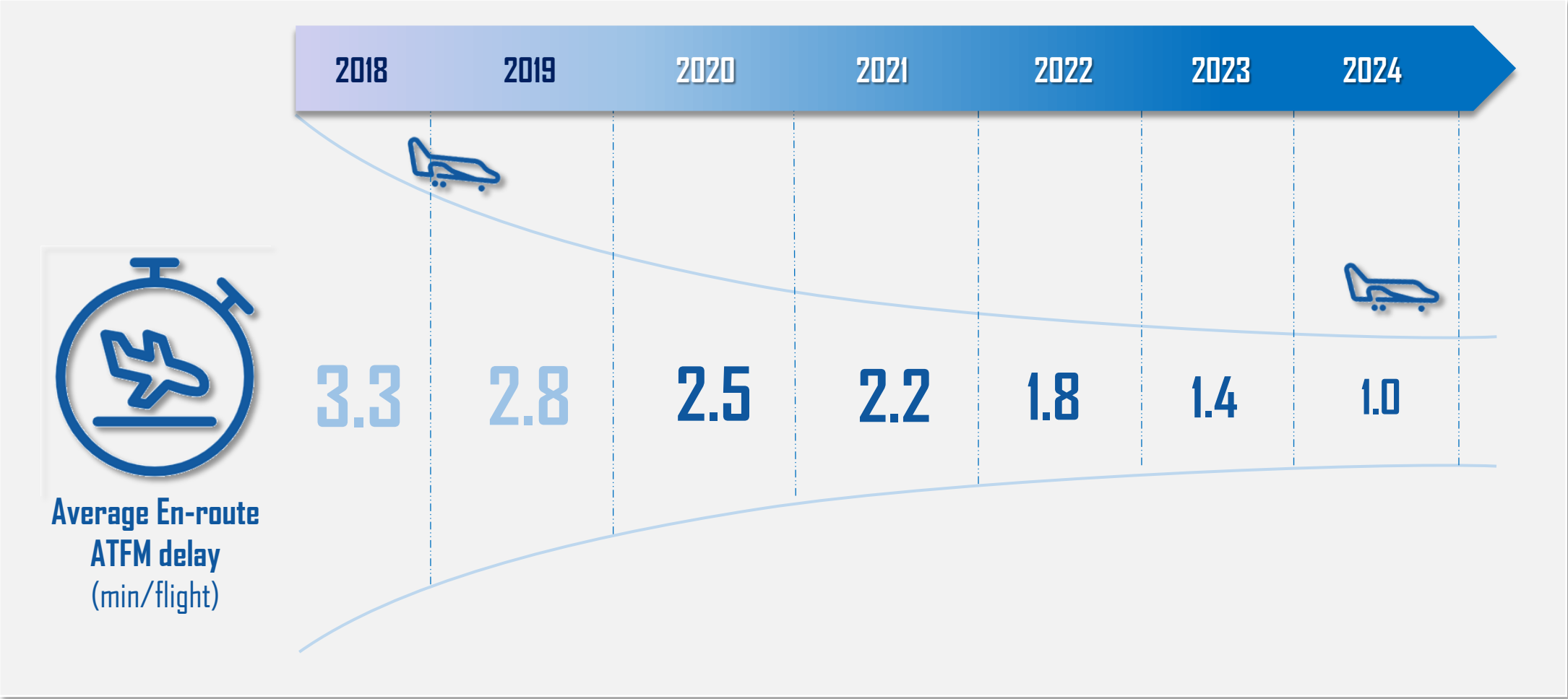
**Boost**

**Prepare**

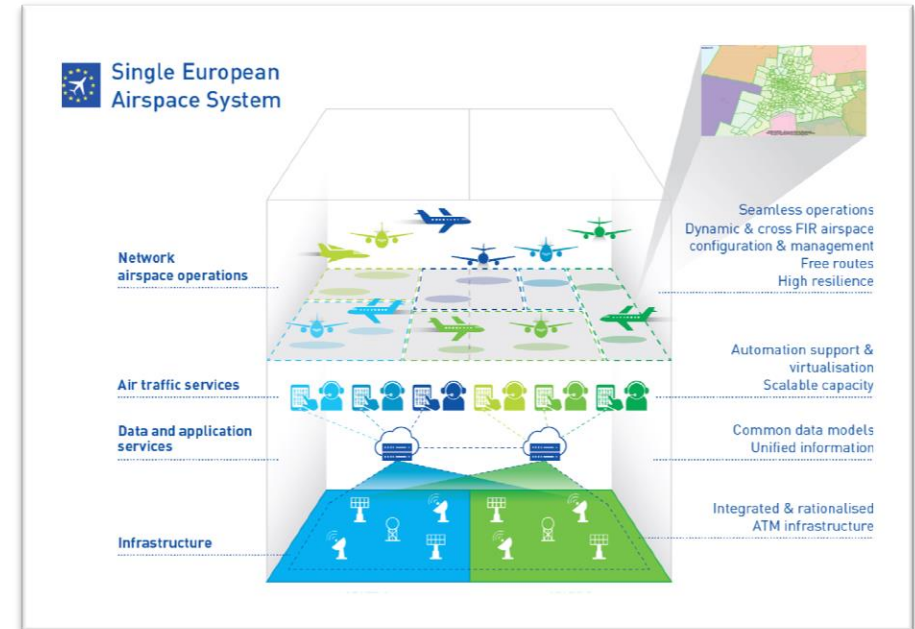
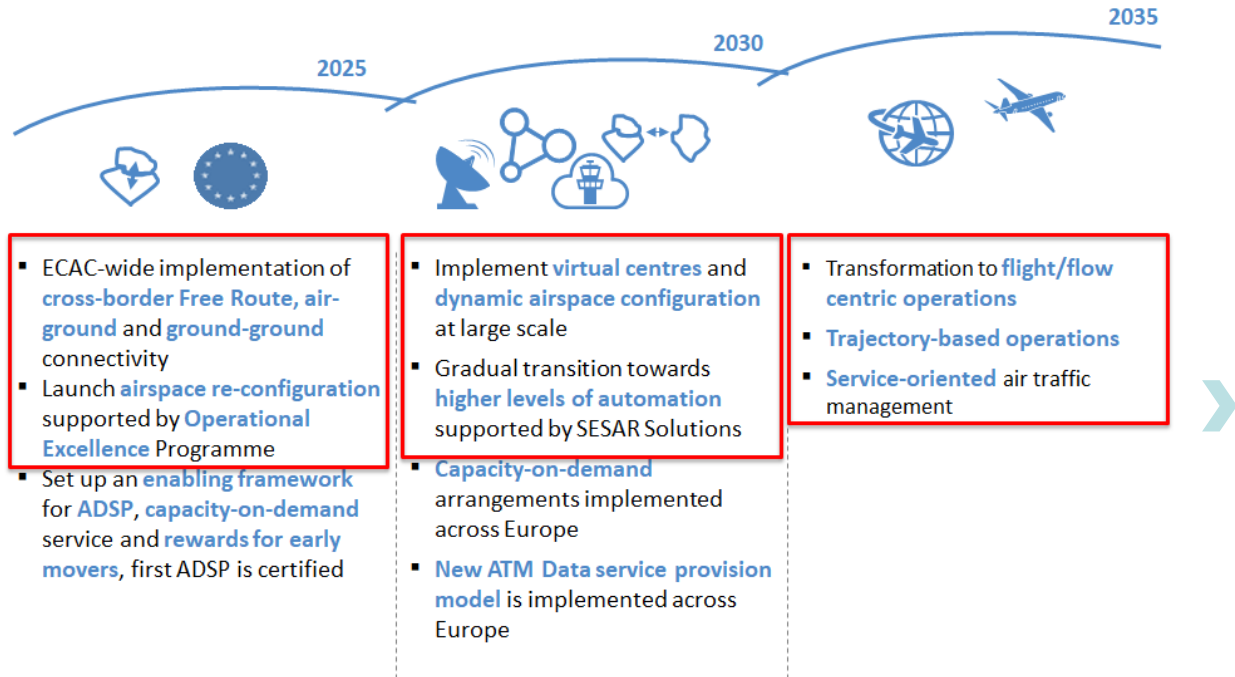




# Performance Delay Targets Summer Period



# Airspace Architecture Study Transition Plan



Conscious of the urgency to act to address the capacity challenge, this transition plan focuses on key measures that need to be implemented in the period 2020 to 2025 to bring us on the right track with regards to the full implementation of the AAS.

# AAS Implementation: NM\Operational Stakeholders

## Action Line for 2024 Timeframe



### Operational excellence

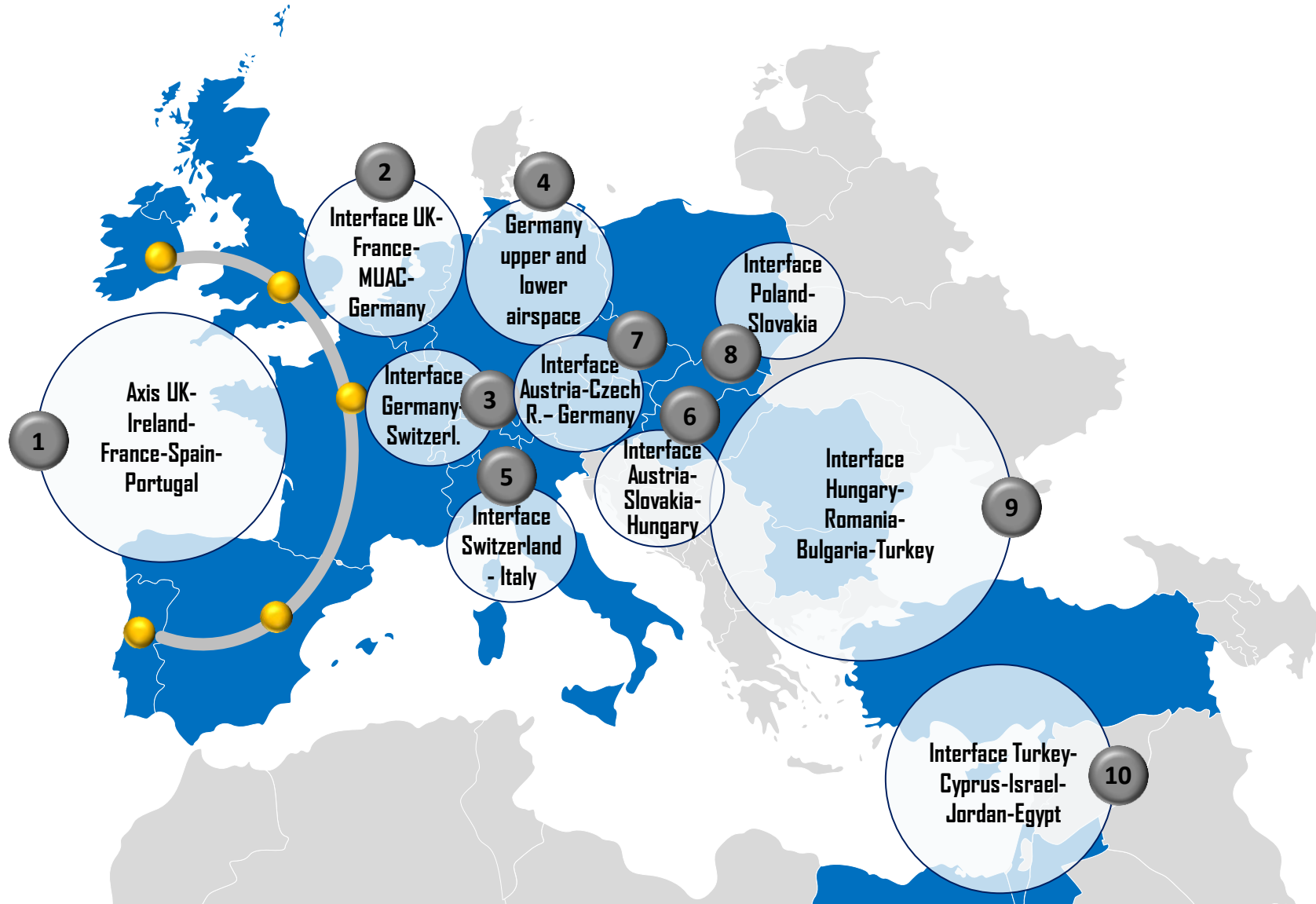
- Harmonisation of the implementation of new operational concepts, technologies, connectivity and interoperability
- Improvement of ATFM, A-FUA, weather and operational procedures practice in the network
- Streamlining ATCOs training and recruitment
- Improved Ops usage of air traffic controllers:
  - Rostering and Cross-border sectorisation
- eNM implementation only for hotspots
- Focus on very un-punctual flights
- Monitor and resolve volatile traffic (ATC issue)
- Bringing ATC sectors throughput to best in class



### Airspace restructuring

- Seamless airspace structures
- Cross-border Free route implementation
- Accommodating civil and military users' operational needs
- Optimised TMA connectivity
- Optimised sectorization
- Addressing airspace top 10 critical bottlenecks between 2020-2022
  - Main airspace restructuring projects: Croatia – Germany – Cyprus – Spain – Netherlands – France – Greece – Austria – Hungary – Romania – Bulgaria

# Focus on 10 Hot Spots for Implementation



- 1 Axis UK-Ireland-France-Spain-Portugal
- 2 Interface UK- France-MUAC-Germany
- 3 Interface Germany-Switzerland
- 4 Germany upper-lower airspace
- 5 Interface Switzerland-Italy
- 6 Interface Austria-Slovakia-Hungary
- 7 Interface Austria-Czech Republic-Germany
- 8 Interface Poland-Slovakia
- 9 Interface Hungary-Romania-Bulgaria-Turkey
- 10 Interface Turkey-Cyprus-Israel-Jordan-Egypt

# Airports as a Component Part of the Network



## NMOC “Airport Function”

- Strategic / D-1 / Day of Operations
- AOP-NOP Enabled Procedures

**On Time Performance**



## All Airports Connected

- Major Airports Integrated
- European Connected Regional Airports

**Predictability Services**



## High Performing Airports

- Airport Performance Solutions
- Services / Implementation Support

**Operational Improvement**



## *Summer 2020 Focus*

- NMOC Airport Function to support airports
- Sharing Best Practice, Anticipate Issues

**On Time Performance**



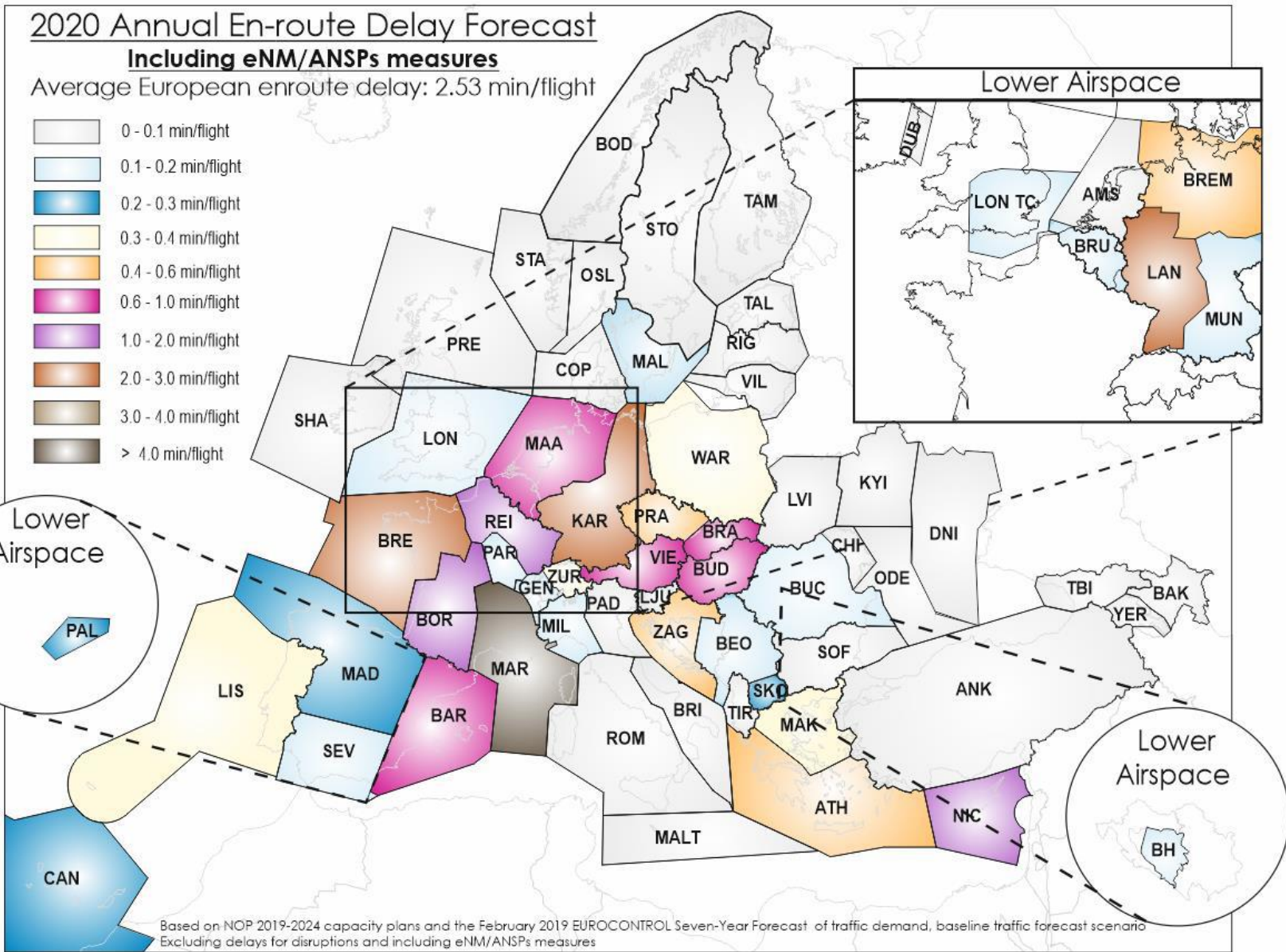
## *Deployment Ready Development*

- Harness SESAR contribution for NM
- “Trials” transitioning to “in-service”

**Time to Market**



# 2020 Delay forecast – with eNM/ANSPs measures



Traffic forecast Feb 2019 - Base  
 Capacity plans NOP 2019-2024

# EUROCONTROL/NM Action Plan 2020



## NM Action Plan 2020

- 1. eNM/S20 ("Enhanced NM/ANSPs Network Measures for summer 2020")
- 2. Preparation of NOP 2020-2024, including specific sector opening schemes and rostering (2020 emphasis)
- 3. Re-enforcement of Network CDM ATFM, FUA Airport support and Weather Processes (2020)
- 4. Airspace Re-structuring Project (2020/2024)
- 5. Airport Network Integration Project including Regional and Small Airports (2020/2025)
- 6. Operational Excellence Project
- 7. ANSPs to work with social partners to avoid strikes or to provide improved notification to airlines and NM (2019)

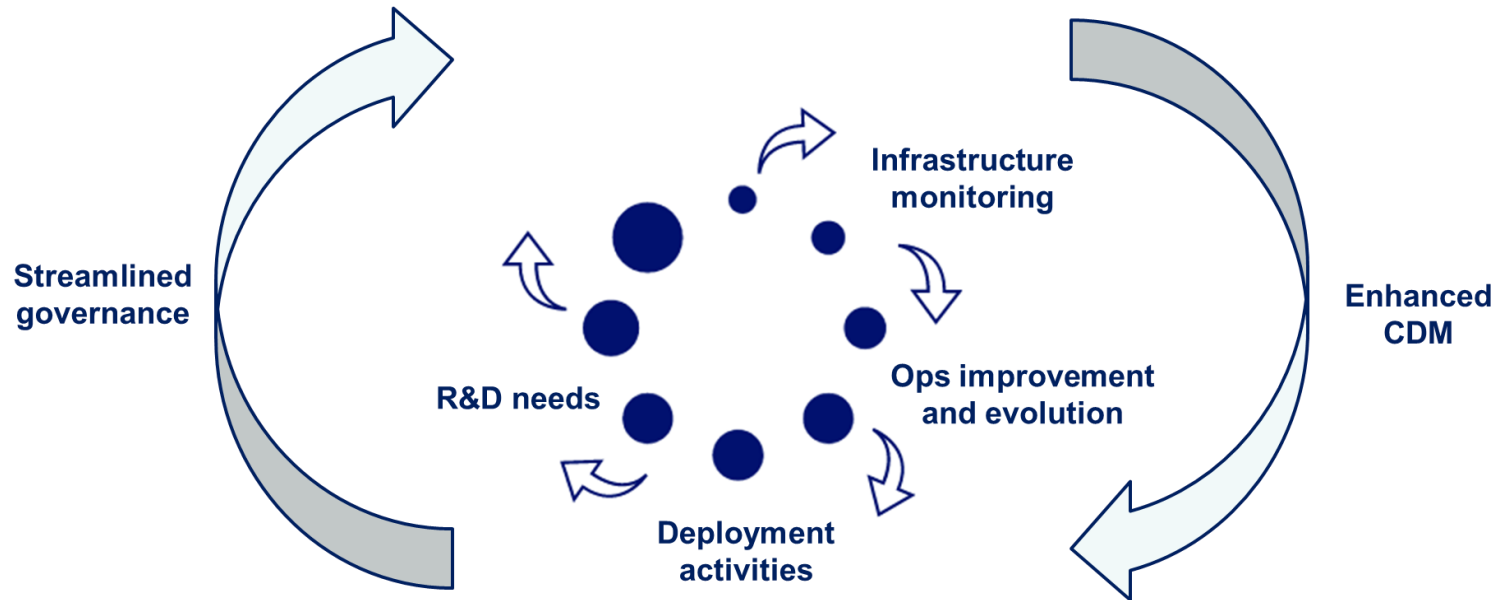
More gradual implementation

More flexibility in the applicability of the measures

Better adaptation to particular airspace users needs

Transition to On Time Performance

# Network CNS Infrastructure Monitoring & Common Services



## Further improved support to deployment cooperation

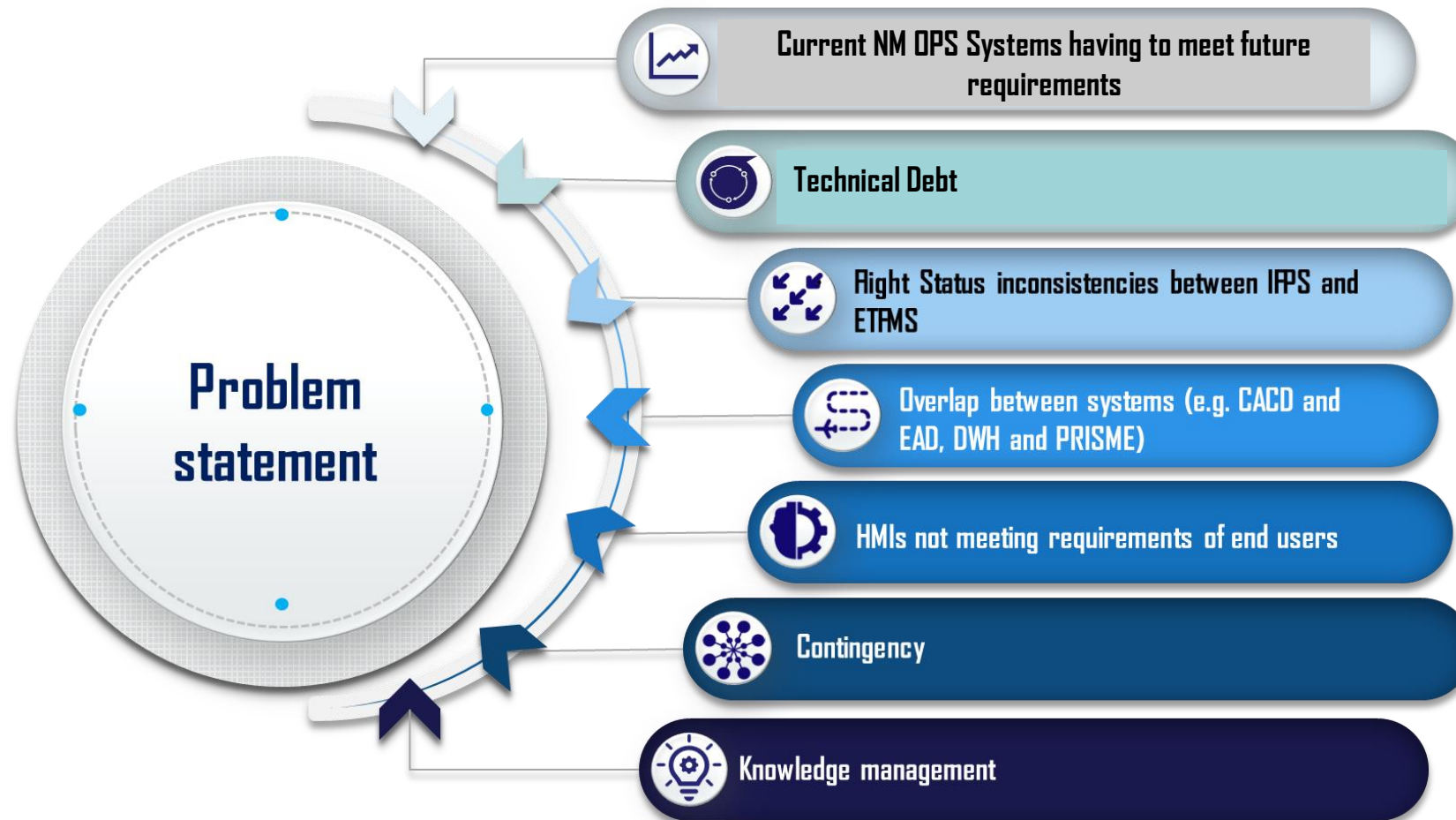
SDM - Early partnering: DLS, ADS-B, Sharing of Monitoring data, PCP/CP1 review, ...

Work in Progress : New Partnership with Airspace Users, ANSPs & Airports



# NM System Modernisation (iNM)

The iNM Program has been launched in order to solve identified problems, highlighted as follows:



# Strategic View for iNM

*Technology as an enabler to deliver new and better services*

▶ iNM shall allow to **optimise** and **transform** the European ATM business



Support the **new concept of operations** including **SESAR**



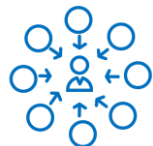
Introduce **artificial intelligence and automation** in real time business processes, augmenting human capabilities and supporting an informed decision-making



Be a **flexible and agile platform** allowing smooth and efficient processes, and integrating with external stakeholders via interoperability standards



**Allow for the expansion**, provide services and/or platforms



Allow to **transform the APIs** in the new NM assets, to explore new business opportunities and to be a true actor in the digital market

**Not only do better, but do differently, bringing more value -  
A leap to be taken by business and tech together!**



# Partnering together to make strategy everyone's job

