

## Working Together 4ACC to e/NM19

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#### Average daily traffic for last 5 Years



After years of little growth traffic started to grow significantly in 2017.

2017: +4% 2018:+3.8% 2019: Forecast +2.8% (since revised downwards +1.3% due economic factors.



Very strong growth in the East of Europe but also strong in the already busy core area.



### **Network Delay Forecast 2018 – at ACC level**



Delays in 2018 were expected to be high in the core area.

Increase in traffic plus lack of staffing.

# Something needed to be done.







### Activities to harmonies different initiatives in NM region

- NM collected detailed information from all ANSPs
- High traffic forecast for 2018
- Detailed routings as operated by the airspace users
- More than 1200 ATC sectors assessed in different configurations
- New airspace changes introduced, including new sectorisations
- All scenarios coordinated and simulated by the Network Manager





### Activities to harmonise different initiatives in NM region



### **NM/4ACC** Initiative

Using around 200 fixed restrictions to move traffic from areas of congestion to areas with capacity

Balancing delay against extra route length: fuel burn and route charges.

# Transition plans: Airspace changes and upgrades

# X border weather procedure.





### EDUUCHI\_1 scenario







### EDUU SOUTH\_ESS scenario





- Network Performance 2018 with and without NM/4 +11 ANSPs
- Without NM/4+11 ANSPs 1.55 min/flight
  - DFS Over 2 min/flt vs a need of 0.34 min/flt
  - DSNA 0.7 min/flt vs a need of 0.26 min/flt
  - MUAC Just below 2 min/flt vs a need of 0.17 min/flt
- With NM/4+11 ANSPs 1.05 min/flight
  - DFS 1 min/flt vs a need of 0.34 min/flt
  - DSNA 0.7 min/flt vs a need of 0.26 min/flt
  - MUAC 0.92 min/flt vs a need of 0.17 min/flt

## 4ACC initiative saved up to 5 million minutes of delay.

- Network Manager and 4 ANSPs DFS, DSNA, MUAC and NATS
  - Joined by Belgocontrol, LVNL, Naviair, PANSA, LFV, ENAIRE, ENAV, ANS Czech Republic, Austrocontrol, Skyguide, LPS Slovakia

### **General outcome**

- Approx. 80% reduction in EDUUUTA delay
  - More than **500 flights** offloaded from EDUUUTA
- Approx. 50% reduction in EDYYUTA delay
  - More than 100 flights offloaded from EDYYUTA
- Network Measures implemented through RAD (fixed restrictions)
  - 24 May-7 November 2018, Week and week-end
  - Strategic predictability of traffic flows
  - Avoids un-necessary cumbersome coordination on a daily basis
  - Optimum network solution, lowest network delay, minimum route extension
  - Vast majority level capping taking into account close to optimum profiles
  - Half of measures require a level capping between FL305-FL355 with limited penalties on the actual requested flight level
  - Little or no additional delay in on load areas.





Razvan Bucuroio (Head of Network Strategy and Development Division of the EUROCONTROL's Network Manager Directorate) and John Santurbano (Director of the Maastricht Upper Area Control Centre/MUAC) represent the Agency for the NM 4ACC initiative. **But....** Summer 2019:

- Staffing situation expected to be worse in some areas- retirements and trainees not on stream
- Traffic levels growing (record day 28<sup>th</sup> June

Further work needed.....





### 1. Enhanced NM/ANSPs network measures for summer 2019

NM/4ACCs initiative expanded in 2019 to include more centres and interfaces between busy neighbouring sectors.

### 2. Preparation of the Network Operations Plan (NOP) 2019-2024, including sector opening schemes and rostering

New edition of the Network Operations Plan will cover a six year period (2019-2024) covering ANSPs' expected capacity requirements

#### 3. Network Collaborative Decision Making (CDM) process for the management of en-route weather

A more network-oriented approach is needed to handle weather. Addressed through:

•new network procedures for managing en-route weather

•the definition of roles and responsibilities

•more NM-oriented decision-making on en-route weather management.

#### 4. Harmonisation of Flexible Use of Airspace (FUA) application and Enhanced FUA procedures

New procedures planned for the availability of civil-military airspace and for the network synchronisation of the utilisation of civil-military airspace at times of high/complex traffic, and during bad weather.

#### 5. Network CDM process to optimise ATFM regulations

A more network-oriented approach to the application of ATFM regulations is needed. •new network procedures for applying ATFM regulations •better definition of roles and responsibilities •more NM-oriented decision-making on applying ATFM regulations.

#### 6. Addressing structural airspace bottlenecks

Urgent need to start addressing a number of structural airspace design problems NM will create three major seamless airspace re-sectorisation projects which will be developed on the basis of operational requirements.

#### 7. ANSPs to work with social partners to avoid strikes or to provide improved notification to airlines and NM

ANSPs are expected to continue their work with social partners to avoid industrial action as far as they can. When this is not possible, it is expected that strike notification procedures will be followed.

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## **Some Numbers!**

Summer period:	Mon 01 May > Friday 15 Sept 2017	Mon 30 April > Friday 14 Sept 2018	Mon 29 April > Friday 13 Sept 2019
Peak Traffic:	Friday 30 June: 35,937	Friday 07 Sept: 37,088	Friday 28 June: 37,228
Peak Delay:	207,911 min Thursday 22 June, (Weather – convective)	327,795 min Tuesday 22 May, (ATC strike – France)	330,025 min Sunday 01 September, (ATC equipment – France)
Average delay per flight for the Summer period:	2m06s per flight	3m43s per flight	3m17s per flight
Peak ATFM delay per flight:	6m00s per flight, Thursday 22 June. (Weather – convective)	10m50s per flight, Tuesday 22 May. (ATC strike – France)	9m51s per flight, Saturday 27 July. (Weather – convective)
Weeks with more than 1 million minutes delay:	0 (zero)	10 (incl. 7 consecutive)	1 (one)
Total delay (En-Route + Airport, all causes):	9,531,588 min	17,360,879 min	15,491,401 min
Dates with >= 300 regulations:	13 (thirteen)	61 (sixty one)	7 (seven)
Most regulations in a day:	360, Tue 12 September, (French National Strike)	468, Wed 09 August, Weather (convective)	412, Saturday 27 July, Weather (convective)

### 2018





Top 20 delay locations for year-to-date en-route delays

2019



ENROUTE WEATHER ENROUTE EVENTS ENROUTE DISRUPTIONS ENROUTE CAPACITY ENROUTE DISRUPTIONS (ATC) ENROUTE STAFFING (ATC) ENROUTE CAPACITY (ATC)

Top 20 delay locations for year-to-date en-route delays



- When there is capacity shortage in an ATM system ATFM might not resolve it completely, but it can reduce the negative impact from it.
- When we act together, with cross border solutions, the results are better for all partners and airspace users!