

Supporting
European
Aviation



Updates on CNS collaboration between ICAO Regional Office and EUROCONTROL CNS SG/24 of APANPIRG

Pascal Dias

Head of the iCNS Unit

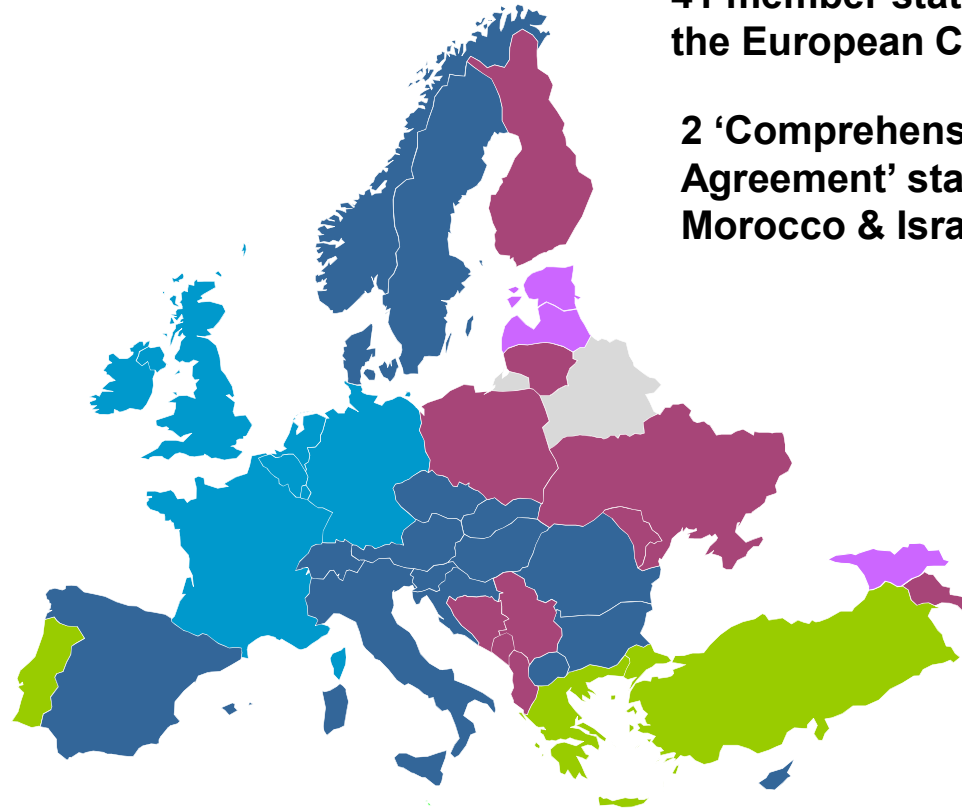
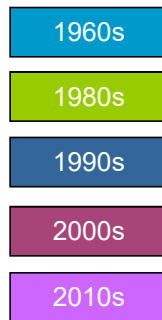
30 November – 4 December 2020



NETWORK
MANAGER



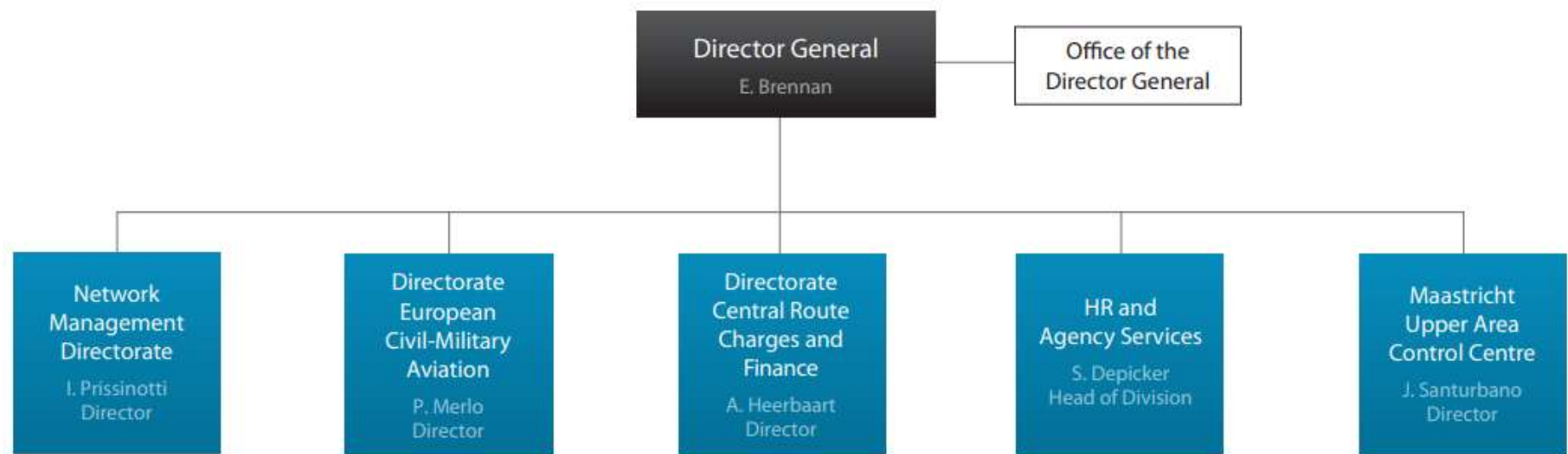
EUROCONTROL – History



41 member states & the European Community

2 'Comprehensive Agreement' states – Morocco & Israel

EUROCONTROL Structure

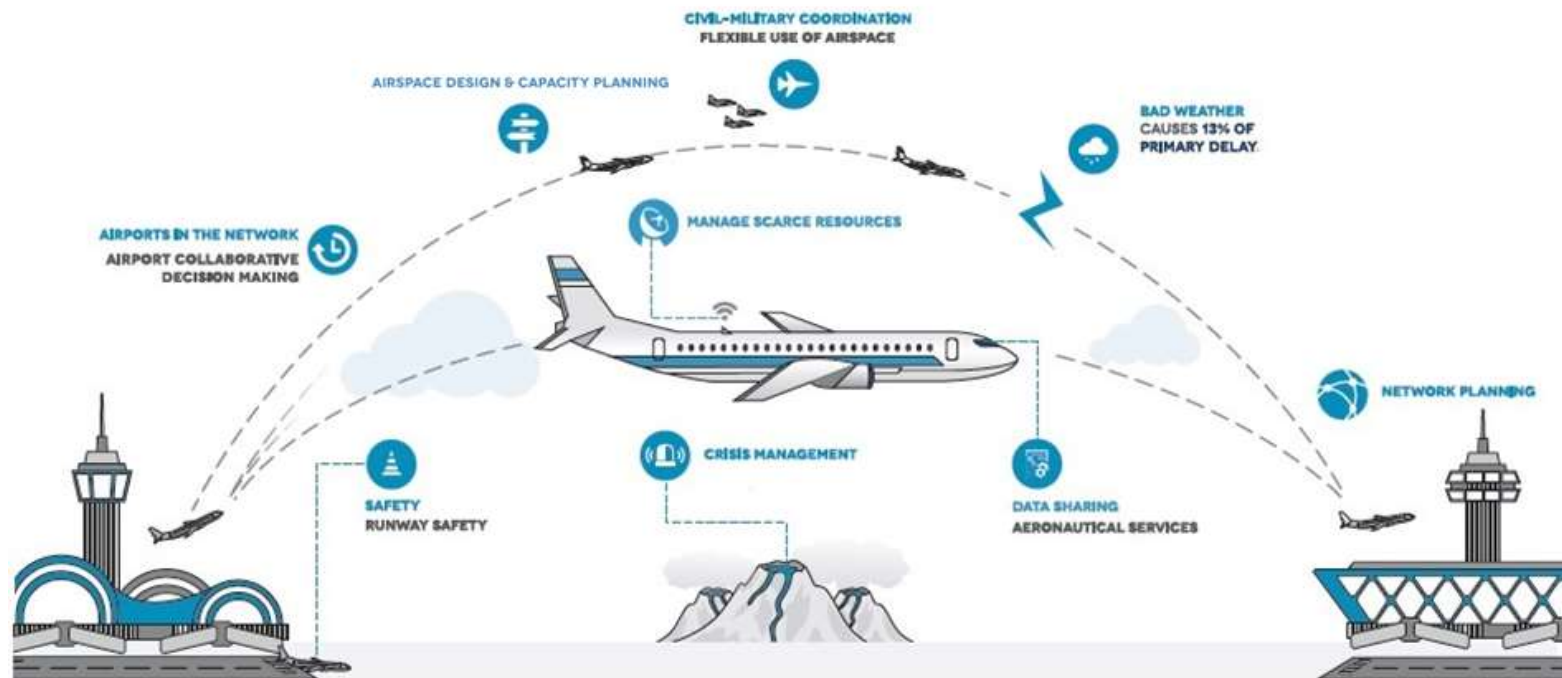


Network Manager



The Network Manager

Connecting the Network to deliver Improved



FLOW MANAGEMENT SINCE 1995

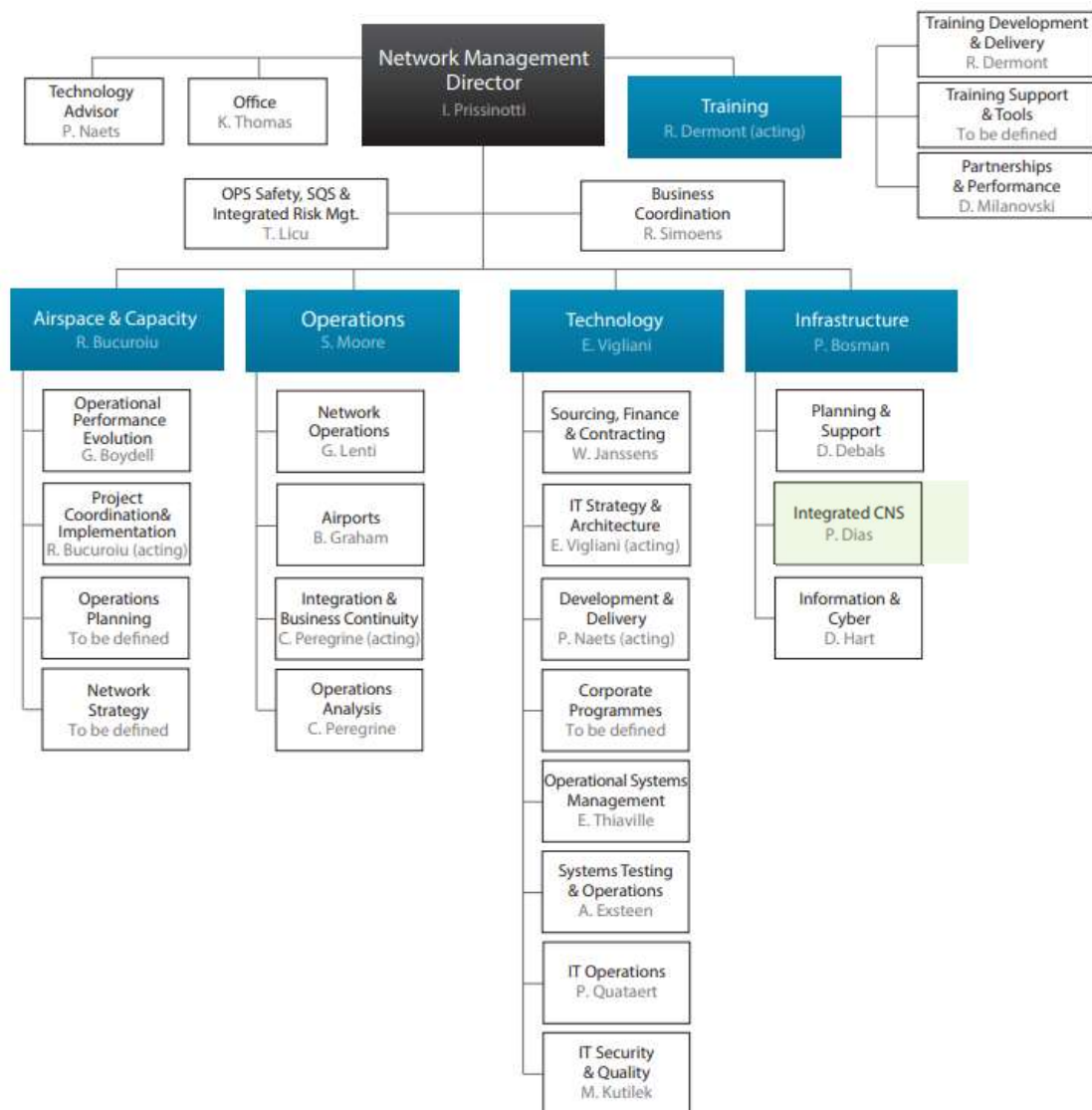
FLIGHT EFFICIENCY INITIATIVE

LAUNCHED IN 2013

EUROCONTROL Headquarters Brussels

The **European Organisation for the Safety of Air Navigation (EUROCONTROL)** is an intergovernmental organisation for the central coordination of air traffic control in Europe. The headquarters of EUROCONTROL are in Brussels.





- iCNS Unit Activities

- Integrated CNS
 - Infrastructure Monitoring
 - Implementation Programmes
 - Spectrum and Frequencies
- Communications Domain
- Navigation Domain
- Surveillance Domain

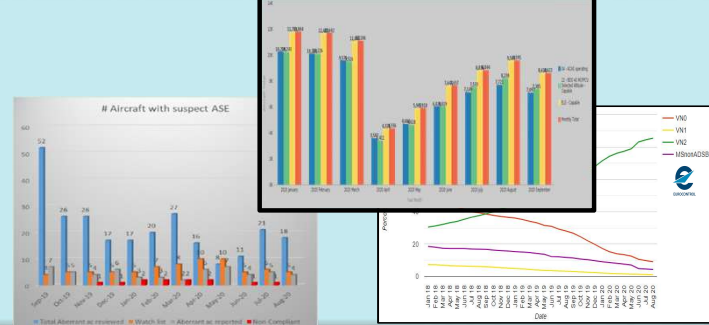
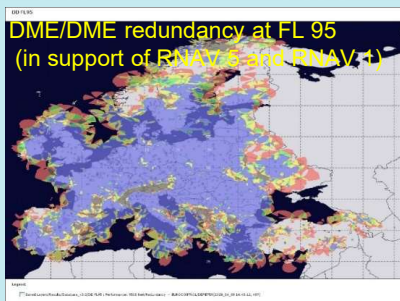
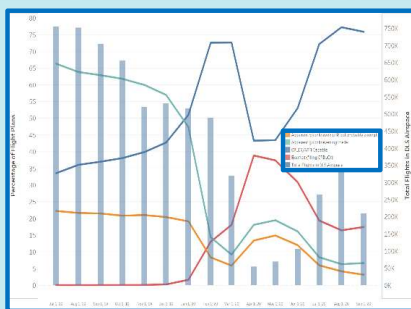
iCNS infrastructure monitoring

Datalink Performance
Monitoring
- DPM -

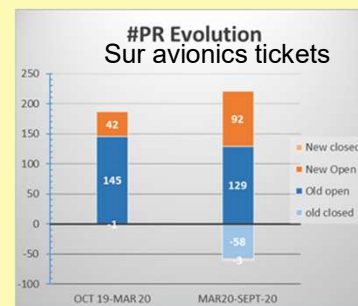
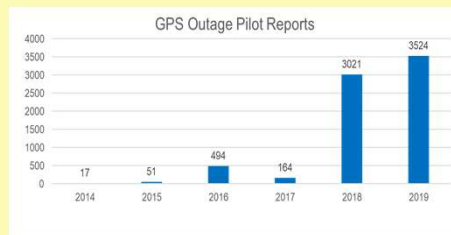
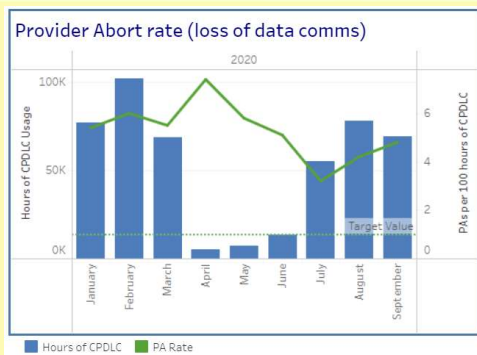
Navigation systems
Monitoring Ground + GNSS
- NAVM -

Surveillance Interrogators, Avionics,
ACAS and Altimetry Monitoring Service
- SIAM -

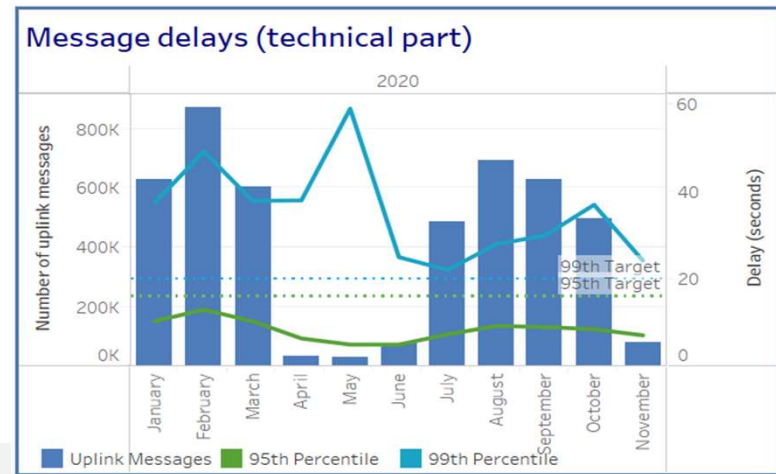
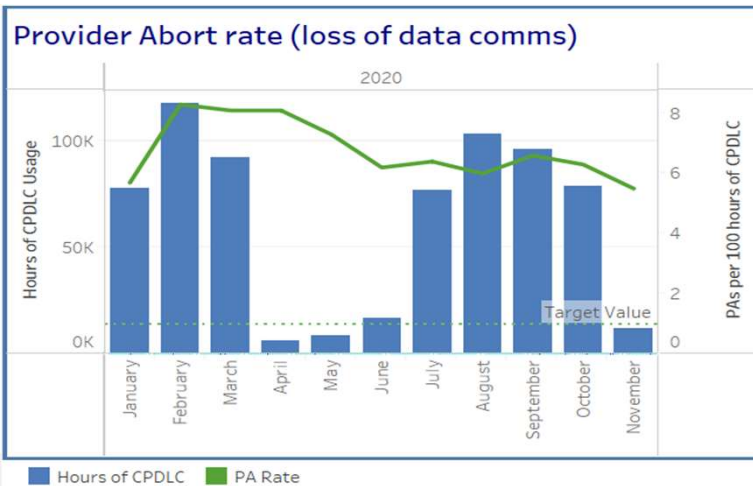
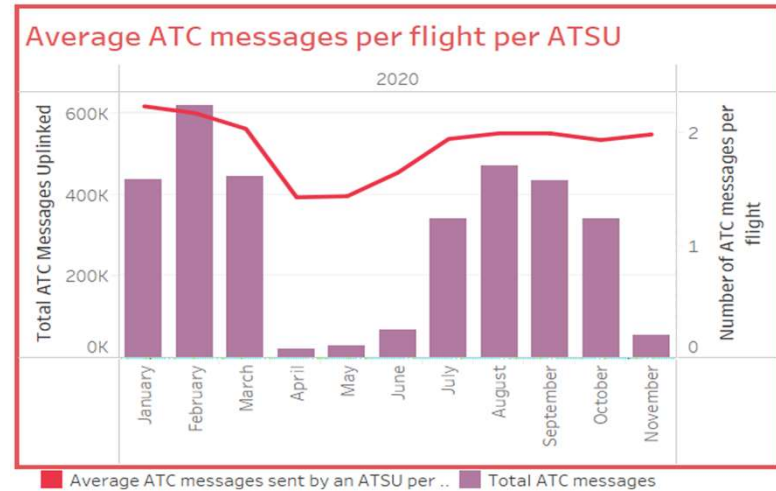
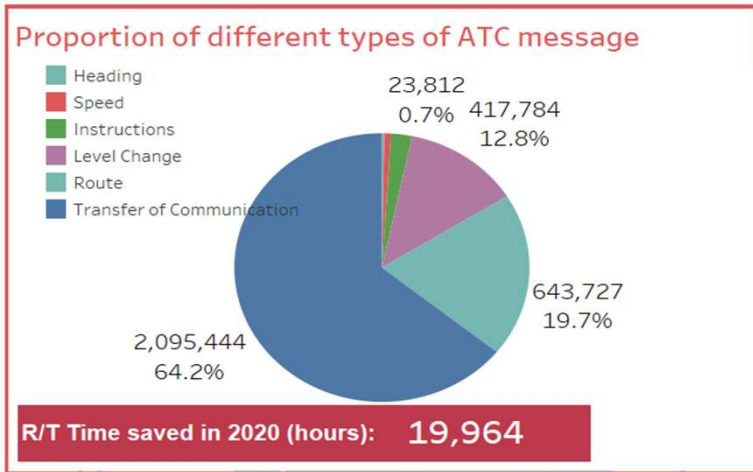
Capability Monitoring



Anomalies/ Performance Analysis



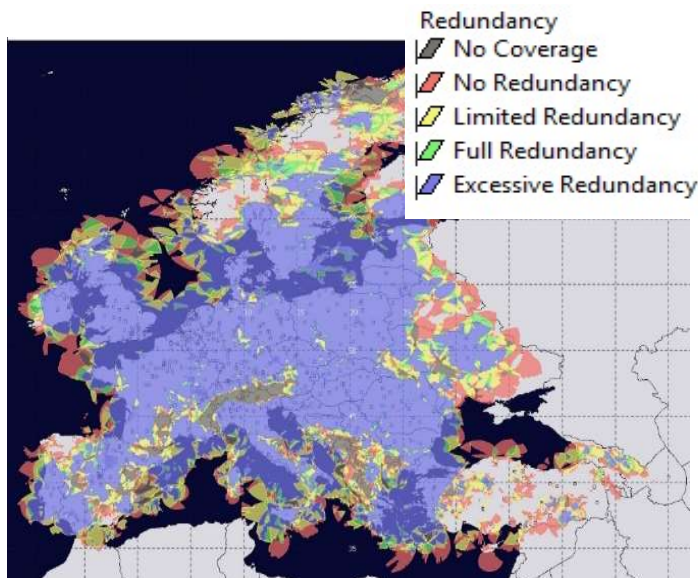
Datalink Performance Monitoring



Joint CNS

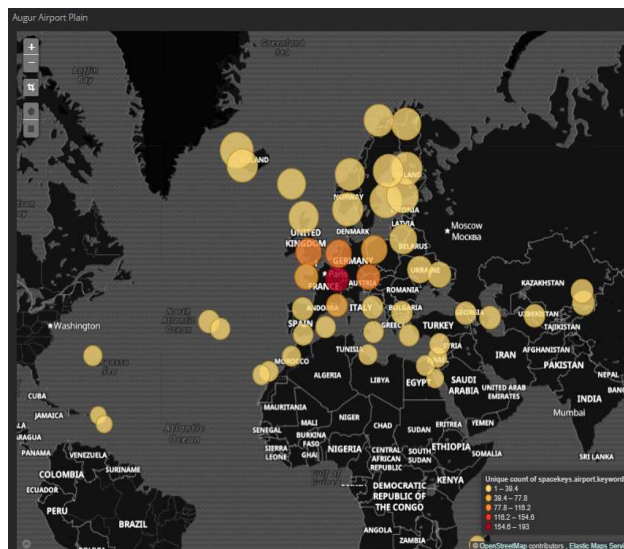
NB: Partial November data

Navigation Systems Monitoring



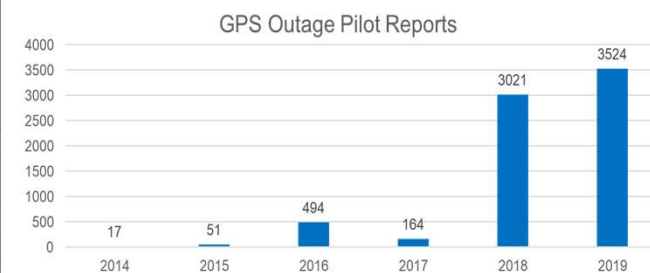
DEMETER

DME/DME redundancy at FL 95
(in support of RNAV 5 and RNAV 1)



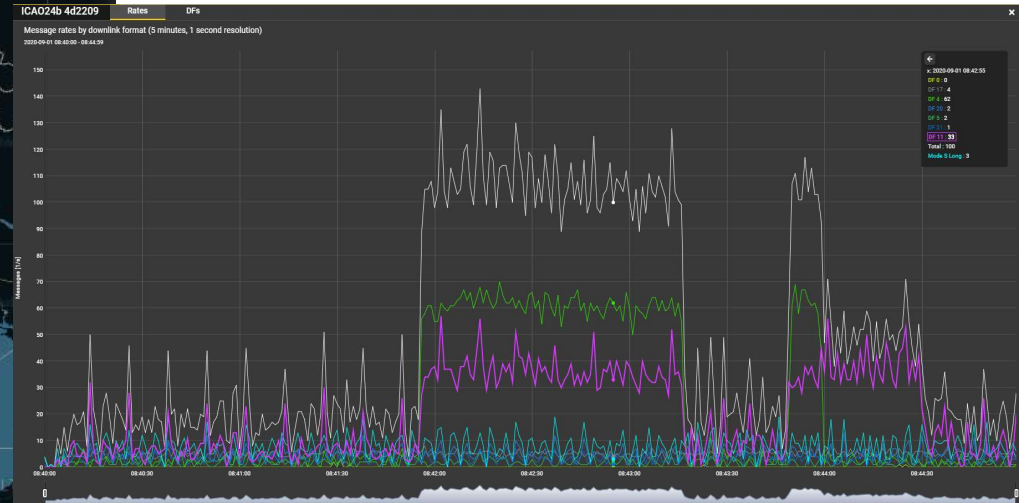
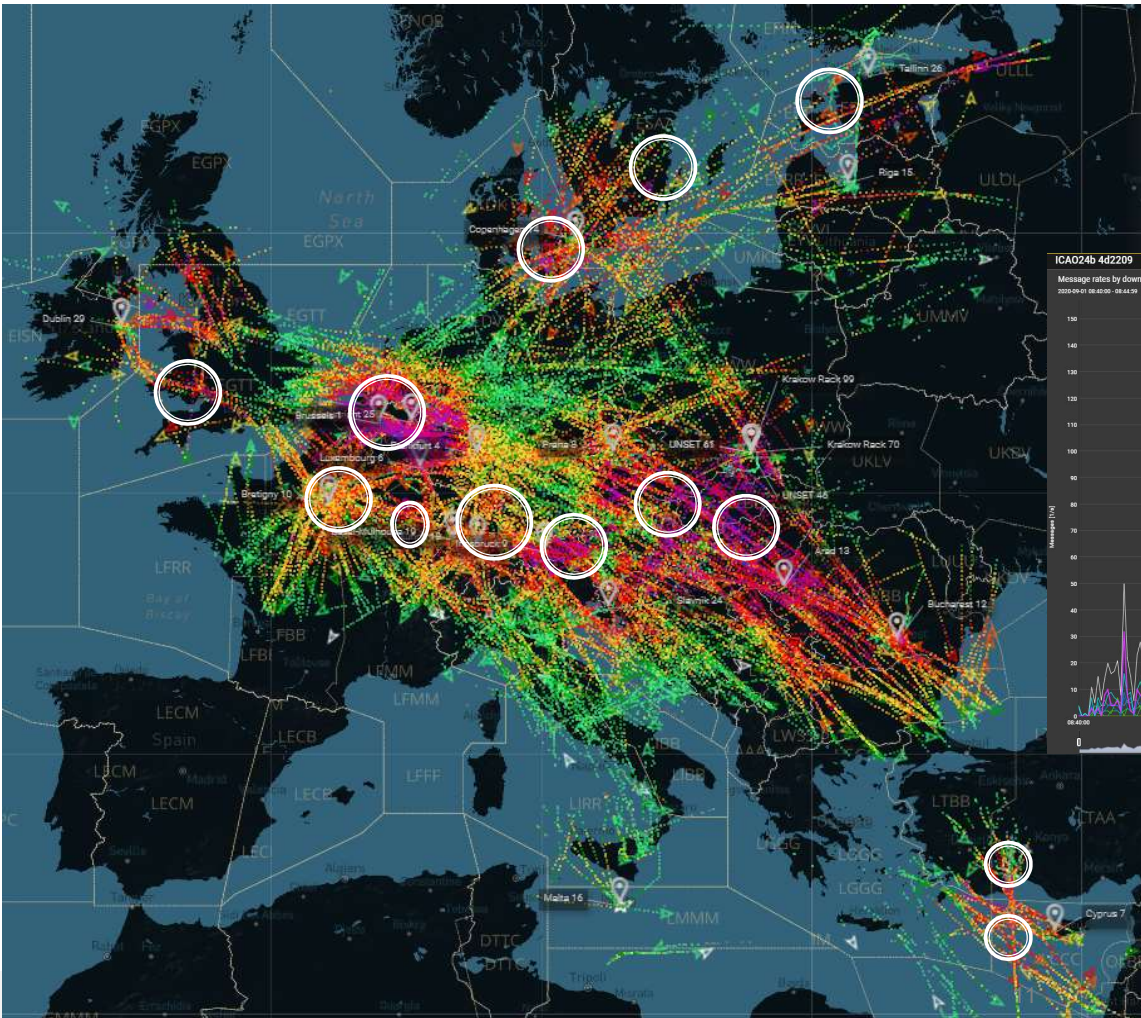
AUGUR

GPS RAIM availability



GPS Outage reports
collected by EVAIR

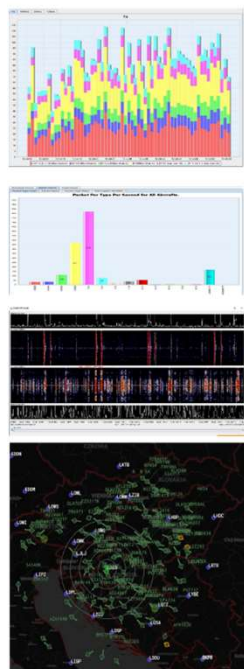
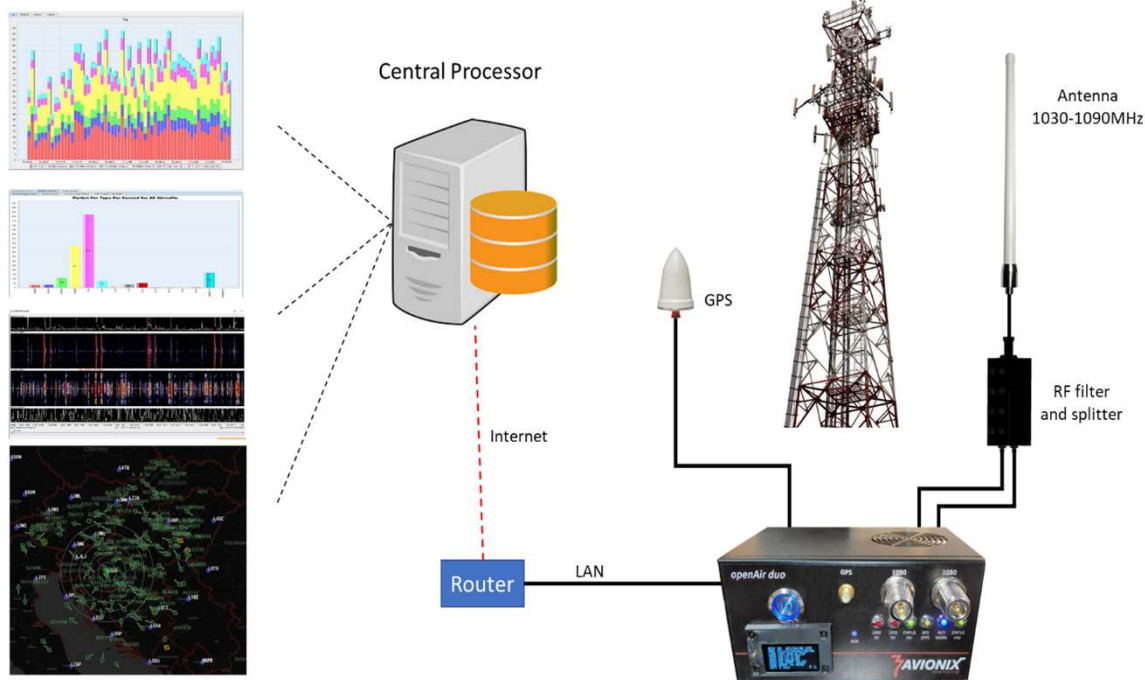
1030-1090 Status Monitoring



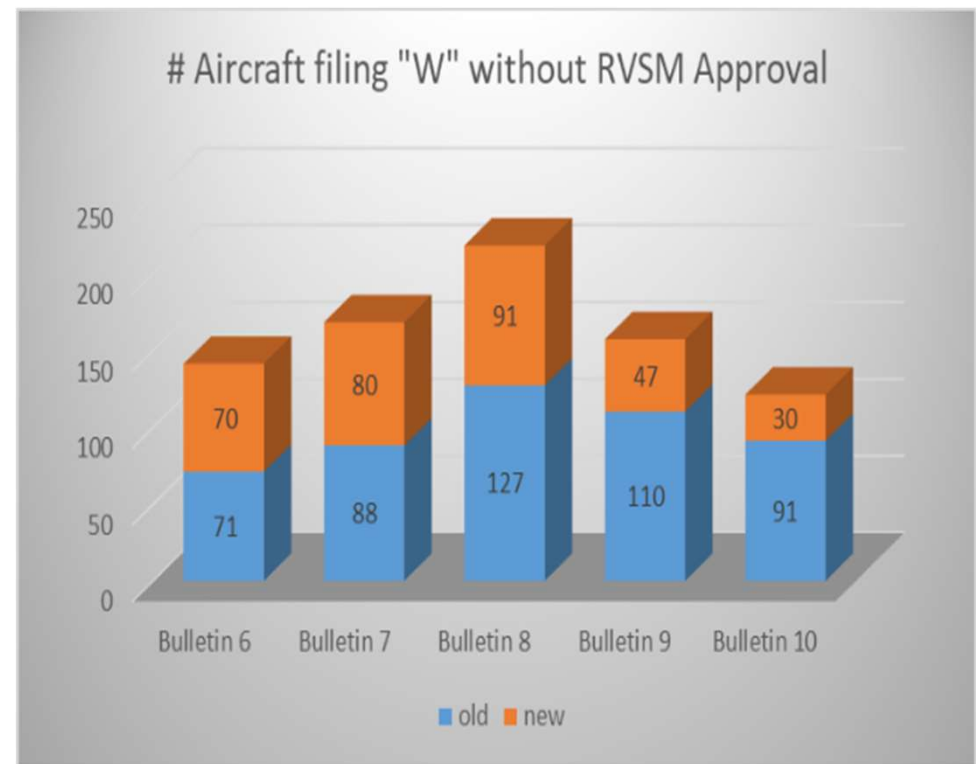
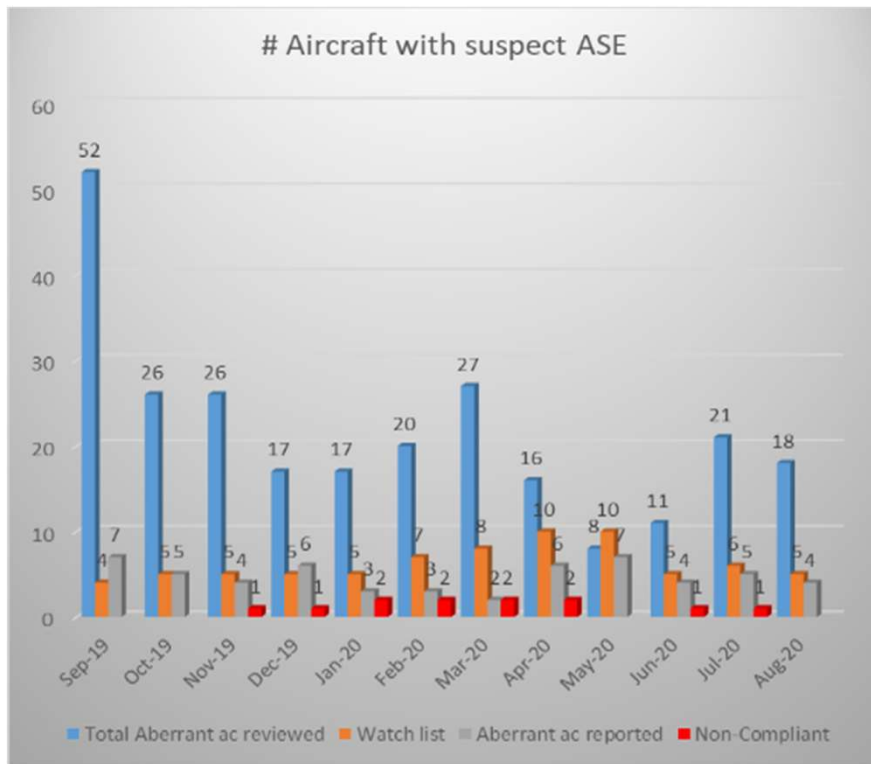
1030-1090 Status Monitoring Tools



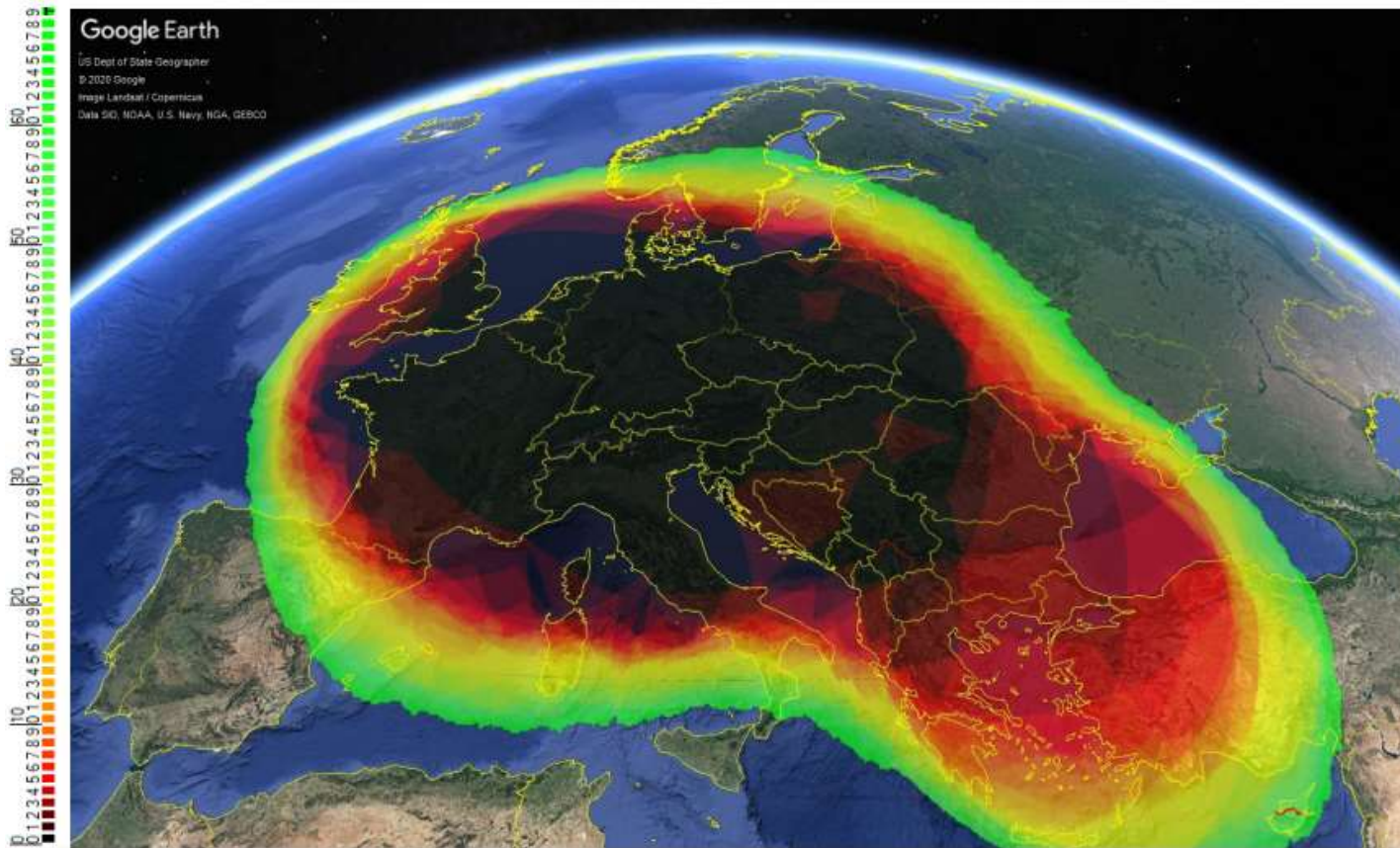
- European Monitoring of Interrogators and Transponders (EMIT) network



Altimetry Monitoring

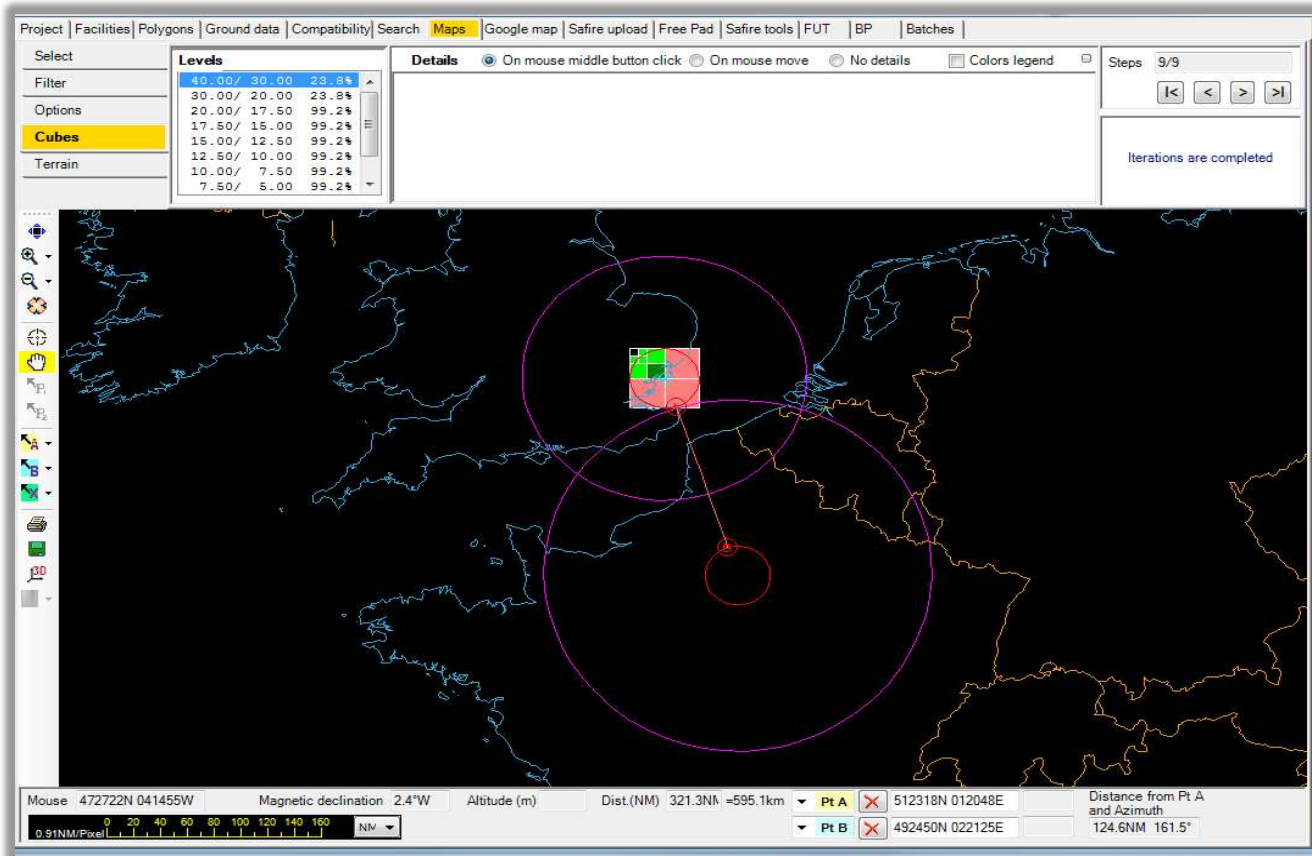


Spectrum and Radio Frequencies



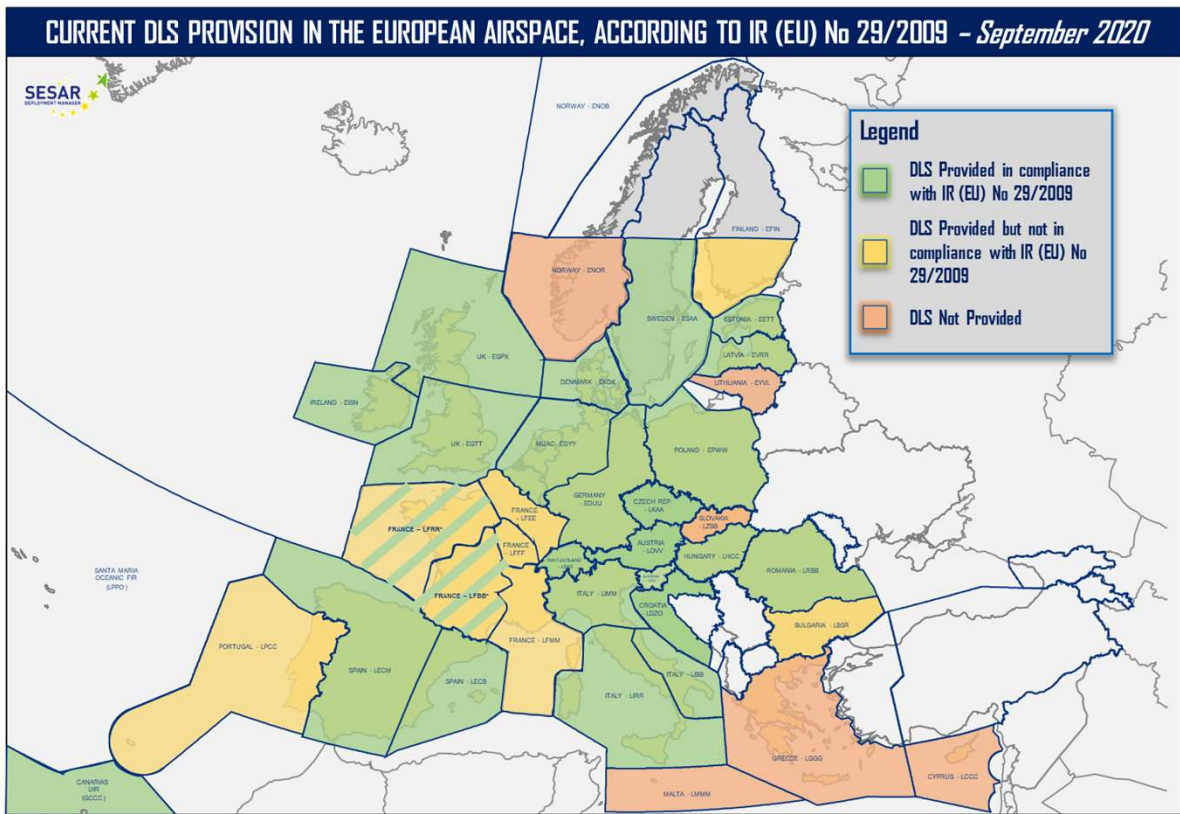
- Number of 25 kHz VHF ACC frequencies available Nov 2020

Spectrum and Radio Frequencies Tools

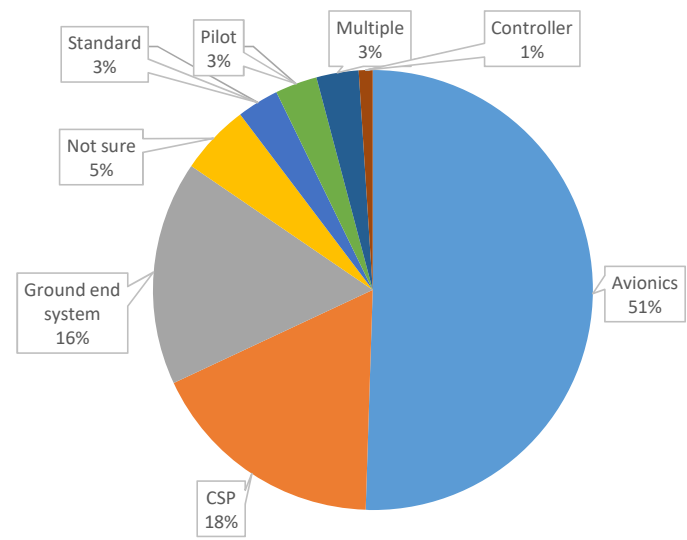


- Spectrum and Frequencies Information REsource (SAFIRE)
- Management Interactif des Frequencies (MANIF)

Datalink Implementation Support



 **LFRR (Brest) and LFBB (Bordeaux)** are currently providing the full ATN B1 services except of ACL downlink msgs



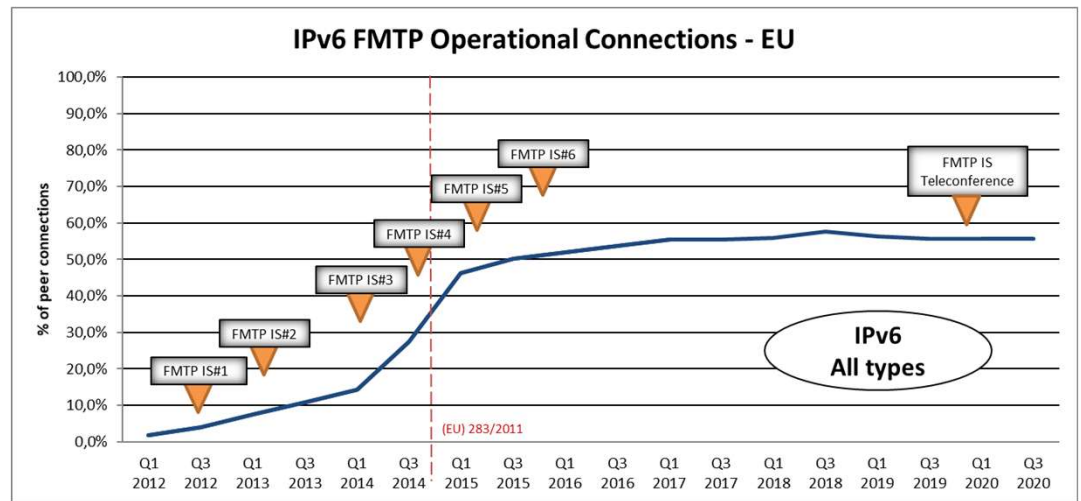
140 open Problem Reports (PRs)

Datalink Implementation Support Tools

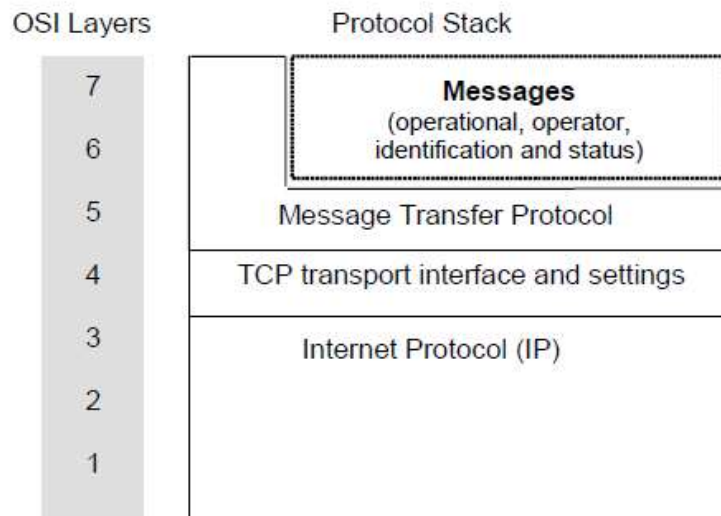


- controller-pilot datalink communications ground automated tool (CPDLC GAT)

COM - IP



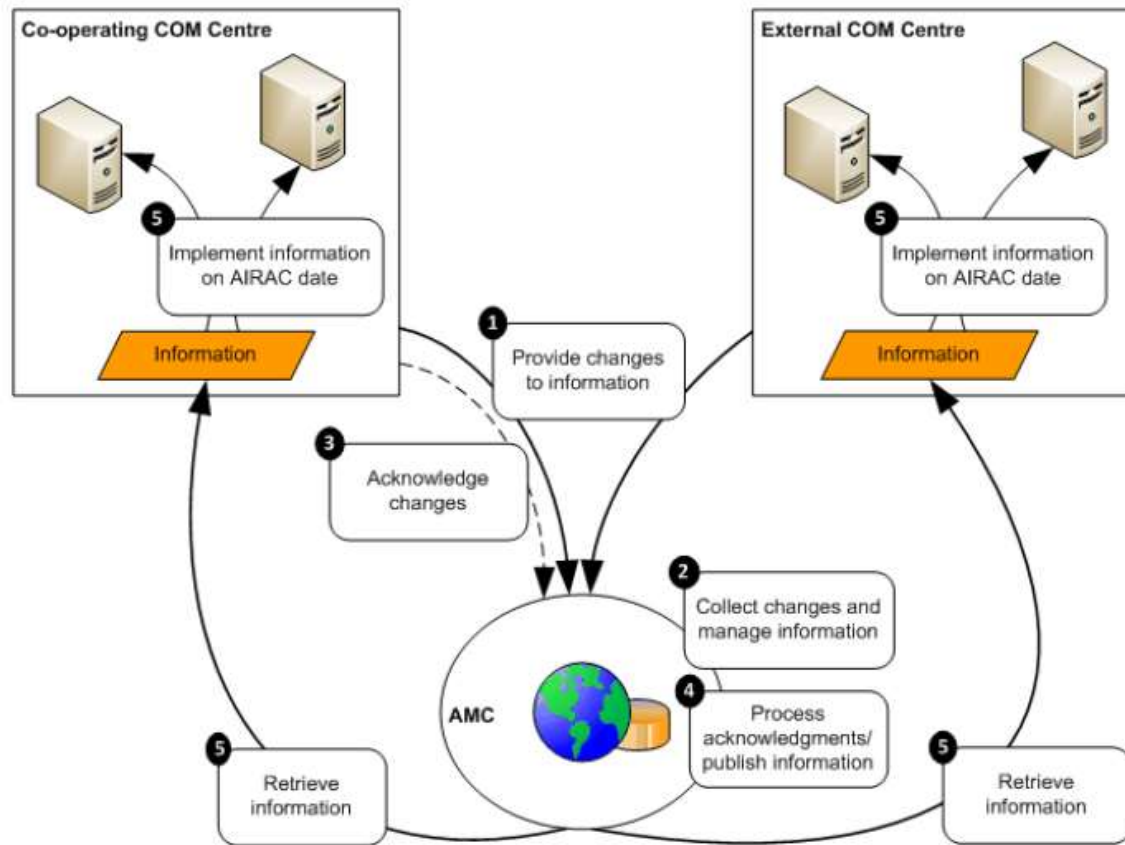
COM – IP Tools



FMTM protocol stack

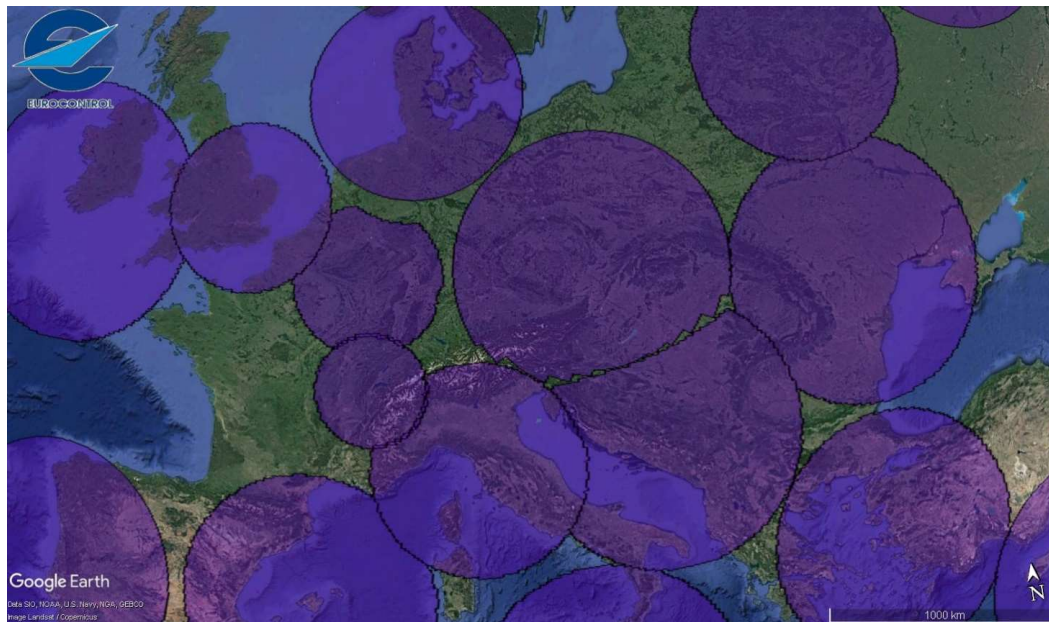
- ATM Ground Voice Network (AGVN) database
- VoIP in ATM test suite called VOTER
- Flight Message Transfer Protocol (FMTP) database
- EUROCONTROL Inter Centre Test Tool (ETIC)

COM - ATS Messaging Management



- Air traffic services messaging management centre (AMC)
- European Directory Service (EDS)

SUR Code Allocation Tool



- MICA web application
- System map generator and extractor tool (SGMET)

SUR Services Tools

SDDS
surveillance data distribution



**secured
communication**

ARTAS
surveillance data processing



**high quality
picture**

SASS-C
surveillance data evaluation



**performance
monitoring**

- ATM suRveillance Tracker And Server (ARTAS)
- iCAMOS
- SDDS
- SASS-C

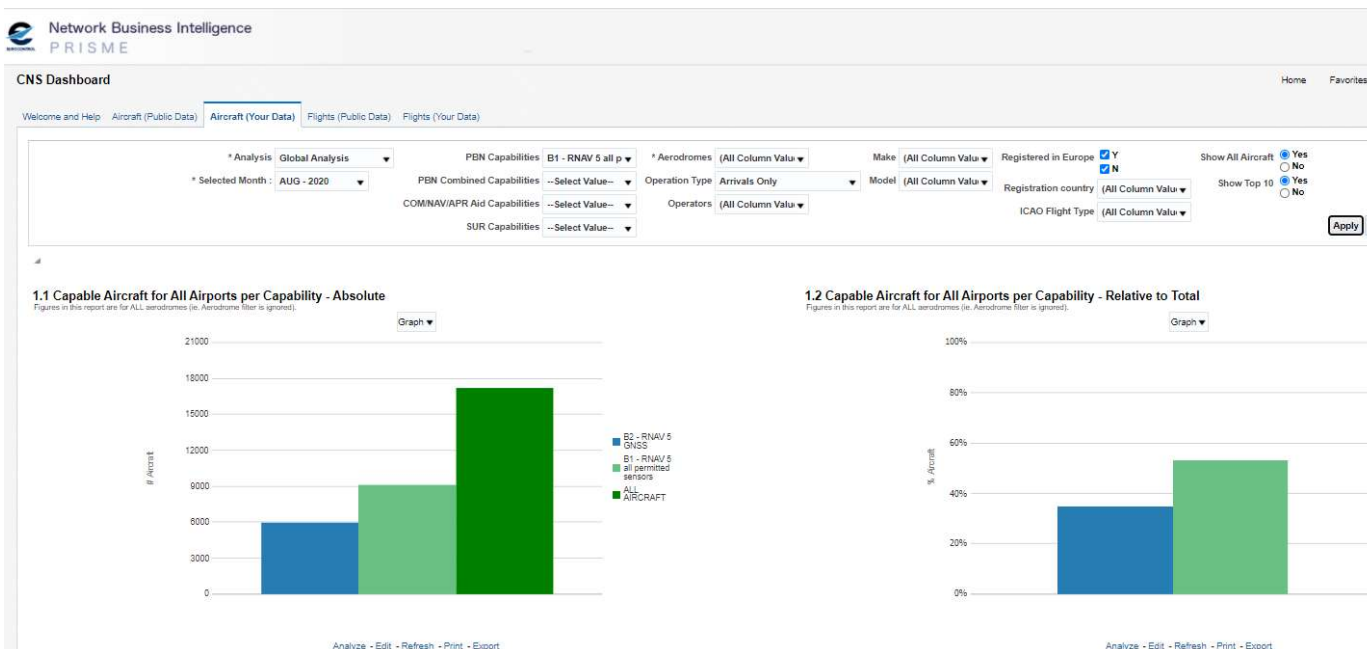
NAV PBN



NAV PBN Tools



- PBN Map tool
- Aircraft CNS dashboard
- ePBN Portal
- enhanced RNAV validation tool (eRVT)
- FM immunity support
- Turn calculator

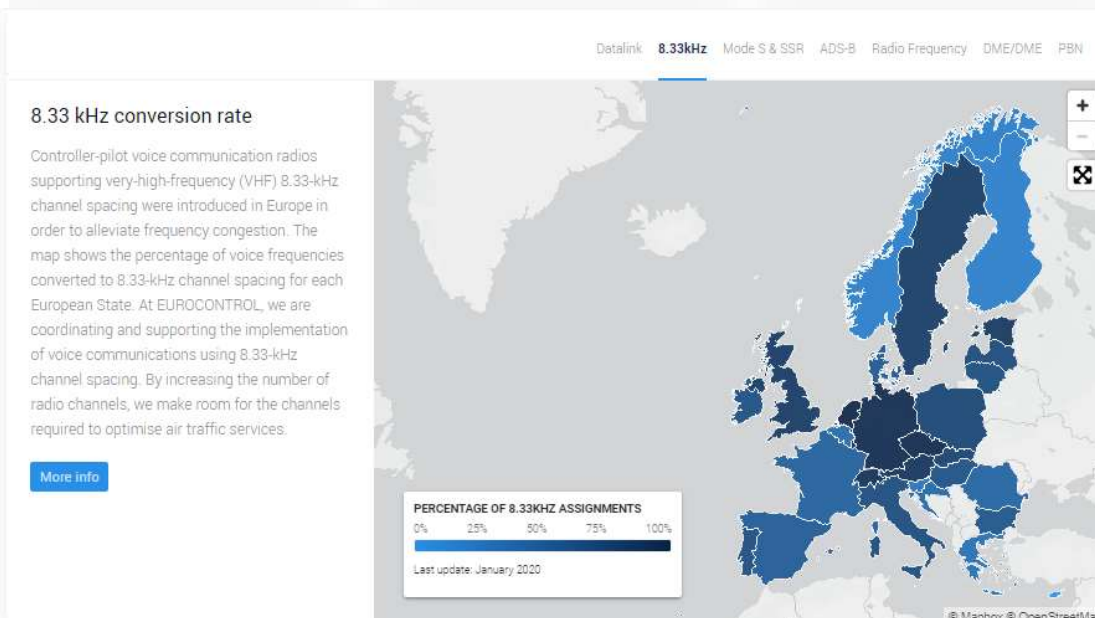




CNS Dashboard

Providing a network-wide view of European CNS infrastructure

[Click Here](#)



Thank You!

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