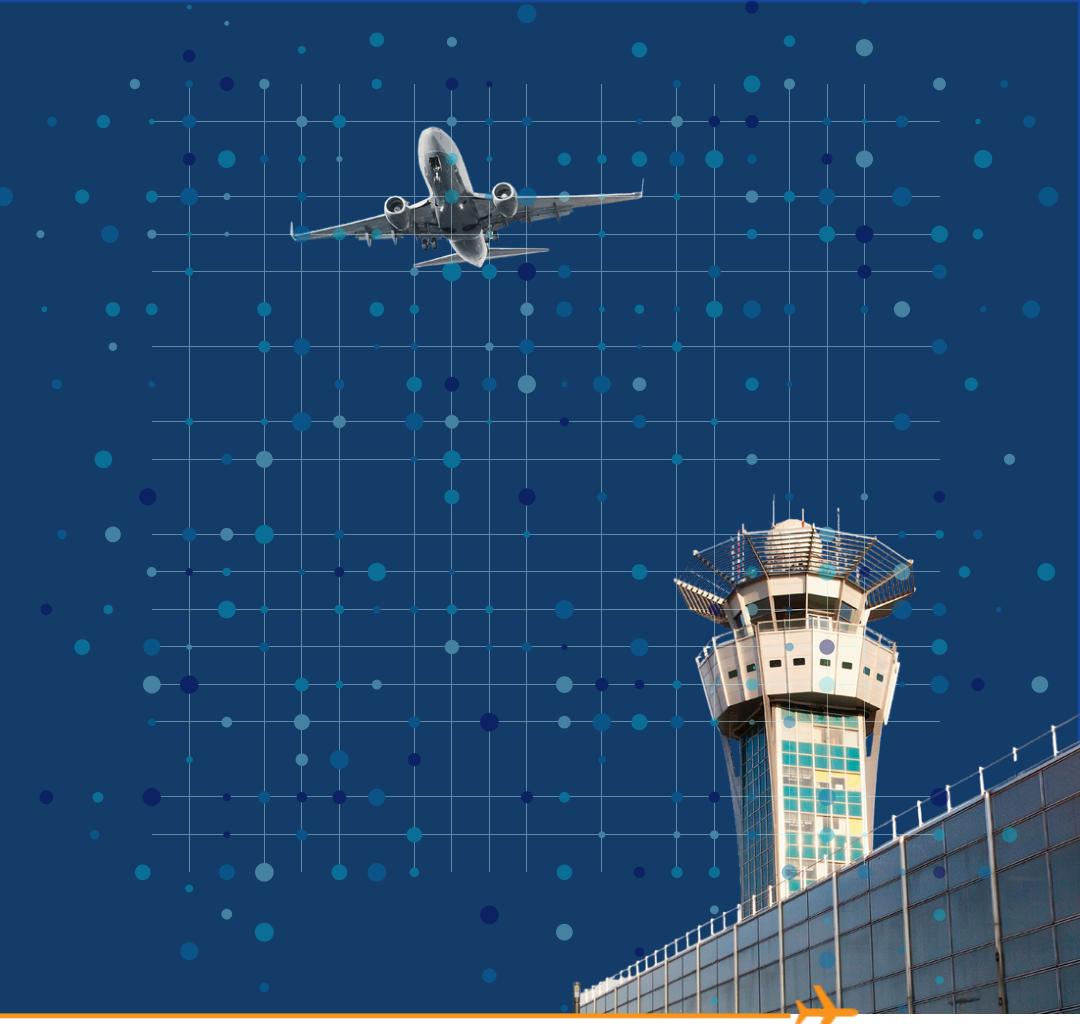


WG-122: Setting the foundation for Europe's future virtual airspace

Developing the standards and deliverables to enable the virtual centre concept.



What is a Virtual Centre? (VC) | Enabling harmonised European airspace

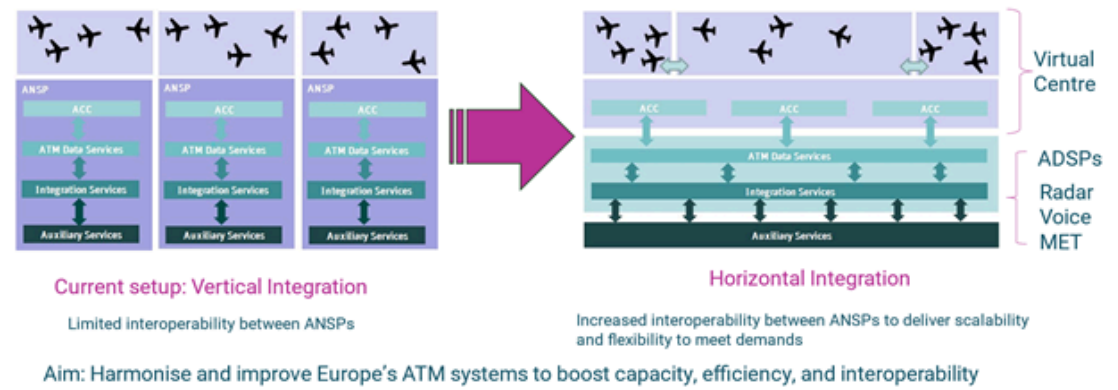
Europe's air traffic management (ATM) has developed as a patchwork of systems shaped by borders, legacy infrastructure, and local requirements. This fragmentation limits interoperability, increases costs, and makes it difficult to adapt capacity quickly when traffic patterns change.

The VC concept is a modern, harmonised approach to ATM. It shifts isolated systems to network-centric, service-oriented architecture, allowing air traffic to be managed flexibly and efficiently across Europe.

Controllers can manage a sector from any connected operations centre, service providers can share data and tools seamlessly across borders and capacity can scale dynamically in response to demand. The result is a more resilient, efficient, and sustainable European sky.

Traditional vs. Virtual Centres

Modernising the European Air Traffic Management Infrastructure



The benefits



Capacity on demand



Higher cost efficiency



Lower environmental impact



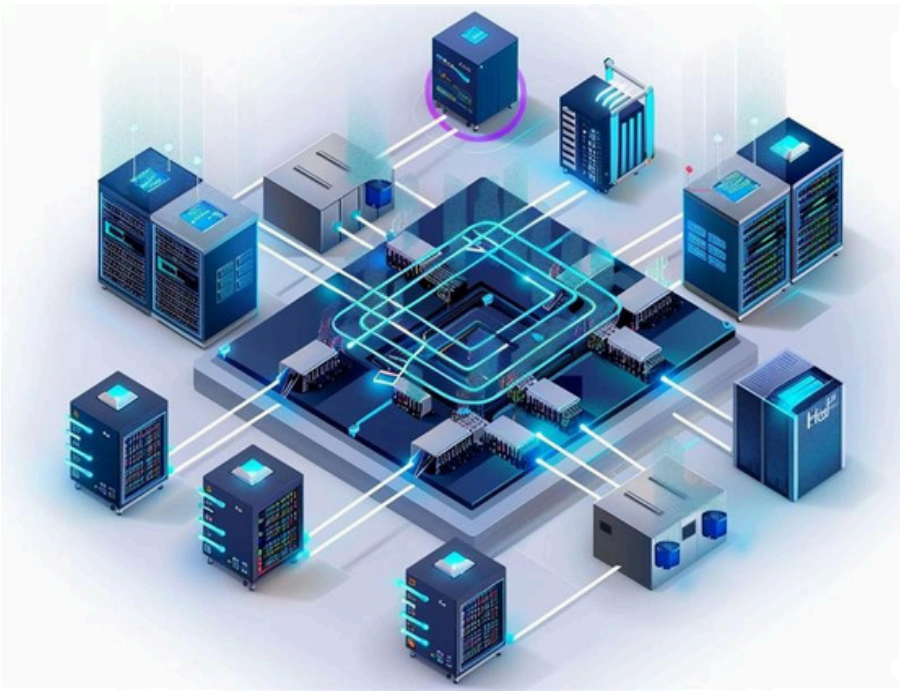
Greater business continuity



More resilient cyber security



Increased safety and efficiency



WG-122 | Developing the standards to enable virtual centres

WG-122 brings together experts from across the ATM community to create the blueprint for putting VC's into operation across Europe.

Our mission is to:

- Develop common standards and guidelines that reduce implementation risk.
- Support interoperability across borders and providers.
- Enable scalable, cost-efficient adoption of virtualised ATM services.
- Align technical work with the European ATM Master Plan and industry needs.

This work ensures that the shift toward a network-centric, service-oriented architecture happens in a coordinated and future-proof way.

What is WG-122 delivering?

14/02/2022

Phase 1: The strategy for Standardisation (Delivered)

Explains what a VC is, its benefits, and different architectural models. The report highlights gaps, proposes a roadmap, and defines a blueprint for European-wide deployment.

Deliverables:

- Virtual Centre Standardisation strategy

29/01/2024

Phase 2: Templates and common vocabulary (Delivered)

A map of all services to support the strategy developed in phase 1. This ensures alignment with existing frameworks and prioritises the services ready for standardisation.

Deliverables:

- Taxonomy of Services for Virtual Centres

In progress

Phase 3: Virtual service standardisation

Practical implementation guidelines aligned with the European ATM Master Plan. Alongside a new European standard for ATM data services, including separate sub standards per service.

Deliverables:

- Virtual Centre - Guidelines for Implementation
- Interoperability Standard for ATM Data Services for Virtual Centres

How can you get involved?

Collaboration is essential to shape Europe's virtualised ATM future.

You can support or participate in WG-122 by:

- Contributing expertise to ongoing standardisation activities.
- Sharing the group's outputs within your organisation and network.
- Engaging with upcoming workshops and consultations.
- Reaching out to WG-122 through the QR code provided.

Together, we are building the blueprint for interoperable, future-ready ATM services.

