

CANSO Europe 2035 Vision

**A forward-looking vision to improve
European airspace management**

About CANSO

CANSO Europe is the voice of the air traffic management (ATM) industry in the region, working alongside aviation industry partners and European institutions to represent the interests of air navigation service providers (ANSPs) and influence the development and implementation of European ATM legislation.

Europe is one of the most complex air traffic management regions, with CANSO Europe's 35 Members representing a variety of airspace, service provision and business models. CANSO's priority is to define long-term solutions to efficiently and effectively tackle challenges in Europe, including capacity demand, climate change, new airspace users and cyber-security, while maintaining safety, the industry's number one priority.

To do this, CANSO is committed to playing a proactive role in shaping the future of ATM and championing ANSPs as reliable and predictable aviation industry partners.

Our vision

The CEOs of CANSO's 35 ANSP Members in Europe have agreed a common vision for ATM in Europe in 2035. Safety remains the number one priority. In addition ANSPs need to be customer-focused, anticipative and responsive to address future ATM challenges such as the strong growth in air traffic, the impact of climate change, new airspace users and cyber threats.

The CANSO Europe Eight-Point Vision 2035 identifies the necessary measures to address European ATM's key challenges; and the consequent benefits for our aviation industry partners and the passengers they serve.

Measures include customer-focused initiatives, operating successfully in a market-based environment, changing from a charging to pricing regime, focusing on the network rather than individual network players.

While ANSPs have a key role to play in transforming ATM and delivering a vision for the future, European policy makers also enable the industry to fully unlock the potential of an open system architecture vital for the future of ATM. CANSO is therefore committed to working closely with operational stakeholders and European policy makers in delivering this Vision for Europe.



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Safety is the number one priority of CANSO Members. Air navigation service providers (ANSPs) are customer-focussed, anticipative and responsive in addressing future air traffic management (ATM) challenges, such as strong growth in air traffic, climate change, new airspace users and new risks like the cyber-threat.

CANSO believes that:

1 ANSPs should act primarily in the interests of the customer.

Any successful company serves the interests of its shareholders, employees and customers.

As a key priority, ANSPs provide air navigation services (ANS) to all airspace users according to the rules set by the competent authorities. The needs of military airspace users must be addressed according to the type of operation and may under certain circumstances have priority over all other airspace users.

This point incorporates the idea that State (and political) influence on ANSPs can be reduced in time, without affecting the ability of the State to assure its sovereignty. As a logical consequence, national borders may no longer be a point of constraint for the ATM system in the future, except in rare and extreme cases of conflict.

2 ANSPs will operate successfully in a market-based environment.

CANSO foresees a stepwise liberalisation of the ANS market driven by ANSPs' business decisions, as a business development complementary to the core regulated ATM.

ANSPs need to be supported by a regulatory framework that provides the necessary autonomy and flexibility for ANSPs to take full advantage of this competitive environment and successfully deliver value to their customers. This competition may also support technical and operational consolidation, where a positive business case exists.

Equally, this needs to happen without preventing States from maintaining sovereignty over their own airspace.

The only way that ANSPs can be successful in any such environment will be through collaboration with all players in the system, including information-sharing and developing new partnerships.

3 Change from a charging to a pricing regime in European airspace is necessary to create markets.

There are two elements contained within this point: the move from a cost mentality to a price mentality (after all, it is really only the price which the customer cares about, and not the cost, so this is a consequence of point number 1). This, in itself, should encourage all ANSP staff to consider revenue flows, leading to a more customer-oriented mindset.

A pricing approach allows ANSPs to charge different prices, allowing better choices for customers, and to better manage demand and supply (e.g. congestion charging).

4 Network management should be about the brokerage of capacity, with a focus on the network rather than an individual network player.

CANSO acknowledges and supports the need for a stronger network-oriented approach towards the management of air traffic across Europe. This incorporates the idea that optimising the Pan-European network and its interfaces takes precedence over any individual ANSP's or airspace user's requirements or preferences. This, in turn, implies a stronger part to be played by the network manager, and it also implies neutrality of the network manager, which will need to be reflected in its governance structure and in any network decision-making process.

Measures proposed by the network manager and/or any stakeholder will be developed through effective collaborative decision-making processes, taking into account operational, technical and financial effects on all stakeholders.

The network manager is in the best position to recommend overarching network-oriented strategies for managing traffic flows in Europe. The entities (ANSPs) appointed to exercise control within particular pieces of airspace are accountable for determining how to implement these network-oriented strategies safely and efficiently.

5 Regulation must move from being constraining to enabling.

This is about the quality and quantity of regulation. CANSO believes that less and better regulation can achieve more than trying to regulate all aspects of the ATM – and UTM – system.

Regulation should, in principle, create options and allow either the user or the competent authorities to decide which path to follow. It should be output-focussed, rather than input-focussed. It should be designed to create the right incentives for all players to change and reward early movers. It should

also take account of the effects of the regulation itself (e.g. additional costs it generates versus the benefits it generates).

6 Open systems architecture is vital for the future of ATM.

In this point, we find the clear journey towards system-centric technology, increased automation, the location-independence of future operations, service-oriented architecture, virtualisation and interoperability. It points to the need for standardised interfaces in key ATM systems. We also consider that artificial intelligence and machine learning will form a critical part of the systems of the future.

When addressing these changes, it will be most important to tackle the human and organisational aspects related to modernising the European ATM system.

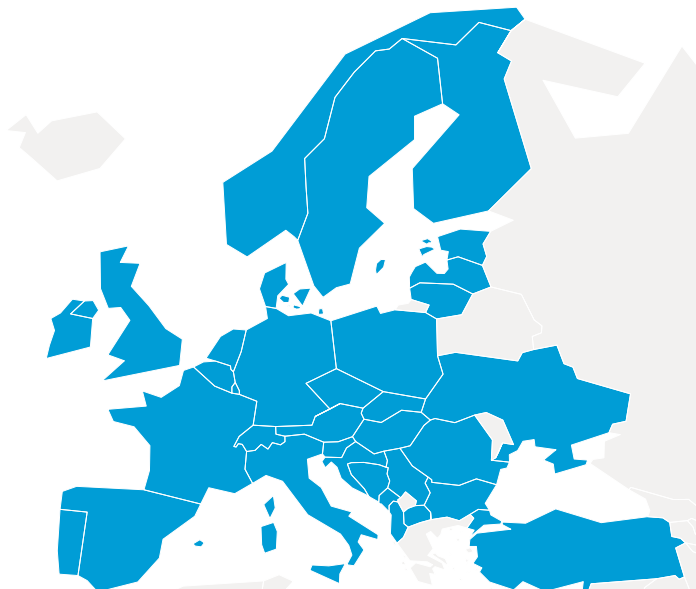
7 ANSPs will rely on services and not necessarily only on assets to provide their services.

The principle here is that there is no need for each ANSP to have its own full ATM/CNS infrastructure to be able to provide a service in its area of responsibility. The process of virtualisation will allow services to be offered instead of each ANSP relying on its own monolithic system, and this should lead to improvements in cost-efficiency.

This point does not rule out the possibility that an ANSP may still be an asset-owning provider of services for its own use or for services to be offered to other ANSPs.

8 ANSPs will have a fundamental role to play in delivering U-space in Europe.

ANSPs are best placed to provide a number of core U-space services critical to the success of U-space, while ensuring safe integration with ATM. ANSPs already have the appropriate safety, airspace and air traffic management culture, expertise and skills as well as the means to implement key U-space services. Many ANSPs are proving this already through the delivery of UTM related projects, often in partnership with new drone technology companies.



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