European Airspace Modernization

Fact Sheet

European Airspace is inefficient and airlines and passengers deserve better

European airspace and the air navigation service providers (ANSPs) that manage air traffic play a crucial role in keeping the skies safe and facilitating efficient flows of air traffic across the continent.

The system of national ANSPs is rooted in post-war structure which modern technology and superseded and which cannot cope with the levels of traffic demand without causing increasing delays and cancellations. Costs are high and innovation is held back. Urgent modernization is vital and would unlock huge value across Europe.

In order to demonstrate the value importance of this issue, IATA commissioned SEO Amsterdam, an independent economic consultancy, to model the benefits if European airspace was modernized in-line with SES. Their estimation is that a modernized and optimized European airspace will generate an additional €245 billion in GDP annually from 2035, including 1 million extra jobs. [www.iata.org/airspacebenefits](http://www.iata.org/airspacebenefits)

History of the Single European Sky

- In 1999 the European Commission (EC) proposed the creation of a Single European Sky (SES) for air traffic management (ATM).
- The SES project was formally launched in 2004 to rationalize the fragmented European airspace into nine Functional Airspace Blocks (FABs).
- The high-level goals of SES\(^1\) are to:
  - Enable a three-fold increase in capacity to reduce delays, both on the ground and in the air
  - Improve the safety performance by a factor of 10
  - Enable a 10% reduction in the effects flights have on the environment, and
  - Provide ATM services to the airspace users at a cost of at least 50% less
- The first package of proposals in 2004 provided limited progress and benefits.
- Following strong lobbying by IATA and other associations, the EC adopted a second package of measures in July 2008.
- SES Package II was adopted by the Council of the European Union in March 2009 and came into effect in November 2009.
- In 2013 the EC presented a package termed SESII+ which includes most of the needed reforms identified by the Airspace Users. While the SESII+ package was supported by the EU Parliament, it is opposed by most of the larger EU member states.

Comparison with US ATM

- The 2015 US-EUR comparison of ATM related OPS performance identified that Europe’s air navigation service provision is more fragmented:
- There are 37 air navigation service providers (ANSPs), 62 en route centers and 16 stand-alone Approach Control Units, making for a total of 78 facilities.
The US contiguous airspace has one provider, 20 en route centers and 26 stand-alone Terminal Radar Approach Control (TRACON) units: a total of 46 facilities.

The US uses the same tools and equipment, the same communication processes and a common set of rules while in Europe, the provision of air traffic control services is still largely organized along State boundaries, with national ANSPs operating different systems under slightly different sets of rules and procedures.

The most recent US ATM cost-efficiency study published in 2013 shows that US costs are 34% less than in the EU:

- European (SES states) control costs €534 per flight hour;
- US control costs €354 per flight hour.

(Source: Eurocontrol)

Relative to 2004/2005 performance levels,

Status

Progress to achieve the SES high-level goals is not on track.

The Performance Scheme for the first reference period (RP1) - 2012-14 did not deliver the expected performance improvements as several states failed to meet the already watered-down cost efficiency target. According to the Performance Review Body Annual Monitoring Report 2016 (Edition date: 9.10.2017) in 2016 en-route ATFM delays increased by 20% compared with 2015 and the EU-wide capacity KPI was 0.91 minutes ATFM delay per flight, which does not meet the 0.50 minute/flight targets set for 2016.

The current Performance Scheme framework lacks much needed enforceability, provides for “uncontrollable costs” to be added to the agreed charges, allows for congestion charging and has failed to include terminal charge target setting.

In order to progress SES and influence further regulatory reforms, IATA, along with other European airline associations developed an airline “Blueprint” for SES. The Blueprint calls for further regulatory reform and identifies three key needs:

- **A binding performance scheme** through the establishment of an independent European regulator for air navigation charges able to establish milestone EU targets to be achieved by each State or FAB.
- **The rationalization of ATM structures** through opening up services to competition and a reduction in the number of air traffic control centers across Europe to not more than 40 and cutting the ratio of back-office staff to ATCOs from 2.4 to 1.6.
- **Modernization of the ATM system** including airborne systems and ground infrastructure and procedures to ensure that the forecast of increased traffic can be safely managed through better situational awareness for both pilots and air traffic controllers.

Why develop National Airspace Strategies?

Airlines and their passengers cannot afford to wait until the Single European Sky materialises. There are significant improvements to ATM that can be made at national level which can be enacted rapidly. To ensure these national plans ultimately are aligned with SES objectives and customer priorities, IATA is working with European ANSPs to develop national airspace strategies (NAS)

- The ANSPs of Poland (PANSA), France (DSNA), Italy (ENAV), Bulgaria (BULATSA) Spain (ENAIRE), Romania (ROMATSA) and Germany (DFS), have agreed to work with IATA on creating NAS.
- PANSA’s Airspace Strategy for Poland was published in November 2018, with ENAV’s Italian National Airspace Strategy published on 11 December.
- Governments’ acceptance of these strategies will be essential for many of the reforms to succeed. For more information go to [www.iata.org/airspacebenefits](http://www.iata.org/airspacebenefits)
Characteristics of National Airspace Strategies

The typical elements of a NAS include:

• Governance and consultation arrangements with full involvement of the airline community
• Investment decisions strategically planned and agreed
• Planning for better business continuity
• Achieving airspace change for more capacity and more efficient routes, to reduce fuel burn and emissions
• Enhanced cooperation with European partners to accelerate the Single European Sky initiative
• It is crucial that airlines are fully involved in the development of the NAS, through the governance arrangements and the working groups covering issues such as safety, environment, flight efficiency, connectivity and cost efficiency.