



THE SINGLE EUROPEAN SKY: A NEW HORIZON FOR AVIATION IN EUROPE

Europe's airspace is one of the densest and most complex in the world: it encompasses more than 11 million flights per year, 27 European Union Member States and a dozen associated countries, more than 60 air navigation service providers and a mosaic of national regulations. In this fragmented scenario, each flight becomes a puzzle, which, if not managed properly, can result in longer than necessary routes, higher fuel costs, congestion at certain control points and an environmental impact that could be reduced with more efficient management.

To respond to this challenge, at the beginning of the 21st century the European Union launched the Single European Sky (SES) project, one of the most ambitious regional integration initiatives since the creation of the single market. Its purpose was to rationalise airspace management, overcome national fragmentation and move towards a common sky based on efficiency, safety and sustainability.

After two decades of regulatory and technological development, the SES entered a decisive phase with the entry into force of Regulation (EU) 2024/2803¹, known as SES2+, in December 2024.

Almost a year later, we can begin to assess how many of the expectations placed on this new phase are materialising. In this newsletter, we review the SES regulatory framework, the most significant advances achieved during this first year and the future challenges that still remain: from the integration of new technologies and the modernisation of infrastructure to the political will necessary to consolidate a truly single sky.

REGULATORY PATHWAY OF THE SINGLE EUROPEAN SKY

The genesis of the Single European Sky dates back to the late 1990s, when growing air congestion and a lack of coordination between states began to compromise the competitiveness of air transport in Europe.

Specifically, in 2001, the European Commission presented a set of proposals on air traffic management to bring about a "Single European Sky"². The first legislative package, known as SES I, laid the foundations for the project, consisting of four regulations that established a European regulatory system for air navigation, reorganised airspace according to operational criteria, ensured the interoperability of control systems and defined common rules for the provision of services³.

However, SES I met with resistance, mainly due to the reluctance of Member States to give up powers and the absence of a long-term technological vision⁴. To overcome these limitations, SES II was launched in 2009, with an emphasis on operational efficiency and the introduction of Functional Airspace Blocks (FABs), structures that grouped the airspace of several countries according to traffic and efficiency criteria, transcending national borders. Despite this, differences between countries, technological interoperability issues and sovereignty concerns limited the results, and European skies remained fragmented.

In 2014, SESAR (Single European Sky Air Traffic Management Research Project)⁵ was established as the technological arm of the SES, with the aim of modernising air traffic management through the digitisation of control systems, process automation, route optimisation and the integration of new users such as drones and unmanned aviation (U-Space⁶). And, in fact, thanks to the collaboration of European institutions such as Eurocontrol, airlines and technology providers, SESAR has become a global benchmark in air traffic management innovation.

Finally, in December 2024, Regulation (EU) 2024/2803, known as SES2+, came into force, updating and strengthening the regulatory framework of the Single European Sky, marking a new chapter in its development.

¹ Regulation (EU) 2024/2803 of the European Parliament and of the Council of 23 October 2024 on the implementation of the Single European Sky

² For further reference, please see the press release dated 10 October 2011, which echoed the [2001 set of proposals on the 'Single European Sky'](#).

³ Regulations (EC) No 549/2004 of the European Parliament and of the Council of 10 March 2004 laying down the framework for the creation of the single European sky (Framework Regulation); No 550/2004 of 10 March 2004 on the provision of air navigation services in the single European sky (Service Provision Regulation); No 551/2004 of 10 March 2004 on the organisation and use of the airspace in the single European sky (Airspace Regulation); and No 552/2004 of 10 March 2004 on the interoperability of the European air traffic management network (Interoperability Regulation).

⁴ Regulation (EC) No 1070/2009 of the European Parliament and of the Council of 21 October 2009 amending Regulations (EC) No 549/2004, (EC) No 550/2004, (EC) No 551/2004 and (EC) No 552/2004 with a view to improving the performance and sustainability of the European aviation system.

⁵ For further reference, please see the information available on the [SESAR project](#).

⁶ For more information on U-Space, please refer to the following link: [U-Space Concept](#).

⁷ Public Air Navigation Entity (ENAI) in Spain; Direction des Services de la Navigation Aérienne (DSNA) in France; or Deutsche Flugsicherung GmbH (DFS) in Germany, among others.

GREEN LIGHT FOR SES2+

SES2+ has introduced key measures to improve European efficiency, innovation and sustainability, including greater flexibility in the provision of air traffic services, allowing certain services to be opened up to the private market, under public supervision, in order to promote efficiency and innovation in the sector⁷; the creation of national supervisory authorities in each Member State, responsible for safety, financial aspects and monitoring of performance and charging systems, supported by an advisory committee independent of the European Commission; and the establishment of an independent auditor ("Performance Review Board") to assess performance targets, incorporating environmental and climate criteria⁸.

SES2+ also extends Eurocontrol's powers as network coordinator, optimises routes and manages congestion, and strengthens the link between Eurocontrol and SESAR to ensure that technological developments are efficient and applicable.

On the other hand, although the regulation does not establish specific environmental measures, many of its initiatives promote sustainability. Route optimisation and more efficient air traffic management reduce fuel consumption and, with it, CO₂ emissions and other pollutants. In addition, charge modulation offers financial incentives for airlines to adopt more environmentally friendly practices. For example, a company that uses biofuel instead of conventional fuel could benefit from reduced air navigation charges, thus directly integrating operational efficiency with the European Union's environmental objectives.

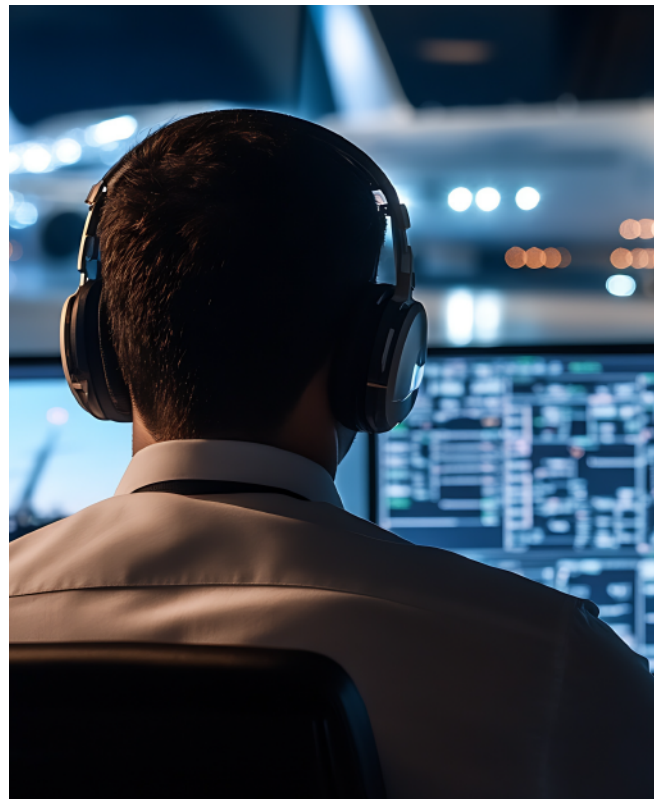
SES2+ also opens the door to the integration of new forms of air mobility, including drones and other unmanned aircraft systems (UAS), as well as urban air mobility solutions, and encourages civil-military collaboration to avoid unnecessary restrictions in airspace. In addition, it encourages the participation of European start-ups and technology companies in the development of artificial intelligence, traffic simulation and automation solutions, strengthening the aeronautical innovation ecosystem.

FUTURE CHALLENGES AND INFRASTRUCTURE MODERNISATION

Despite the progress made, Europe faces significant challenges in consolidating a truly single sky. Political fragmentation remains the main obstacle: only a real transfer of sovereignty and effective transnational cooperation will make it possible to coordinate routes, harmonise procedures and ensure efficient air traffic control.

In fact, experts insist that the progress made is not yet sufficient to speak of a fully integrated sky. The Spanish Association of Air Lines (ALA) insists that the SES2+ reform falls short: as long as management remains the exclusive competence of each state, fragmentation will persist. The obstacle, they stress, is not technological but political: without a genuine transfer of sovereignty, the single sky will remain incomplete.

In addition, infrastructure modernisation is critical, and this involves upgrading control centres, communication and navigation systems, ensuring platform interoperability between countries, and adopting predictive management tools based on artificial intelligence and big data. It also includes integrating new users such as drones and unmanned aerial vehicles, as well as coordinating civil and military airspace safely and efficiently.



Finally, the adoption of new technologies would improve operational efficiency, reduce costs and lessen environmental impact, aligning with the so-called "European Green Deal". The ability to predict congestion, optimise routes and modulate fares according to sustainability criteria would, if achieved, benefit airlines, passengers and society in general, reinforcing Europe's position as a global leader in aeronautical innovation.

INTERNATIONAL PERSPECTIVES AND THE FUTURE OF THE SES

With SES2+, Europe is taking a decisive step towards a more modern, efficient and sustainable single sky, combining technological advances with a regulatory framework that seeks to balance national sovereignty, private innovation and environmental objectives.

The Single European Sky has established itself as one of the pillars of global aviation. Thanks to it, Europe has made remarkable progress in the efficiency and sustainability of air traffic management, partially mitigating a historical problem: the fragmentation of airspace. Initiatives such as "FABs" have shown that it is possible to coordinate national interests to move towards common management.

In addition, the SES has served as an inspiration in other regions of the world, such as Latin America, where fragmentation and coordination problems are reminiscent of those in Europe, and the concept of a single sky has gained ground in the debate. In fact, in 2017, Brazil, Argentina, Paraguay and Uruguay signed an agreement to move forward with the creation of regional FABs, and in Central America, projects led by European companies have begun to lay the foundations for more integrated management.

⁸ On 12 September 2025, the European Commission appointed the members of the Performance Review Board. See: [EC press release on the PRB](#)

⁹ For example, SES2+ does not present sufficiently defined advances in terms of sovereignty, which continues to limit transnational coordination. This fragmentation has been evident in recent episodes, such as the air traffic controllers' strike in France in July 2025 –affecting more than one million passengers– and has been highlighted in various recent analyses on the risk of chaos in European air traffic. See, among others, the articles published in *Controladores Aéreos* on the collapse of air traffic in 2025: [here](#) and [here](#)

¹⁰ ALA is the leading airline association in Spain, accounting for 85% of air traffic in the country, including the 10 airlines with the highest traffic. See: [ALA About us](#)

¹¹ For further reference, please refer to [the podcast 'Hablemos de Defensa y Seguridad' \(Let's talk about defence and security\)](#). Guest: Javier Gándara, president of ALA

¹² As an example, the Spanish company Indra is leading a project in Central America together with the Central American Air Navigation Services Corporation (COCESNA) to standardise and modernise air traffic management systems, seeking to lay the foundations for a regional 'single sky'.



Looking ahead, the SES horizon points towards greater transnational integration, with interoperable data systems, predictive management using artificial intelligence, increasing automation –including remote control, drones and unmanned traffic– and a clear commitment to sustainability, in line with the objectives of the European Green Deal.

In short, the Single European Sky is one of the most ambitious transformations in the history of aviation. Europe already has the regulatory and digital tools necessary to make it a reality, but the key remains political: only a shared will among Member States will make it possible to definitively overcome fragmentation. The future of European aviation will depend on EU countries understanding that, in a borderless airspace, everyone wins: airlines, passengers, the environment and, ultimately, Europe itself as a common project.

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