

DSNA is 20 years old! →

2005-2025 : DSNA COMMITTED TO SAFETY AND PERFORMANCE





Beauvais-Tillé Airport (2007)

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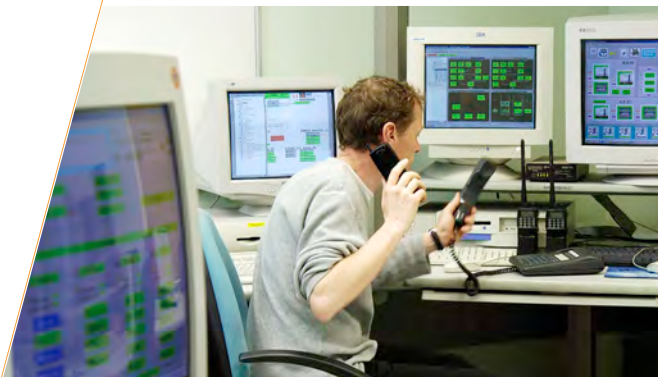
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Foreword



In the early 2000s, air traffic in Europe experienced significant growth, leading to substantial delays related to ATFCM: more than one in four flights was delayed by over 30 minutes, due to various causes. Airlines and European citizens complained about this situation. Air navigation was at the heart of the discussions: it became necessary to rethink its operations on a European scale, breaking free from national borders to promote a safer, smoother, and more efficient air traffic management.

In this context, the European Commission launched an ambitious initiative: the Single European Sky. European regulations became more demanding, requiring compliance with technological standards and coordinated deployment schedules. On the operational side, performance targets (safety, capacity, environment, cost) were introduced for air navigation service providers.

For DGCA, the Single European Sky regulations required a profound reorganization of its structures, which was implemented on March 1, 2005. That is how DSNA, as we know it today, was created by decree 20 years ago! Since then, regular adjustments to its organization have been made to meet the evolving requirements of the aeronautical sector and to operate in an ever-changing environment.



Jean-Yves
DELHAYE



Marc
HAMY

2005



Maurice GEORGES

2009

Through this brochure, I invite you to rediscover this part of our history, which helps to better understand the meaning behind DSNA's missions. It is also an opportunity for me to thank the women and men who, over the past 20 years, have worked within DSNA to adapt to these transformations and deliver an increasingly efficient service to our clients and users.

With our strategy 'DSNA 2030' strategy, let us continue together on our path to meet the challenges of air navigation!

Frédéric GUIGNIER

French Air Navigation Services Director



Florian GUILLERMET



Frédéric GUIGNIER

IN BRIEF

25 years ago, Europe experienced significant air traffic delays amid a period of strong growth. To rethink air navigation beyond national borders, the European Commission took action by proposing the Single European Sky. As a result, DGCA reorganized itself by implementing a functional separation of services, leading to the creation of DSNA on March 1, 2005. Performance targets have been set for air navigation service providers since 2012 within the framework of a performance plan submitted to the European Commission (DG MOVE) for each reference period. With the approval of these plans, DSNA is authorized to collect air navigation charges to finance its investments.

2004-2005



A NEW APPROACH TO AIR NAVIGATION IN EUROPE TO SUPPORT AIR TRAFFIC GROWTH

To address significant delays caused by air traffic control, the European Commission launched an ambitious initiative: the Single European Sky. Objectives: defragment air traffic management beyond national borders, modernize ATC tools, and ensure safer, smoother management of traffic flows, at controlled costs levels. Several European regulations have gradually defined the framework of the Single European Sky (SES).

In 2004, the first regulations laid the groundwork for two key structures:

- **The Functional Airspace Blocks (FAB)** under the responsibility of States, aimed at removing national borders in civil and military air traffic control. The goal : greater integration of European airspace to enable more efficient air traffic management.
- **The ATM Research and Development program (SESAR)**, designed to develop a modern European air traffic management ATM system based on common technological standards.

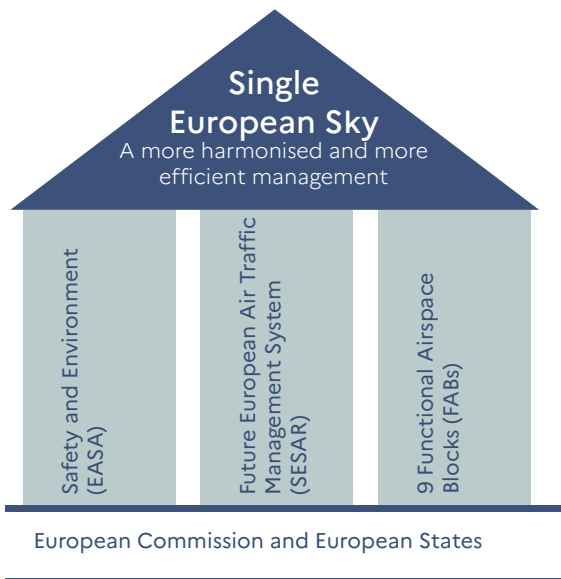
SAFETY

The European regulation of **December 20, 2005** established common requirements for the provision of air navigation services, mandating the implementation of a safety management system by 24 December 2006. In response, **DSNA opted for an Integrated Management System**, addressing safety, quality, security and environmental protection in a coordinated manner.

COMPETENCIES

The European directive of **April 5, 2006** introduced a common **air traffic controller (ATCO) license**, harmonizing the training requirements for air traffic controllers across the European Union. This directive was transposed into French law by the decree of **October 22, 2007**, which notably allows the recruitment of controllers from other European Union Member States under clearly defined conditions. The decree of **Septembre 11, 2014** sets out the conditions for issuing licences to personnel responsible for the maintenance and technical supervision of air navigation systems (**ATSEP licence**).

In 2009, additional regulations came into force. Among them, one focused on performance in the areas of safety, environment, capacity and cost-efficiency of air navigation services. Another set a deadline of **December 4, 2012** for the implementation of FABs. A further regulation expanded the responsibilities of the European Union Aviation Safety Agency (EASA) to include air navigation and airport domains.



The Single European Sky, as seen in the DSNA 2013 annual report

SESAR

The technological and industrial pillar of the Single European Sky, this unique public-private partnership involves all stakeholders in the aviation sector.

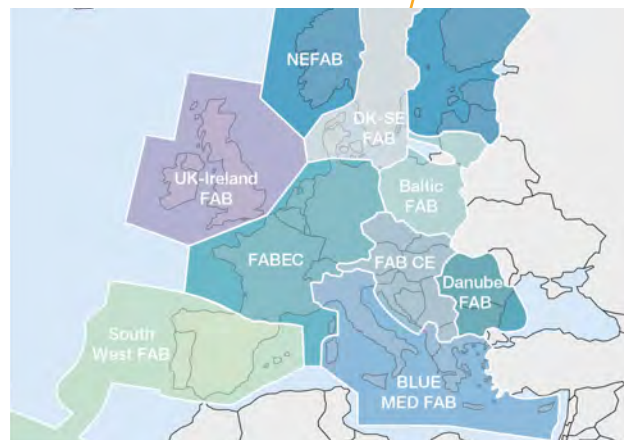
DSNA is a founding member of SESAR 1 (2008-2014), which began with nearly 300 projects. The objectives were to design and test new operational concepts that closely aligned with the needs of airlines and operational realities.



FABEC (FAB EUROPE CENTRAL)

The Single European Sky is composed of 9 FABs. The Treaty creating FABEC was signed on December 2, 2010, and ratified by the six member states of FABEC, coming into force on December 4, 2012.

This airspace, covering nearly 2 million km², is located at the heart of European traffic flows (core area), and is one of the most dense and complex in the world. Due to its geographical location, France plays a key role as an essential operator in the Single European Sky.



The Single European Sky' 9 functional airspace blocks, as depicted in the DSNA 2017 annual report.



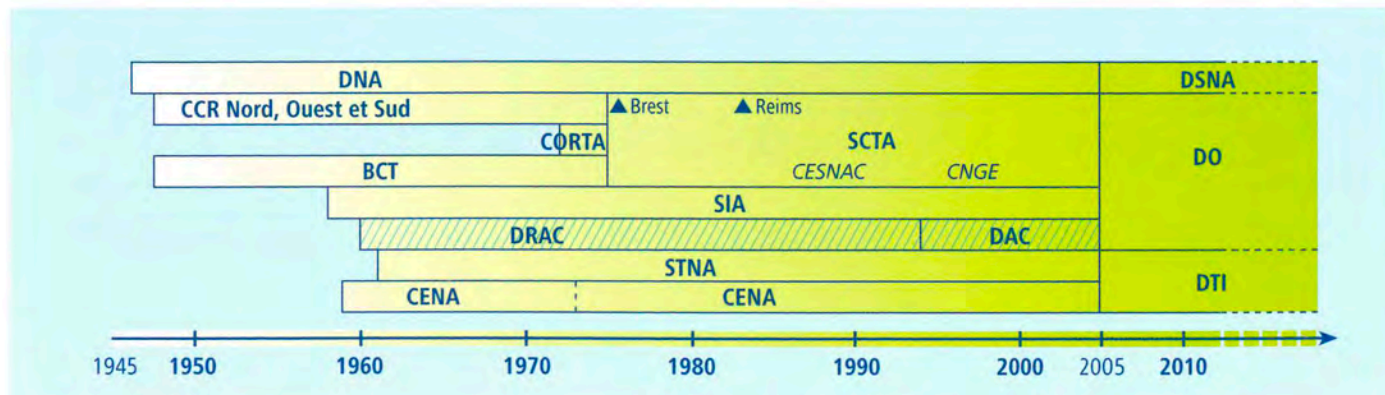
A REORGANIZATION OF DGCA AND DSNA



The decree of February 28, 2005 establishing the organization of the DGCA came into effect on March 1, 2005. In response to the requirements of the Single European Sky, DGCA, under the leadership of its CEO, Michel Wachenheim, underwent a profound reform, organizing itself by functions. Its model relies on a functional separation of services within DGCA — a French specificity compared to other European organizations.

This new structure notably distinguishes between air navigation operations, entrusted to DSNA as an air navigation service provider, and surveillance activities, entrusted to the Directorate of Safety Control (currently, the DSAC) as the National Supervisory Authority (NSA).

The functional separation of the various missions within the DGCA is also reflected in the new budgetary structure introduced on January 1, 2006: the core public service activities are transferred to the general state budget, while activities funded by air navigation charges are identified within the “Air Traffic Control and Operations” budget.



In 2005, the structure of DSNA was simplified and made easier to understand, with two main departments: the Directorate of Operations (DO) and the Technical and Innovation Directorate (DTI).

DNA : Air Navigation Directorate - SACTA: Air Traffic Control Service - SIA: Aeronautical Information Service - DAC: Civil Aviation Directorate - STNA: Air Navigation Technical Service - CENA: Center for Regional Air Navigation Research

DECEMBER 19, 2006: FIRST CERTIFICATION OF THE DSNA AS AN AIR NAVIGATION SERVICE PROVIDER IN FRANCE



In accordance with the Single European Sky regulation, DSNA is certified to provide the following three services: air traffic services, communication / navigation / surveillance services, and aeronautical information services.

This certificate, issued by the National Supervisory Authority for a renewable 4-year period, attests to the compliance of DSNA's compliance with all European requirements for ensuring its operations and organization are in line with the standards for providing these services.



FABEC ANSPs Managers Meeting at EUROCONTROL - Brétigny (2009)

PERFORMANCE TARGETS FOR AIR NAVIGATION SERVICE PROVIDERS

The European Commission, recognizing that air traffic control cannot be subjected to competition due to national sovereignty over airspace and safety concerns, requires in return a significant and continuous improvement in the performance of air navigation service providers.

Performance targets are defined in terms of **safety, capacity, environmental and economic efficiency** within the framework of performance plans for each reference period (RP1: 2012-2014, RP2: 2015-2019, RP3: 2020-2024). The successive strategic plans of DSNA provide a comprehensive and coherent vision of how to achieve these objectives.

DSNA manages its performance through objective-based management (PPO), thereby ensuring the proper implementation of its strategy. It must meet a performance plan whose targets are set up at the FABEC level, except for the cost-efficiency target, which is defined at national level for each reference period.

The Single European Sky also established a **Strategy Commission**: this consultative body has met annually since 2007. It brings together representatives of airspace users, airlines, airport operators, EUROCONTROL, and military authorities to contribute to the DSNA's performance targets and strategic direction. The aim is to deliver high-quality, competitive services that meet the expectations of all stakeholders. DSNA's transparency during these meetings is regularly praised by its clients and partners.

THE INITIAL OBJECTIVES SET FOR THE CREATION OF THE SINGLE EUROPEAN SKY



INFRASTRUCTURE & ATC TOOLS

A high-performance, secure communications network; increased automation



PERFORMANCE

x3 air traffic control system capacity



ENVIRONMENT

Optimized flight paths to minimize environmental impact and reduce fuel consumption; integration of satellite navigation



FINANCES

Reduction of control costs



Trainee air traffic controller undergoing training on a control position at the Reims Area Control Center (ACC) in 2006.

HIGHLIGHTS AND KEY EVENTS OVER THE PAST 20 YEARS

Creation of DSNA

First Mode S radar stations: Paris-CDG, Palaiseau, Grand Ballon, Nice...

Commissioning of the North Tower and North runway doublet at Paris-CDG.

A new control tower at Rennes.

New IFR Approach room at Toulouse.

Transferring the Approach from Agen to Toulouse.

2005



Implementation of the DTI with the merger of two departments: STNA and CENA.

Renovated watchtower at Lyon-Saint Exupéry, Bastia and the central tower at Paris-CDG, ensuring nighttime control of the entire platform.

DGCA social protocol.

2007

2006

DSNA certified as an air navigation service provider under the Single Sky regulations.

New IFR Approach room at Paris-CDG and Lyon-Saint Exupéry.

Launch of Coflight, the future advanced flight plan processing system, in cooperation with ENAV, our Italian counterpart.



Approach Control Room at Toulouse (2005)

The first part of this brochure highlighted the key milestones marking the transition from DNA to DSNA between 2004 and 2006. A new organizational structure upon which we continue to build our future.

Without being exhaustive, let us recall some major events and technological achievements over the past twenty years, as featured in the DSNA's annual reports.

Global financial crisis.

Creation of the SNA Région Parisienne (SNA RP) within the Directorate of Operations.

Progressive installation of a type 1 CMCC (Military Coordination and Control Center) in each ACC to meet European requirements for direct communication between civil and military controllers.

Transfer of the Avignon approach to Marseille.

A new control tower at Ajaccio.



2008

New control tower at Ajaccio



A volcanic eruption in Iceland severely disrupting air traffic in Europe.

Paris-CDG certified as an Airport-CDM.

FABEC Treaty signed by Member states.

Implementation of ICAO-standard language endorsements for European air traffic controllers.

Renewal of DSNA's certification as an air navigation service provider.

DGCA social protocol.

2010

2009

DSNA awarded ISO-9001 certification.

A new control tower at Le Bourget.

Infrastructure and operation of the EGNOS satellite navigation system entrusted to ESSP.

Redesign of initial training for ATCO and Technical student air traffic controllers (common basic module within FABEC).

2005-2010





- 1 / The new Bordeaux Area Control Center (ACC) building (2003)
- 2 / ATSEP and air navigation systems racks (2005)
- 3 / Air traffic controllers at the Lyon-Saint Exupéry Control Tower (2005)
- 4 / Construction of the North Tower at Paris-CDG in 2003 (commissioned in 2005)

4-FLIGHT contract signed with Thales.

Completion of the project to raise arrival route altitudes at CDG, Le Bourget, and Orly — an initiative from the Grenelle Environmental Round Table.

A temporary segregated area, used by military aircraft in high altitude, dynamically managed in northeastern France, foreshadowing future working methods.



ATSEPs at Marseille ACC (2011)

2011

Digitalization of aeronautical information with the new NOPIA database, leading in particular to the publication of AIPs in electronic versions (eAIP).

Commissioning by the Paris ACC of the Point Merge for flights destined for Paris-CDG from the North-West.

Transfer of Perpignan Approach to Montpellier.

First Type 2 CMCC with more advanced functions, implemented at Reims ACC.

DGCA social protocol.



Pointe-à-Pitre control tower

2012

A new worldwide flight plan format.

A new control tower at Pointe-à-Pitre.

Higher arrival route altitudes for flights from the South-West of France to Paris-CDG & Le Bourget to facilitate continuous descent operations.

Restructuring of upper airspace in the northeastern France.

New strategy to rationalize lower airspace (DSNA provides control services to 81 airfields in mainland France).



Setup of the technical room for 4-FLIGHT at Marseille ACC.

2013



4-FLIGHT team meeting (2014)

Waves of attacks in Europe.

A new control tower at Cayenne (French Guiana).

Implementation of the ERATO electronic environment in Brest ACC in a completely renovated building.

Transfer of airspace management from Brest ACC to Paris ACC.

Crash of Germanwings flight in the Southern Alps.

2015

2014

Creation of the Grand South-West Air Navigation Services (SNA GSO) within the Directorate of Operations.

Lyon-Saint Exupéry is the first regional organization to be equipped with the Advanced-SMGS system for managing the safety of ground movements.

Modernization of telecommunications network for DSNA needs (RENAR-IP).

Transfer of Grenoble-Isère Approach to Lyon-Saint-Exupéry.



Data Link

Implementation of the Data Link at Brest ACC and Marseille ACC.

Complete redesign of the control rooms and training simulator rooms at Brest ACC.

A new control tower at Beauvais.

RECAT-EU at Paris-CDG (optimized approach separation minima).

Implementation of the ERATO electronic environment at Bordeaux ACC.

A new Internet Protocol network architecture.

Rationalization of the Category 1 ILS network at airports.

Closure of ATC services at Angers, Angoulême, Calais, Cherbourg, Lannion, Le Havre, Le Mans, Valence and Vannes.

Paris-Orly certified as an Airport-CDM.

DGCA social protocol..

2016

2017

RWSL at Paris-CDG to prevent runway incursions.

A new control tower in Figari.

Category 1 EGNOS approach procedures deployed everywhere on IFR runways.

Lyon-Saint-Eupéry awarded Airport-CDM label.

Major reorganization of civil and military airspace in Western France.

Implementation of the CACAO2 system for oceanic airspace managed by Cayenne.

ERATO at Brest ACC

Major reorganization of military zones and air navigation flows in the South-West of France, and of the interface between Marseille ACC and Marseille-Provence.

Renovation of the control tower at Paris-Orly.

New control towers at Strasbourg and Pau-Pyrénées.

Transfer of Rodez Approach to Clermont-Ferrand.

Introduction of triple, independent and parallel PBN approach procedures at Paris-CDG — a first in Europe.

2018

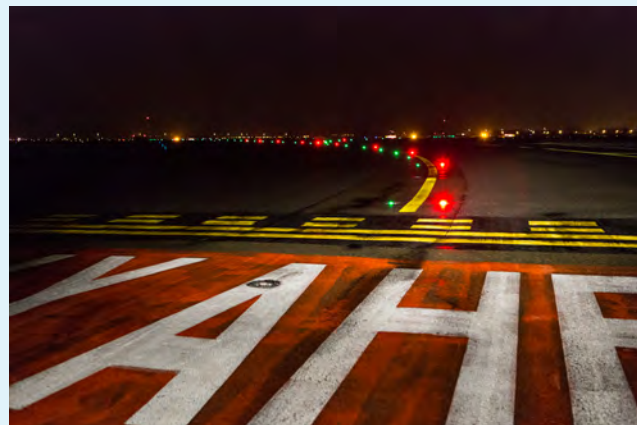
2019

May 2019



3.3 million flights controlled in 2019

RWSL at Paris-CDG



2011-2019





7

- 5/ Technical supervision room at Brest ACC
- 6 / Cabling network at Strasbourg Air Navigation Service (ANS)
- 7 / Technical racks
- 8 / The new control tower at Pau-Pyrénées overlooking the old Tower and the Antonov 225
- 9 / Renovated operations room at Brest ACC



9

Global COVID19 pandemic causing an air traffic collapse.

A new Apron radar at Orly Control Tower.

Migration of operational flows to NewPENS (ground-ground communication network)

Nice-Côte d'Azur certified as an Airport-CDM.

Renovation of the control tower at Toussus-le-Noble.

2020



2021

Restructuring of DTI.

Renovation of the control tower at Toulouse.

Implementation of Free Route in France across nearly half of the upper airspace.

Completion of the transfer of continental airspace within the FIR managed by Brest ACC to Brest, Rennes, and Nantes.

Transfer of BRIA Le Bourget's activities to BNIA and BNI.



CDM tools at Nice



4-FLIGHT operating at Brest ACC

Beginning of the conflict between Russia and Ukraine.

Commissioning of the 4-FLIGHT system at the two pilot sites: Reims ACC and Marseille ACC.

First satellite-based procedure with turns (RNP AR) in mainland France at Ajaccio, following the implementation in La Réunion.

Commissioning of SOFIA Briefing in mainland France and overseas territories — a new tool integrating flight preparation and flight plan submission.

Territorial footprint of DSNA: 5 ACCs, 29 Approaches, and 74 Control Towers.

2022



RNP AR procedure at Ajaccio.



26 July 2024: Traffic rerouting during the Olympic Games opening ceremony.



iATS at Paris-Orly

Paris 2024 Olympic Games.

iATS system operational evaluation at Orly Tower.

DSNA awarded the Green ATM label by CANSO.

Transfer of the FIR managed by Reims ACC to Strasbourg and Basel-Mulhouse. Modernisation of the infrastructure at the Marseille-Provence.

Transfer of Deauville Approach to Rennes; transfer of Deauville maintenance and Rouen Approach to Lille.

2024



SEAFLIGHT at Fort-de-France

4-FLIGHT operating at Paris ACC



2025

Commissioning of 4-FLIGHT at Paris ACC.

Commissioning of the SEAFLIGHT system in an electronic environment for the Fort-de-France Approach/Tower.

Reorganization of airspace at the interface between Reims ACC and the Maastricht control center.

Metz-Nancy Lorraine: Following the transfer of maintenance to the North-East Air Navigation Service (SNA Nord-Est) in 2023, transfer of Approach operations to Strasbourg.

2023

A new strategic plan for DSNA towards 2030.

Deployment of training simulators for air traffic controllers.

Implementation of the Green Operations network within the Directorate of Operations.

Live trial of the N-VCS radio-telephony communication system at Brest ACC.

Transfer of Pontoise Approach to Le Bourget.

Transfer of BRIA Cayenne operations to Bordeaux BNI.

DGCA social protocol.

2020-2025



New control tower in Cayenne, French Guiana (2015)



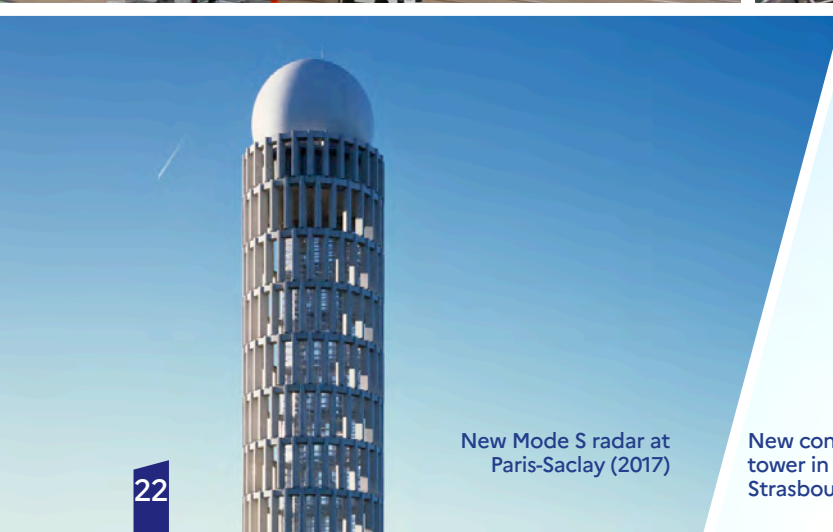
New control tower in Beauvais (2019)



New control tower in Figari, Corsica (2017)



New radar in Paris-Orly (2020)



New Mode S radar at Paris-Saclay (2017)



New control tower in Strasbourg (2018)



Operations room equipped with 4-FLIGHT at Reims ACC

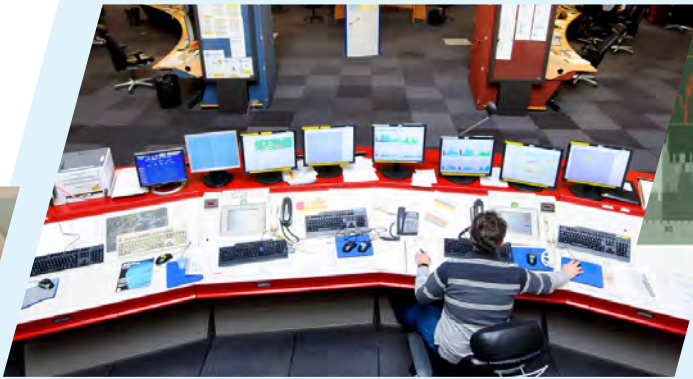
The achievements presented here as examples have benefited from **European co-financing** as they contribute to the improvement of operational performance within the European network. They are part of the regulatory deployments coordinated by **SESAR Deployment Management (SDM)**: Pilot Common Project, Common Project 1,...



From the CAUTRA/ODS system



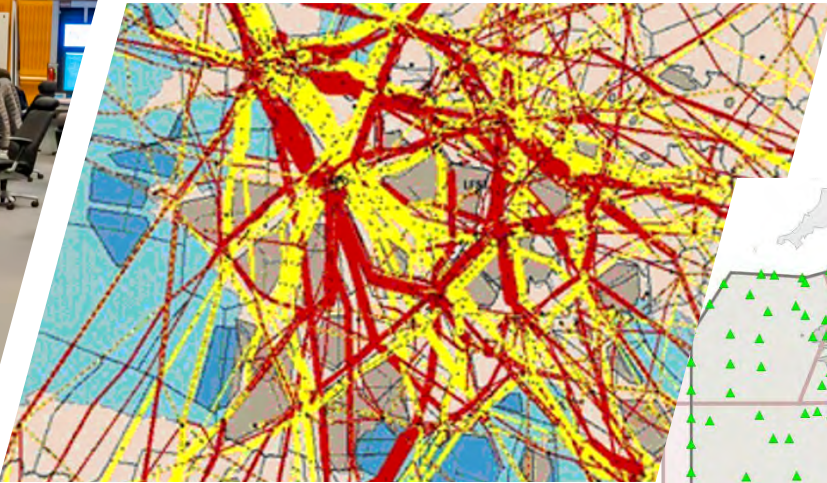
...to the 4-FLIGHT/Coflight system (on June 14, 2022
4-FLIGHT was officially declared in service in Reims ACC
— a first for DSNA!)



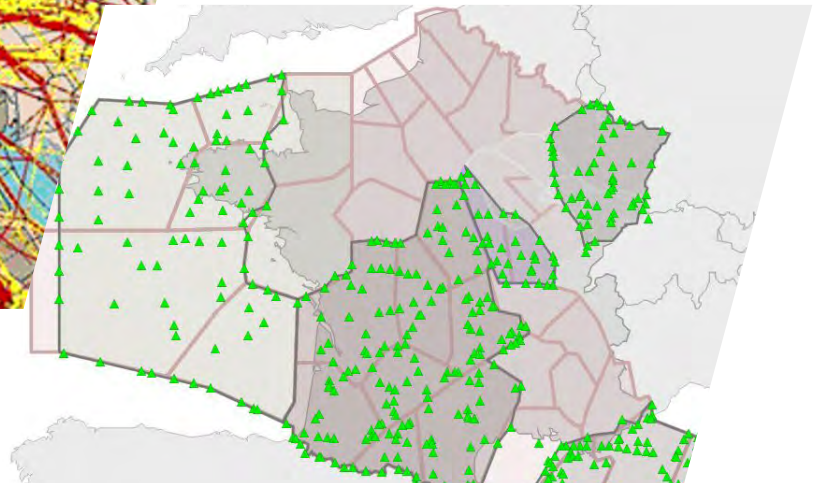
From ATFCM tools



...to increasingly advanced initiatives such as SALTO (Flight Management Position at Paris ACC).



From conventional flows....



... to the implementation of Free Route airspace above FL 195.

DSNA 2030



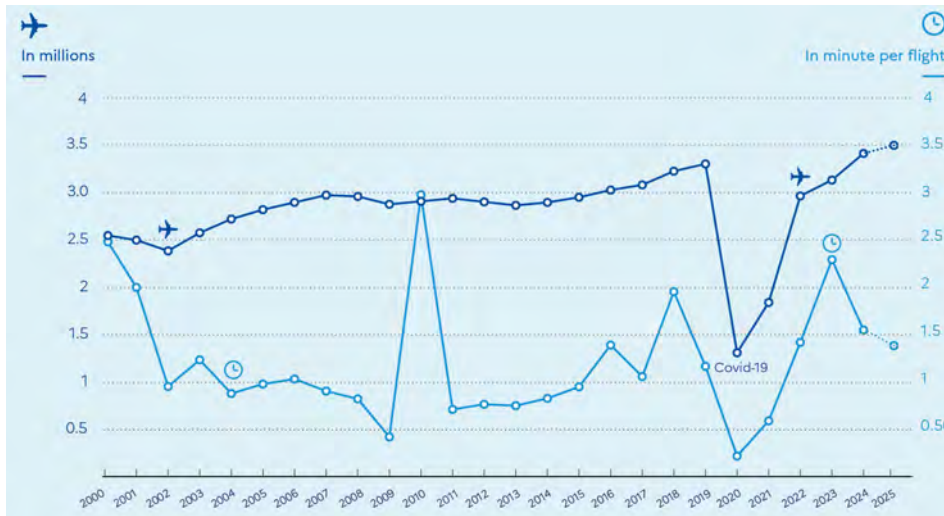
A DYNAMIC TRAFFIC FLOW WITH NEW CHARACTERISTICS.

France is the country controlling the most flights in Europe. **Between 2005 and 2024, DSNA controlled nearly one million additional flights, representing a 28% increase over 20 years!** This trend is also reflected in the daily traffic peak: from 8,875 flights on July 1, 2005, it rose to 11,632 flights on July 5, 2024, setting an all-time record in Europe!

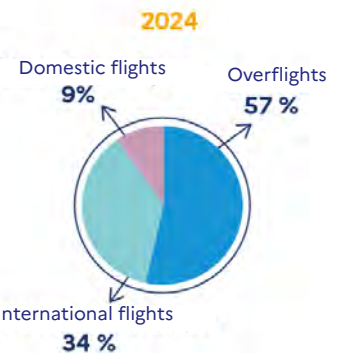
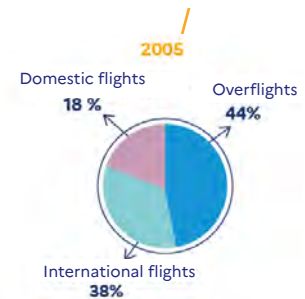
With increasingly constraints airspace availability due to weather conditions, geopolitical crises, and

a high rate of use of military training areas, air traffic controllers must manage a traffic flow that is both more seasonal and denser. In 2024, the Directorate of Operations recorded 60 days with over 11,000 flights!

As for the structure of traffic flows, it has also evolved significantly, with an increasingly dominant share of overflights at the expense of domestic traffic.



Evolution of traffic and delays caused by ATFCM regulations since 2000.



Evolution of traffic distribution from 2005 to 2024.

«DSNA 2030» STRATEGIC PLAN.



Watch the video «DSNA 2030: together, let's make this major transformation a success!»

Technological, territorial, organizational, and cultural transformations with a profound impact on our professions and working methods: this ambitious plan provides a meaningful vision towards a high-performing, modern, and eco-responsible DSNA.

“We, at DSNA, are committed to this transformation to address the new challenges in air transport regarding safety, cybersecurity, operational and environmental performance, and resilience. Our goal is to streamline, standardize, and modernize our infrastructures and technical systems, adapt our territorial organization to our resources, while improving the quality of service provided. We are also fully engaged in an eco-responsible approach to reduce our ecological footprint.

The support of our clients and partners for our approach is a great source of motivation. We will remain transparent about the costs of our projects and the expected benefits in terms of service quality.»

CONCRETE RESULTS IN 2024

The efforts of DSNA are already bearing fruit, with results in terms of increased capacity and reduced delays through various measures: reorganization of upper airspace with Free Route, reorganization of lower airspace with the transfer of the East FIR to the North-East SNA, and consolidation of Approach control service; next-generation technical projects in advanced operational evaluation: 4-FLIGHT at Paris-ACC, iATS at Paris-Orly, N-VCS at Brest ACC, SEAFLIGHT at Fort-de-France (Martinique),

deployment of simulators for air traffic controller training; prior declaration of presence for operational staff in case of social movements. DSNA has also received the Green ATM environmental label from the CANSO association, an international recognition.

These concrete achievements are shaping our future and give us confidence in our ability to implement our vision of air navigation in France.



The Single European Sky has given a new dimension to the annual international Air Traffic Management (ATM) Exhibition.

The European Commission, through its Awards and SESAR Walking Tours, has successfully built a strong image for the stakeholders of this new vision of air navigation in Europe.

DSNA has received several Awards for its operational achievements and hosts presentations of selected SESAR projects at its stand every year.

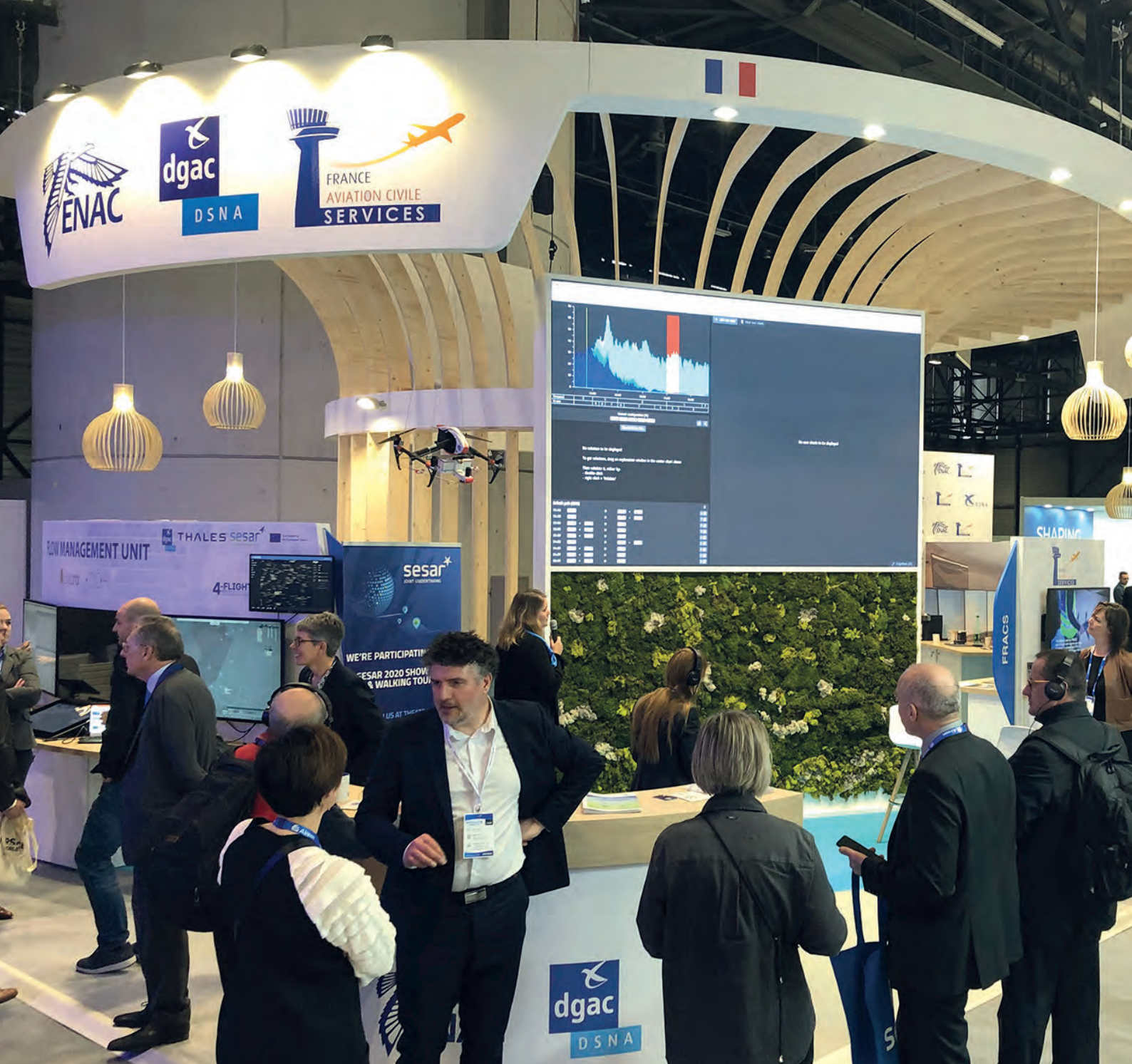


▲ DSN and its counterparts were awarded at the 2019 Exhibition for their efforts in interoperability with EUROCONTROL's Network Manager



▲ SESAR Walking Tour at DSN stand

◀ FABEC stand representing its 7 air navigation service providers at the 2013 World ATM Congress (WAC) in Madrid



Airspace World Geneva 2023: A key event for air navigation professionals, where the DSNA stand, shared with ENAC and FRACS (France Aviation Civile Services), welcomed numerous international visitors.

AT THE EUROPEAN LEVEL

Traffic forecasts in Europe indicate an annual growth of around 5% until 2030. In this context, air navigation must face major challenges while adapting to an increasingly demanding societal, climatic, and geopolitical environment. Green and technological transitions in the digital and satellite age are at the heart of these transformations.

The «Single European Sky 2+» regulation came into force on **December 2, 2024**. It consolidates existing measures and introduces new features such as strengthening the functions of the Network Manager (EUROCONTROL) and the independent authority responsible for evaluating the performance of air navigation services (Performance Review Board) with more realistic objectives, as well as encouraging the modulation of route charges to reduce the carbon footprint.

To harmonize air traffic management at the European level, new approaches have been initiated:

- In terms of **research and development activities**, the SESAR 3 programme [2021–2030] is working to find solutions for a «Smart, Sustainable, Resilient» Digital European Sky — meaning a sky that is more connected, more environmentally responsible, more resilient to crises, more efficient, and open to new entrants.
- On the **technical side**, the ATM Master Plan, published on **December 12, 2024**, is a key tool for planning this modernization in Europe and improving flight performance. It is based on an accelerated deployment of SESAR solutions. By 2045, flights will need to be optimized from departure to arrival to ensure seamless connectivity.

- On the **environmental front**, the «Destination 2050» initiative, led by aviation stakeholders, sets out the actions to be taken to achieve the decarbonization of air transport by that horizon.

EXPECTED BENEFITS

It is estimated that every euro invested in the deployment of SESAR solutions will generate a return on investment of €17, and up to €53 when broader socio-economic benefits are taken into account.

These solutions could save up to 400 million tonnes of CO₂ by 2050 — a particularly significant effort for sustainable air transport!



Establish a foundation of innovative communication technologies.



Ensure high-performance operations at airports.

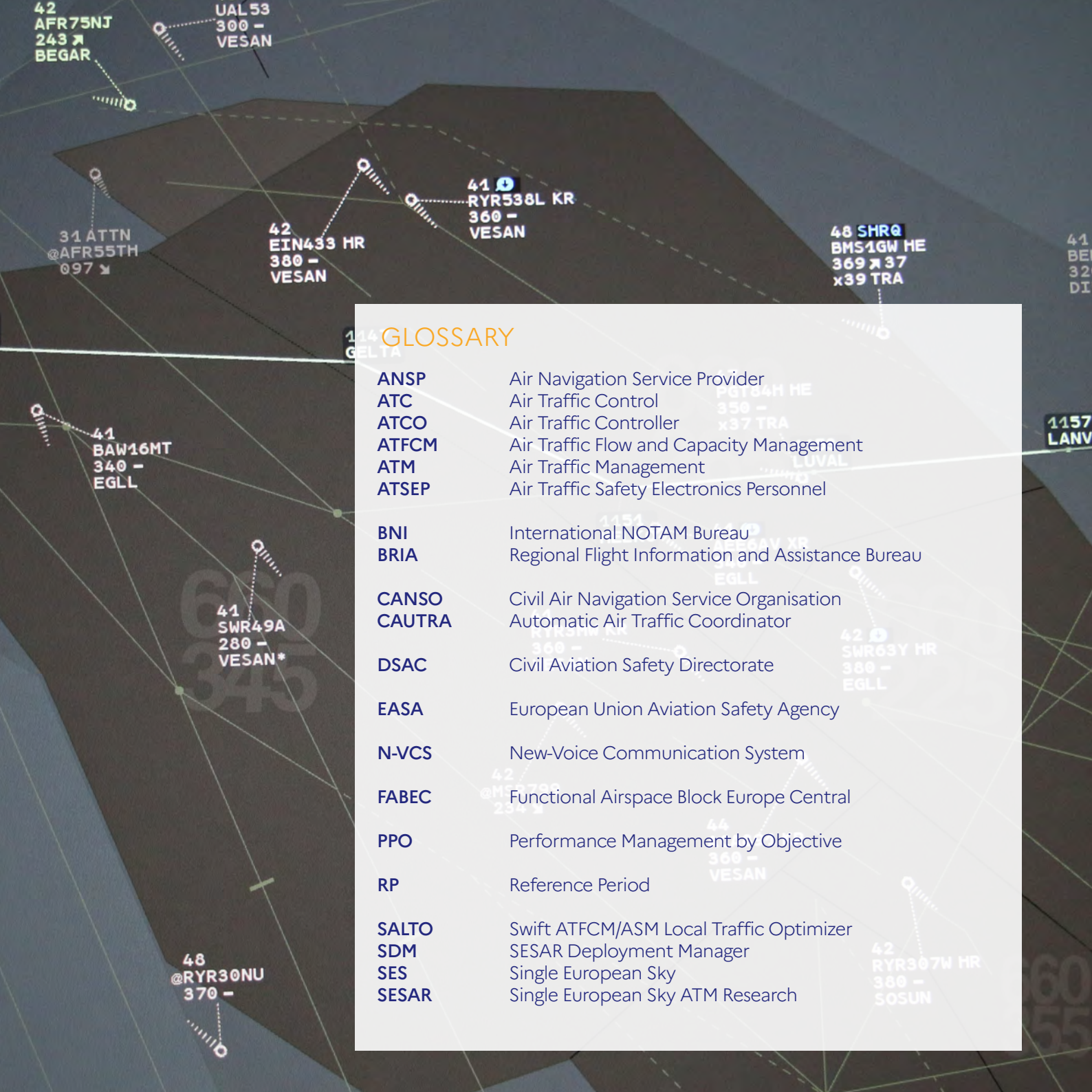


Modernize air traffic services.



Optimize air traffic services and network management.

Single European Sky: Key areas of study and research in the SESAR 2020 programme [2016, 2023].



GLOSSARY

ANSP	Air Navigation Service Provider
ATC	Air Traffic Control
ATCO	Air Traffic Controller
ATFCM	Air Traffic Flow and Capacity Management
ATM	Air Traffic Management
ATSEP	Air Traffic Safety Electronics Personnel
BNI	International NOTAM Bureau
BRIA	Regional Flight Information and Assistance Bureau
CANSO	Civil Air Navigation Service Organisation
CAUTRA	Automatic Air Traffic Coordinator
DSAC	Civil Aviation Safety Directorate
EASA	European Union Aviation Safety Agency
N-VCS	New-Voice Communication System
FABEC	Functional Airspace Block Europe Central
PPO	Performance Management by Objective
RP	Reference Period
SALTO	Swift ATFCM/ASM Local Traffic Optimizer
SDM	SESAR Deployment Manager
SES	Single European Sky
SESAR	Single European Sky ATM Research



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