MINISTÈRE
CHARGÉ
DES TRANSPORTS

Liberté
Égalité
Fraternité

direction générale de l'Aviation civile
DSNA

ANNUAL REPORT

DSNA
THE FRENCH AIR NAVIGATION SERVICE PROVIDER

2024

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Frédéric Guignier

French Air Navigation Services Director

The year 2024 was marked by exceptional air traffic in French airspace, with 3.4 million controlled flights and a record daily peak of 11,632 flights on July 5.

This strong activity reaffirms France's central role in European skies. In this context, the implementation of the "DSNA 2030" strategy is more crucial than ever. As DSNA remains the leading contributor to delays in Europe, this strategy aims to significantly enhance operational performance to meet the legitimate expectations of our clients and partners, and to honor their investments. Our goal is clear: to deliver high-quality service without compromising safety.

Several key milestones were reached in 2024. Our upper airspace is now fully managed in an electronic environment. The Orly control tower and the Tower/Approach system in Fort-de-France (Martinique) are the first to benefit from this next-generation technology. Organizational changes have also been introduced, including new flexibility tools that better align control capacity with traffic demand at each center.

Furthermore, operational resilience has improved. The enforcement of the law requiring prior notification from air traffic controllers in the event of industrial action now enables better anticipation of disruptions, offering greater visibility to airlines and passengers regarding maintained flights.

Environmental responsibility remains a strategic priority. In 2024, DSNA was awarded the international CANSO Green ATM label, recognizing its commitment to the aviation sector's ecological transition. This distinction reflects our determination to place ecoresponsible performance at the heart of our operations.

The Paris 2024 Summer Olympic Games were another major highlight. Managing the temporary closure of Parisian airspace during the opening ceremony was a significant operational challenge, which DSNA successfully met, demonstrating its expertise.

These ongoing transformations are laying the foundation for a modern, high-performing, and ecoresponsible DSNA.
I have full confidence in the collective efforts of DSNA's men and women to ensure the success of this ambitious modernization.

As of December 2024, ***DSNA Steering Committee*** *was composed of :*
Frédéric Guignier (Director), Geoffroy Ville (Interim Director of Strategy and Resources), Guillaume Blandel (Director of Operations), Christophe Rouquié (Director of Technology and Innovation), Carine Donzel-Defigier (Safety Director), Stéphane Le Foll (Head of Environnement Mission) and Anne-Laure Gaumerais (Chief of Staff).

Highlights

▶ JANUARY

Service Organization

Implementation of the law ensuring the predictability of air navigation services during industrial actions.

Ecoresponsibility

Launch of the public inquiry for the 'PBN to ILS' project, aimed at enabling continuous descent operations in west-facing runway configurations at Orly Airport.

▶ FEBRUARY

Human Resources

Commissionning of a new air traffic controller training simulator at Bordeaux SNA, as part of the STARSim program.

Ecoresponsibility

Deployment of new Free Route cells, increasing the Free Route airspace portion in France above FL 195 (6,000 meters) to 70%.

Service Organization

Launch of an action plan in response to a BEA recommendation, aimed at implementing on-site presence monitoring of air traffic controllers within operational units.

▶ MARCH

Event

- Celebration of 50 years of air navigation services at Paris-CDG, marking the airport's entry into service on March 8, 1974.
- DSNA's participation in Airspace World, the world's largest air navigation exhibition, held in Geneva.

Safety

Complete loss of radar visualizations at Marseille ACC.

Service Organization

Transfer of technical site responsibilities: Deauville to Lille, and Poitiers to Bordeaux and Chateauroux.

▶ APRIL

Service Organization

- Transfer of approach control service: Deauville to Rennes, and Rouen to Lille.
- Termination of the Remote Tower Control (RTC) project.

Modernization

iATS: First live trials of the Tower system in a secure electronic environment at Orly.

▶ MAY

Human Resources

Signing of the 2023–2027 DGCA social protocol, supporting DSNA's transformation initiatives.

▶ JUNE

Modernization

Ajaccio : inauguration of new regional maintenance facilities.

▶ JULY – AUGUST

Event

« Paris 2024 » Summer Olympic and Paralympic Games.

Service Organization

Transfer of technical site responsibilities for Limoges to Toulouse.

Performance

Record-breaking day in French airspace with 11,632 flights controlled on July 5 – the highest daily total traffic ever recorded.

▶ SEPTEMBER – OCTOBER

Ecoresponsibility

DSNA awarded the 'Green ATM' label by CANSO.

▶ NOVEMBER

Service Organization

Transfer of lower airspace management from Reims ACC to the Strasbourg and Basel control units.

Modernization

- 4-FLIGHT: final phase of live trials at Paris ACC.
- SEAFLIGHT: Live trails in a secure electronic environment of the Approach/ Tower system in Fort-de-France (French West Indies).
- Construction of a new technical building in Marseille, and ongoing installation of operational systems.

▶ DECEMBER

Modernization

- Signing of a contract with Aireon for the acquisition of a satellite surveillance service to support oceanic airspace management by the Cayenne control center (French Guiana).
- iATS: Final phase of live trials at Orly Airport.

Event

On December 14, 2024, the island of Mayotte was struck by a devastating tropical hurricane, causing extensive damage.

The control tower and air navigation equipment were destroyed. Teams from SNA Indian Ocean maintained a vital air bridge with La Réunion and worked to restore administrative and infrastructure operations. The airport was reopened to commercial flights on January 1, 2025.

Foreword

This 2024 report, while not exhaustive, highlights the efforts undertaken by DSNA throughout the year to ensure the highest possible safety standards and to pursue enhanced operational and environmental performance, for the benefit of its customers and airspace users.

DSNA remains a major air navigation service provider within the European network, handling nearly one in three flights in Europe. It plays a key role in ensuring territorial connectivity and acts as a significant economic stakeholder.

In 2024, air traffic in France surpassed the 2019 reference level by 3% and increased by 6.5% compared to 2023. Positioned at the crossroads of European air traffic flows, DSNA managed operations across a vast airspace of 1 million km², controlling 3.4 million flights - 57% of which were overflights. On 60 separate days, traffic exceeded 11,000 flights. This growth occurred in increasingly constrained airspace, impacted by geopolitical crises, greater use of military training zones, adverse weather conditions, and more seasonal traffic patterns with pronounced peak periods. Combining these challenges, DSNA is still catching up on post-COVID recruitment, with current traffic levels nearly two years ahead of initial recovery forecasts.

In this context, DSNA maintained a high level of vigilance in response to evolving cyber threats and continued to guarantee the safety of its operations. From a financial perspective, DSNA collected €1,892 million in fees in 2024, - an increase from 2023 - driven by the recovery of international flights and overflights. 84% of DSNA's revenue came from foreign-flagged airlines. Its top three clients were Ryanair, easyJet, and Air France.

France remains the leading source of air traffic delays in Europe. However, DSNA works closely with airlines and partners daily to improve overall performance. DSNA faces major challenges to enhance operational performance and resilience, modernize systems and tools, adapt its organizational structure and workforce, support the ecological transition. To meet these challenges, DSNA submitted its 2025–2029 Performance Plan to European authorities. This plan includes a large-scale recruitment initiative for operational staff, a €2 billion investment plan and funding for the DGCA 2023–2027 social protocol. The goal: to build a high-performing, modern, and ecoresponsible DSNA.

DSNA 2030 Strategy
Promising Initial Achievements

DSNA provides air traffic management and air navigation services relying on a workforce of nearly 7,000 staff. It operates under the framework of the DGCA and within a European regulatory framework that sets performance targets in the areas of safety, delays, cost-efficiency, and environmental impact.

The 'DSNA 2030' strategy commits the organization to an ambitious reform agenda. In 2024, each of the transformation axes saw its first concrete achievements.

Enhancing operational performance and resilience

DSNA has implemented initial measures to optimize the opening of control sectors based on demand, allowing for better alignment of services with expected traffic volumes. In addition, the introduction of minimum service management - enabled by the new law on the predictability of air navigation services during industrial action - has improved the correlation between the scale of strikes and the resulting traffic reductions. This has contributed to enhanced performance and resilience. Finally, DSNA has reinforced its security posture by strengthening site access controls, particularly in preparation for the "Paris 2024" Olympic Games.

Modernizing technologies by rationalizing, harmonizing, and standardizing systems, and mastering DSNA's technical architecture

DSNA has taken a significant step forward in system harmonization with the deployment of the 4-FLIGHT system at Paris ACC, joining Reims and Marseille ACCs where it is already operational.
At Orly, the control tower has been modernized with the acquisition of the off-the-shelf iATS system - already in use at Dublin Airport (Ireland) - which integrates advanced ground surveillance, a unified information interface, and electronic flight management, replacing traditional paper strips.
DSNA continues to modernize its infrastructure and networks, while streamlining its communication, navigation, and surveillance systems, such as the next-generation NVCS (Voice Communication System) commissioned at Brest ACC.

"We support this air traffic control reform in France because it is necessary to bring operational efficiency."

Anne Rigail, CEO of Air France, at the DSNA Executive seminar

Aligning our organization and professions to the new challenges of air Navigation

In 2024, DSNA made tangible progress in optimizing its territorial footprint. This included the continued consolidation of Approach control services (Rouen and Deauville), the closure of several maintenance sites (Limoges, Poitiers, Athis, and Metz-Nancy-Lorraine), the nighttime resumption of BTIV operations at Reims ACC, Bordeaux ACC, and Brest ACC, as well as airspace redesign initiatives.
On the human resources front, DSNA recognizes the need to better manage its workforce and adapt its professions to the evolving nature of its mission as an air navigation service provider. To this end, a multi-year employment plan has been established to optimize recruitment, training, and staffing levels. DSNA has also undertaken a skills-mapping initiative to identify the competencies required to meet the rapid transformation of its roles.
In parallel, an ambitious Management Plan has been launched, offering tailored training paths and support systems to equip managers with the tools they need to lead effectively in a changing environment.

Rising to the challenge of ecological transition

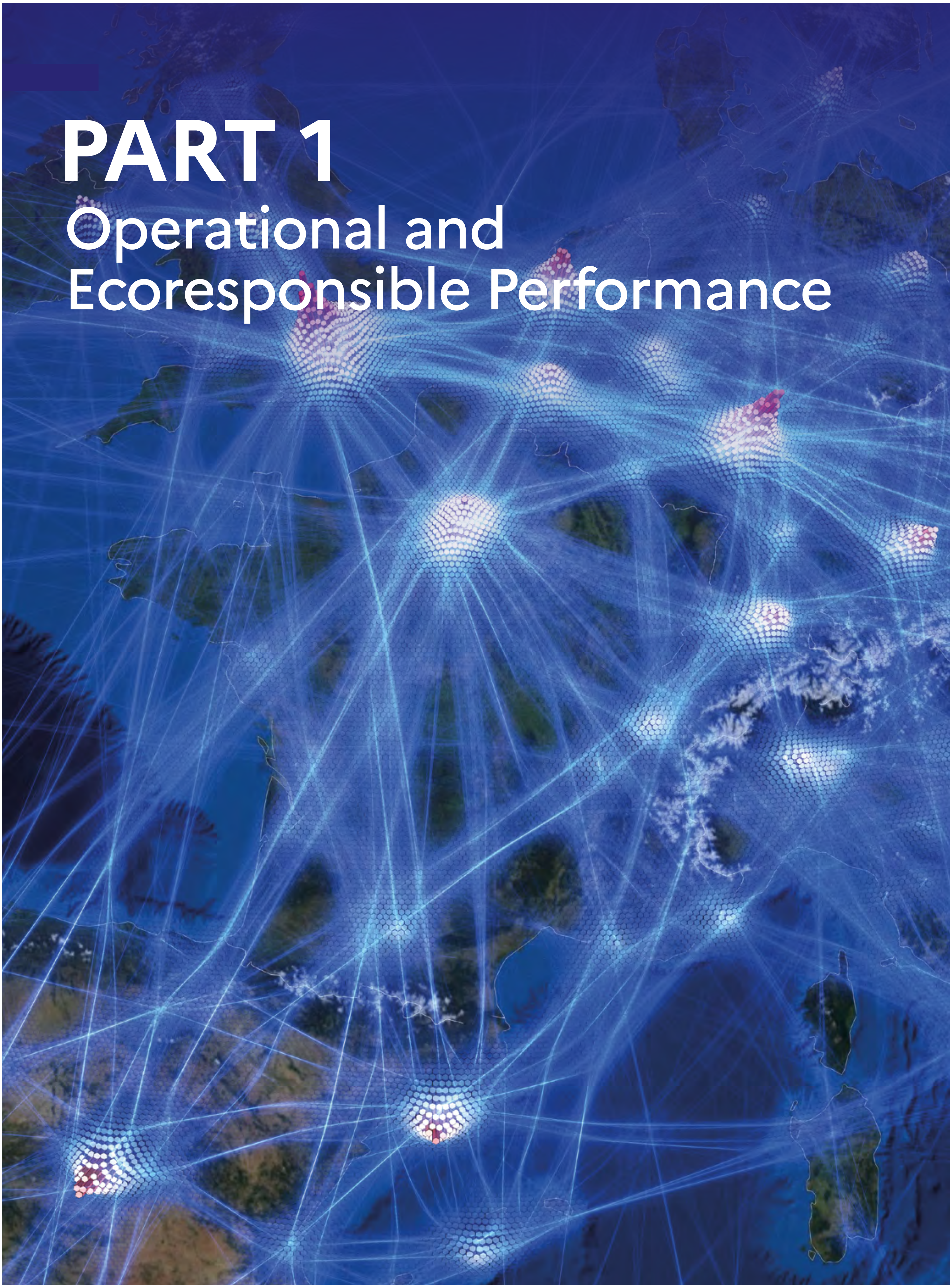
In 2024, DSNA deployed the second wave of Free Route airspace and strengthened its operational cooperation with airlines to implement new, environmentally optimized flight trajectories, as part of the national Green Operations network. It also launched the first initiatives under its Low Carbon Infrastructure plan, including the renovation of the DTI building in Toulouse and the Lyon site. This program aims to reduce DSNA’s carbon emissions by 15% by 2030 and generate €5 million in annual savings. In recognition of its environmental efforts, DSNA achieved Level 2 of the CANSO Green ATM certification and is committed to reaching Level 3 in 2025.

To better engage staff in collective objectives and support its cultural transformation, DSNA began equipping its centers and entities with video screens in 2024. These internal communication tools regularly display updates on project progress and achievements, while also sharing highlights from the professional life of DSNA personnel.

Each year, DSNA organizes **a Strategy Commission with its customers, partners, and other stakeholders to present its strategic orientations** - particularly in terms of operational performance - and to gather feedback. This forum is a key element of DSNA’s customer engagement approach. Airlines regularly commend the transparency of the information shared and the quality of the dialogue established. The 2024 edition featured rich exchanges with around twenty airlines and their associations, military and airport partners, as well as the Network Manager (EUROCONTROL). It also contributed to the user consultation process in preparation for the RP4 Performance Plan covering the 2025–2029 period.

DSNA'S
FIVE VALUES

PART 1
Operational and Ecoresponsible Performance



Operational Performance

AVERAGE NUMBER OF FLIGHTS PER DAY

2023
8,724

2024
9,265

ABSOLUTE DAILY TRAFFIC PEAK

SUMMER 2023
11,012 flights

SUMMER 2024
11,632 flights

AVERAGE ATFCM DELAY PER FLIGHT

2023
2,31 minutes

2024
1,57 minutes

A Dynamic Traffic Recovery

With 3,391,151 controlled flights in 2024, traffic grew by 6.5% compared to 2023. This unprecedented figure was driven by overflights and international flights, which have been steadily increasing since the COVID-19 health crisis: together, they represent 91% of the flights controlled by DSNA. The 'Spain/UK' and 'Spain/Germany' overflights, as well as international flights to/from the UK and Africa, constituted the main traffic flows. Air traffic in France is characterized by strong seasonal and temporal variations and high peaks.

In 2024, the average traffic was 11,000 flights per day during the summer (June/July/August) and 7,300 flights per day during the winter (December/January/February).

Regarding the busiest days in the French airspace, 8 days in 2024 entered the Top 10. The absolute traffic peak was recorded on July 5, 2024, with 11,632 flights, a European record!

In 2024, air traffic in Europe saw significant growth, with notable disparities among countries. DSNA in France is the first Air Navigation Service Provider in Europe : it controls nearly one in three flights in Europe and was the only country to surpass 3 million flights controlled in 2024. Spain and Italy also recorded high levels of traffic. However, the UK and Germany continued to be affected by the geopolitical consequences of the conflict between Ukraine and Russia.

Fleet of Transavia France, the low-cost subsidiary of Air France, parked at the foot of the Orly control tower.

“Prioritising the first rotation for the medium-haul flights: a delay of one minute in the first take-off of the day can result in a four-minute delay in the final rotation of the day ”

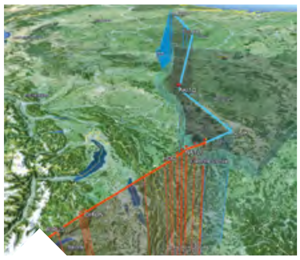
The Network Manager (EUROCONTROL) talking to operators for better flight punctuality.

Punctuality: Encouraging but Insufficient Results

In 2024, France was responsible for 16% of delays in Europe, followed by Germany (13%). It recorded 5.3 million minutes of delay, or an average delay of 1.57 minutes per flight. However, this is **2 million minutes less than in 2023**! The main causes of these delays were the lack of sector openings at peak times (28%), adverse weather conditions (27%), and sectors capacity (24%). The 'Industrial Action' cause accounted for only 3% of these delays thanks to new provisions (p. 29). En-route delays accounted for 83% of these delays. The most penalizing centers were Marseille and Reims ACCs due to a significant traffic surplus (+7%), leading to the saturation of certain control sectors. For Marseille ACC, the capacity recovery following the commissioning of 4-FLIGHT is taking longer than expected due to local technical issues with the system. New system versions should address these issues, but the recovery will depend on the structure of traffic flows and sectors. Finally, the capacity gains observed generated a demand surge for flows that no longer crossed French airspace. Thus, the gained capacity was instantly absorbed by the increased demand. With an 'En-route' performance of 1.02 minute of delay per flight and 'Aerodromes' of 2.38 minutes per flight, France does not meet the performance targets set by the European Commission under the Single European Sky (respectively 0.25 min and 0.40 min).

DSNA is working on a capacity increase plan at several levels: modernization of infrastructure and air traffic control tools, organization of operational staff work adapted to the demanding characteristics of demand, new airspace designs, recruitment for its operational professions in view of the traffic increase and the waves of retirements expected by 2030, reduction of training time for these professions, and territorial reorganization to achieve critical size organizations (p. 30).

A MORE CAPACITIVE UPPER AIRSPACE REDESIGN



The DSNA's 4-FLIGHT system, along with its advanced flight plan processing system Coflight, enables a more capacitive organization of upper airspace. By continuously calculating the flight profile and adapting the servicing of sectors to the filed flight plan, these new perspectives allow for vertical restructuring of the French upper airspace and envision a redesign of sectorization based on trajectories, rather than adapting trajectories to predefined spaces.

High Level of Safety and Security for Operations

Flight safety is DSNA's priority. **The year 2024 was marked by two significant events:**
- The loss of radar visualizations at Marseille ACC for nearly five minutes on March 21, a rare event that was thoroughly analyzed internally at the national level and with the manufacturer to understand the reasons and make recommendations, although no safety event was observed during this outage.
- A runway incursion with conflict at Marseille airport on September 11, which was investigated by the Bureau of Enquiries and Analysis for Civil Aviation Safety (BEA).

All recommendations from these analyses contribute to improving DSNA's practices and reinforcing its high level of safety.

Safety studies on major projects are complex. To facilitate their implementation and validation with the National Supervisory Authority, DSNA has created positions for Regulatory Compliance Managers for major programs. This new structure will provide consolidated information on applicable regulatory requirements in all areas, including security and cyber, benefiting from the experience of the organization set up for the 4-FLIGHT program.

Regarding security and cybersecurity, DSNA has restructured the governance and management of these issues. Work on securing physical sites, particularly isolated ones, and the certification of information systems continued.

Implementation of ECRA Service at Euroairport Basel-Mulhouse
In April 2024, EUROCONTROL and the Euroairport Basel-Mulhouse implemented the ECRA (European Connected Regional Airport) service for the first time in France. This service is based on a collaborative decision-making (CDM) system designed at a limited cost (SESAR concept 'Advanced ATC Tower'). The airport operator and ground handling companies can thus optimize operations with the Network Manager and the Control Tower when an aircraft is delayed in its rotations. This new asset aims to improve network performance at the European level!

DSNA'S ROLE DURING THE PARIS 2024 OLYMPIC AND PARALYMPIC GAMES

In 2024, France hosted the Summer Olympic and Paralympic Games in Paris and ten other cities. To ensure flawless organization of this global sporting event, state services and their partners were fully mobilized. The measures planned in the aviation sector were the subject of intense interministerial work coordinated by the DGCA, involving public and private actors.

The Air and Space Force was responsible for the air security and safety system. During the event, the system was managed by the Civil-Military Air Operations Coordination Center (C3MOA) within a dedicated structure that included various services, including DSNA.

For their part, DSNA services faced several unprecedented challenges in terms of security and cybersecurity, organization, and airspace management to safely and efficiently handle a significant surplus of commercial and business aviation traffic, as well as numerous flights of heads of state, sometimes under difficult stormy weather conditions.

DSNA teams are proud to have contributed to the success of this global event. A brochure has been published on this feedback at the heart of operations, rich in lessons learned!

The ISO 9001:2015 certification was successfully renewed for three years, a necessity to maintain DSNA's compliance with one of the European regulatory requirements for the quality management system. This certificate confirms a high level of excellence in customer listening, as well as in its 'Process and Performance Management' approach. The audit also confirmed that the continuous improvement approach is bearing fruit.

Close Cooperation with the Armed Forces

Airspace is jointly used by civil and military aviation. In this regard, close coordination at all levels between DSNA and the Armed Forces is essential to ensure a high level of safety. The success of the organization of the Paris 2024 Summer Olympic Games, for our business sector, was a perfect illustration of this.

Operationally, airspace modifications are being studied in several regions to better meet new needs: Training Areas adapted for next-generation weapons (ZENA), simplification of the complex South-East zone, and restructuring of the Cognac airspaces. Protocols related to REAPER military drone flights at medium altitude in crisis situations and for drones in general have been signed.

Technically, the deployment of 4-FLIGHT for the co-located military cell (CMCC) at Paris ACC is complete. DSNA also coordinated with the Defense the 'Transition CAUTRA' program responsible for phasing out the old flight data processing system in order to anticipate the impacts on the military air traffic control system.

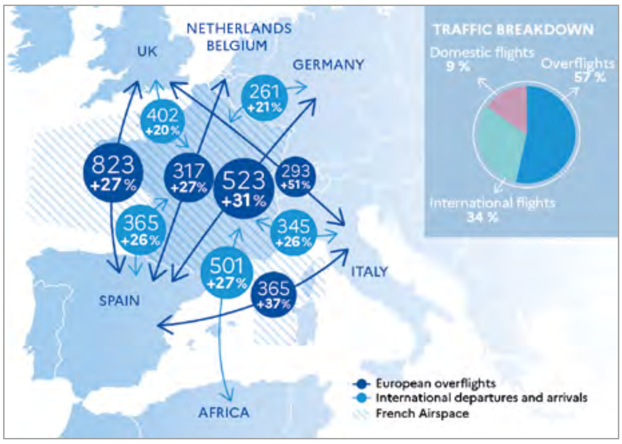
Civilian and military control positions at Reims ACC.

Air Traffic and Flight Punctuality
Key figures

Annual IFR traffic in France

(XX%) : change in traffic compared to the year N-1

Main traffic flows in France
Average daily flights in 2024 and 2024/2023 variation



1,216,671 FLIGHTS
IFR traffic handled by Marseille ACC

France : IFR movements in main airports
(arrivals and departures)

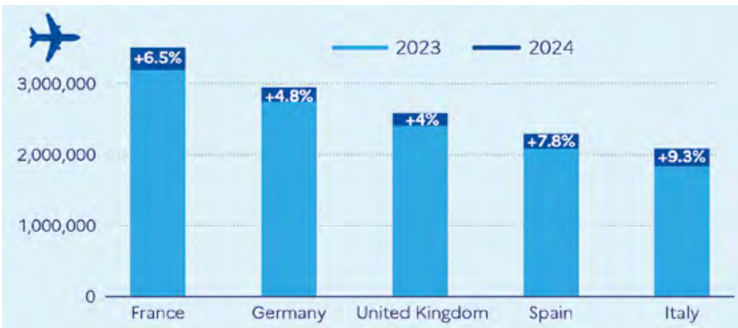
	2023	2024	
Paris - CDG	454,398	465,865	+3%
Paris - Orly	208,329	206,595	-1%
Nice	145,559	139,802	-4%
Marseille	100,254	100,702	0%
Lyon-St Exupéry	89,270	91,388	+2%
Toulouse	76,536	81,634	+7%
Bâle-Mulhouse	70,064	74,746	+7%
Bordeaux	60,324	59,485	-1%
Paris-Le Bourget	58,494	57,160	-2%
Nantes	50,621	52,518	+4%

Overseas Territories : IFR movements
(airports and TMA)

	2023	2024	
Pointe-à-Pître	37,197	36,162	-3%
Fort-de-France	32,594	31,077	-5%
Cayenne	23,368	28,257	21%

XX% 2024/2023 variation

Air traffic in Europe



Flight punctuality in Europe

Ecoresponsible Performance

To support the ecological transition of air transport, DSNA is heavily invested through its major technological modernization programs as well as quick-win, operational projects with airlines.

100,000
TONNES OF FUEL SAVINGS
Environmental gains achieved in the French airspace in 2024 thanks to optimized routes compared to flight plans

Optimizing Flight Profiles

The Green Operations network of DSNA's Operations Directorate initiated an innovative collaboration with airlines to identify projects for optimizing air routes, arrival and departure trajectories that offer rapid and significant environmental and fuel-saving benefits. The defined working methods are then evaluated operationally to measure the gains. The work is shared among control centers to reinforce best practices and generalize harmonized methods.

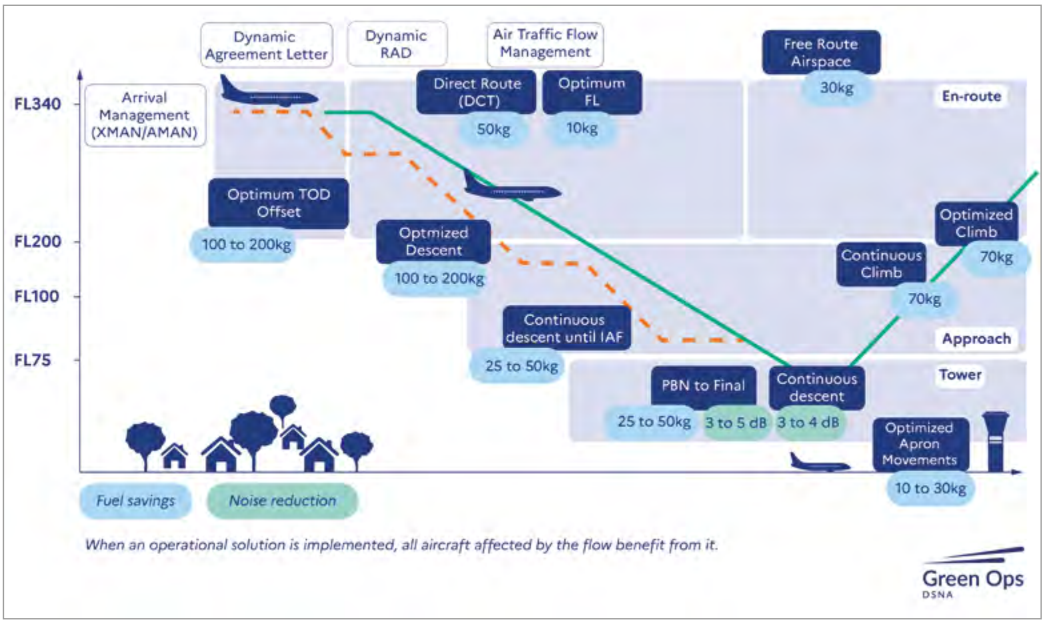
Vertical Efficiency

- **Arrivals to Zurich:** Following the success of the live trial on raising transfer altitudes between France and Switzerland, the letters of agreement between the concerned control centers were modified for winter 2024/2025, thus ensuring an average gain of 37 kg of fuel per aircraft.
- **Arrivals to Paris-CDG:** The PEPAX live trial (optimizing flight level closest to the Top of Descent) continued in 2024. It allows a gain of 200 to 300 kg of fuel for each of the 5 to 7 night flights arriving from the West and Southwest. More broadly, optimized procedures for arrivals saving at least 50 kg of fuel per flight saw their midday slots extended to the night.

Horizontal Efficiency

- **Bordeaux ACC** proposed new direct routes (H24 or plannable at night) or in interface with Brest ACC at the end of 2024.
- **Brest ACC implemented** a Free Route system offering more than 1,000 NM of savings in summer and direct night routes extending beyond Reims ACC.

The operational solutions developed for air traffic control and the average environmental gains on flight performance according to flight phases.




Approach controllers at Lyon Saint-Exupéry airport.

Continuous Descent Operations

→ *Lyon Saint-Exupéry: an example to follow!*

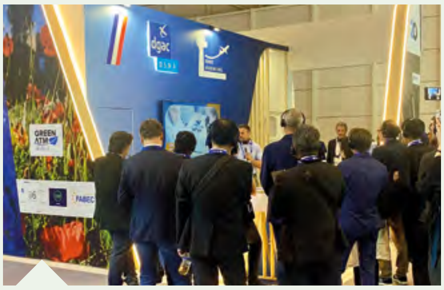
With around twenty arrivals per hour, Lyon Saint-Exupéry airport has a pattern of closed and continuous PBN descent trajectories from the entry points. Directing flights by the controller to one of the many RNAV points on these procedures allows crews to accurately estimate their distance to the runway and thus optimize their descent plan, increasing the rate of Continuous Descent Operations (CDO). Measurements by EUROCONTROL show an increase in 'CDO Noise' from 42% to 56% from FL 75 (2,300 meters), and a reduction in average level-off times.
SNA Center-East and Marseille ACC are working on conditions that would favor the execution of CDO from the Top of Descent to minimize level-offs. In 2024, Nice and Toulouse control units studied a similar system to increase the CDO use rate, which will be evaluated in 2025.

→ *Paris-Orly: a new system to promote CDO in relatively dense traffic.*

In 2024, the 'PBNtoILS' project underwent a public inquiry and received favorable opinions from ACNUSA and the Consultative Commission for the Environment (CCE). This system aims to reduce trajectory dispersion and thus the number of overflown people. In terms of safety, flights can be separated laterally regardless of altitude: level-offs are therefore no longer necessary, and continuous descents become possible even in relatively dense traffic. The operational commissioning of this new system is scheduled for 2025.

+20%
EXPECTED RATE OF CDO USE IN 2030
compared to 2019 at each of the 12 airports monitored by ACNUSA

DSNA awarded « Green ATM » level 2


Promotion of the label on the DSNA stand at Airspace World in Lisbon.

DSNA is proud to have received the Green ATM environmental label from CANSO on November 13, 2024, an internationally recognized cerification. This initiative aims to reward air navigation service providers who have shown concrete efforts in reducing CO_2 emissions and noise pollution in the aviation sector, improving the energy performance of their infrastructure, and reducing their environmental footprint.

This success marks a step towards the goal of a high-performing, modern, and eco-responsible DSNA. DSNA remains committed to developing environmental culture at all levels of its operations and embedding its actions in a continuous improvement dynamic. In particular, a 'Low Carbon Infrastructure' transformation plan has been developed, endowed with €140 million for the period 2024-2029, for the renovation of buildings, energy of remote sites, and the development of quick-win measures. An annual operating cost reduction of around €5 million is envisaged.

This distinction also provides overall coherence to DSNA's actions, and with its customers and partners often engaged in similar initiatives. It encourages continued efforts to integrate ecoresponsibility into its operations.

PART 2
Modernization of Air Traffic System Systems and Infrastructure

Modernization of ATC tools

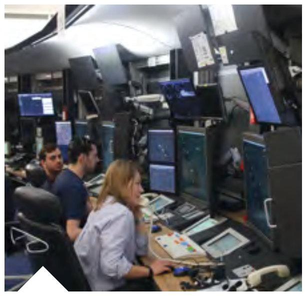
DSNA continues to modernize its Air Traffic Control (ATC) systems, standardizing its tools to facilitate maintenance and evolution, and rationalizing costs by anticipating the withdrawal of legacy systems to limit the coexistence period of several architectures.

4-FLIGHT: A New Vision of En-route Air Traffic Management in France

Developed by Thales, the 4-FLIGHT system continues its deployment from East to West! This next-generation stripless ATC system offers innovative features for controllers and integrates an advanced flight data processing system (Coflight).

4-FLIGHT represents a major change, requiring new working methods. The new system has supported the growth of air traffic in the airspaces managed by Reims and Marseille ACCs (+7% in 2024), equipped since 2022. In 2024, a major update of the system, both technically and operationally, involved these two ACCs and the CESNAC, DSNA's central systems and networks operations center based in Bordeaux.

In 2024, the focus was on commissioning 4-FLIGHT at Paris ACC. DSNA and Thales teams worked closely to adapt the tool to this specific environment of the Paris region. Since 2023, several evaluations on real traffic in secure mode have been conducted to bring more maturity to the system and consolidate its adoption by controllers and technical staff. This ramp-up of the tool was accompanied by mass simulator training for about 330 controllers (about 100 days of training) and 40 maintenance engineers. After the Paris 2024 Summer Olympics, in close coordination with airlines and partners (EUROCONTROL, Aéroports de Paris), Paris ACC switched to the 4-FLIGHT system in the final phase of operational evaluation on November 5, 2024. To ensure a safe transition, the DGCA asked airlines to reduce their flight plannings by 5% from Paris airports. To offer nominal capacity during the holiday season, this phase was interrupted on December 10, with a return to the legacy system until January 7, 2025. Finally, **4-FLIGHT was officially commissioned at Paris ACC on February 11, 2025**, with a temporary capacity reduction of about 10%. A gradual return to nominal capacity, sector by sector, is planned for summer 2025.
Thus, since early 2025, French upper airspace is fully managed in an electronic environment! DSNA is now focused on having a single common system for the 5 ACCs. Next step: Brest ACC, where in 2024, technical installations and initial simulator training progressed well.



THE DEVELOPMENT OF THE 4-FLIGHT SYSTEM AT PARIS ACC
was particularly complex, as it had to take into account :
- an environment specific to the Paris region (overflights account for only around 30% of the traffic controlled by this center);
- the immediate consequences for busy airports (Paris-CDG, Paris-Orly and Beauvais) as soon as capacity is reduced;
- a balance between training and operational staff.

Towers and Approaches

The first phase of modernizing Tower and Approach control systems in mainland France (SYSAT program) focuses on the largest control Towers. In 2024, the Orly control tower led the way in this major technological evolution. In overseas territories, the modernization of Air Traffic Management systems, driven by the SEAFLIGHT program, will offer quality public service. First step: Martinique (The French West Indies).

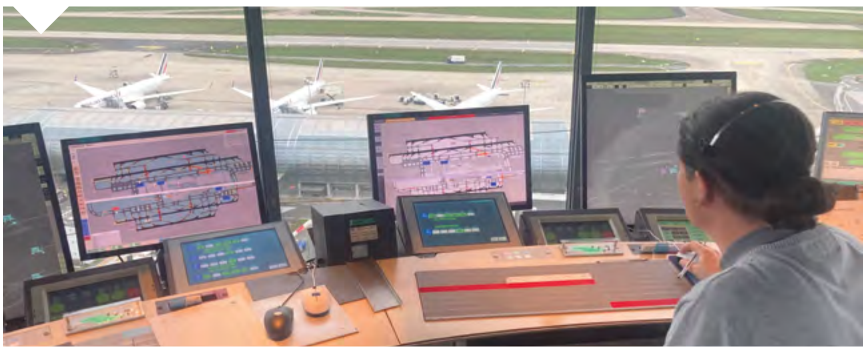
Workposition « iATS » at Orly Tower.

In November 2024, **the North and South Towers of Paris-CDG evaluated the AVISO 2 system on real traffic**. Developed by the manufacturer INDRA, AVISO 2 aims to replace the first version of this ground movement surveillance system, which has become obsolete.
AVISO 2 is scheduled to be commissioned in 2025 for the three control Towers and two Apron rooms. This next-generation system is the first step towards migrating to a stripless environment, allowing electronic clearance entry. It will also meet the requirements of the European CP 1 regulation for safety alerts.

→ *Orly Tower in Electronic Stripping*

The Orly iATS system was developed in collaboration with the SAAB-CS consortium based on an existing industrial product already in service at similar-sized airports. It combines an advanced ground surveillance system, an electronic strip tablet, and a general information device. The electronic environment provides controllers with useful alerts on ground and flight movements, such as detecting non-stabilized approaches (ANS) or below glide path.

The deployment of this ATC tool is the first to materialize DSNA's new 'off-the-shelf' procurement strategy. Its development introduced a new paradigm where working methods had to be adapted to the tool, rather than vice versa. With this approach, DSNA benefits from an evolving system with regular updates managed by the manufacturer.
After a series of essential evaluations with live traffic to adjust settings, correct software and hardware anomalies, and refine working methods, **the iATS system was declared in operational evaluation on December 17, 2024**, a great success for safety and service to our customers and users!
Thus, in two and a half years, with an organization entirely dedicated to the project, **the Orly control Tower has the first metropolitan DSNA control Tower with electronic stripping!**



Workposition "SEAFLIGHT" at Fort-de-France Tower.

SEAFLIGHT PROGRAM OVERSEAS

The new ATC system evaluated at the Fort-de-France pilot-site offers next-generation control support tools in an electronic environment for safer, smoother air traffic management. The tool will be gradually rolled out to other sites in the French overseas territories.

→ *Martinique : an electronic stripping system for Tower/Approach*

Based on the existing AURORA system developed for oceanic en-route control by the Canadian manufacturer ADACEL, this next-generation tool was first deployed for oceanic control in French Guiana. Then, thanks to a highly motivated DSNA team and reinforced project management, it was adapted to develop a complete electronic stripping ATC system for Tower/Approach, a first for DSNA!

The evaluation phase on real traffic began on November 13, 2024. SEAFLIGHT will be officially commissioned in Fort-de-France (Martinique) on May 14, 2025.

Expected benefits:

- Operational: enhanced safety, more efficient working methods integrating short-term automatic coordination and data exchange with neighbouring regional centers;
- Cost rationalization: more synergy and pooling between the three remote sites (Pointe-à-Pitre, Fort-de-France, Cayenne) of the SNA in maintenance, training, and future developments;
- Better data collection for air navigation charges and statistics.

Data Link: Action Plan in 2024 to Consolidate Service Quality

- **Reinforcing Technical Performance**

Encouraging results to strengthen the use of CPDLC (Controller-Pilot Data Link Communications) messages in Europe should not overshadow the difficulties encountered with the performance of air/ground VHF telecommunications links provided by telecommunications providers, SITA and Collins. Failures encountered during periods of heavy traffic have impacted capacity, and a European-wide action plan has been implemented to address this growing volume of exchanged data. To reduce the risk of saturation of digital VHF links used by the Data Link service, DSNA and its counterparts are relying on the use of the new IRIS satellite service provided by the EGNOS Satellite Services Provider (ESSP). In 2024, four easyJet aircraft regularly exchanged CPDLC data via IRIS with excellent performance. Therefore, in synergy with its European partners, including Airbus and ESSP, DSNA is working for a rapid and widespread deployment of the IRIS service in Europe and the expansion of these onboard equipment.

CPDLC IN FRANCE IN 2024

60% : aircraft connection rate.

+37% clearances via Data Link compared to 2023.

2,500 fewer oral communications hours per month on frequency.

Display of flight data (4D trajectories, predicted speed...) on the controller's 4Me tool at Reims ACC / SESAR 2023.

• Anticipating the Deployment of New Services

The contractual model for purchasing Data Link services will evolve towards a European common purchase model from a single provider called Data Link Service Provider (DSP). This model should allow for cost-sharing of Data Link services in Europe, improve and harmonize service quality, and accelerate the implementation of future developments. The implementation date will be defined to be in phase with the new European Single Sky SES2+ regulation that came into force on December 1, 2024.

• Data Link "En-route"

The European CP1 regulation requires that by the end of 2027, air navigation service providers implement the ADS-C/EPP service. It will allow the aircraft's onboard trajectory to be displayed on controllers' screens. DSNA is preparing for this deadline with the deployment of 4-FLIGHT.

• Data Link "Approach / Tower"

The D-ATIS service, already in operation at six metropolitan airports (Lyon, Nice, Paris-CDG & Le Bourget, Paris-Orly, Pau), has been highly praised by airspace users. In synergy with the objectives of the SYSAT program, DSNA aims for a wider deployment of this service in metropolitan France and will launch a study for overseas centers.

A New System Architecture

DSNA strives to reduce the transition phase, during which legacy and new systems must be maintained in operational conditions, to limit the workload of technical services.

The CAUTRA system is DSNA's historical system that provides control services to ACCs, Approaches & Towers, and external providers like EUROCONTROL with flight and surveillance 'Air' data. This aging system no longer meets current requirements in terms of performance, regulation, and interoperability. The gradual implementation of new air traffic control tools (4-FLIGHT and SYSAT) leads DSNA to rethink the technical architecture of its air traffic management with major organizational, operational, technical, and safety challenges. Additionally, the obsolescence of certain critical systems for safety is a major concern for DSNA.
The mission of the « Transition CAUTRA » program is to address both immediate issues related to system obsolescence while rationalizing current infrastructures and resources: freeing up resources and investing in future skills to ensure better operational continuity while reducing the complexity of the current architecture.
DSNA is working on the gradual withdrawal of CAUTRA systems from En-route centers and Approaches. These efforts are an enabler for the arrival of SYSAT programs and the continued deployment of 4-FLIGHT in ACCs.

APPROACHES: SCHEDULED REPLACEMENT OF DACOTA

The DACOTA system provides essential data for 'Air' surveillance visualization in certain Approaches. To address the outdated technology of this tool, DSNA will replace it with a proven solution in ACCs: providing a consolidated image from the 4-FLIGHT and EXSA tracking systems. This evolution, which will be accompanied by the gradual dismantling of DACOTA, embodies a necessary approach towards maintaining performance and safety.

Approach room at Nice-Côte d'Azur control unit.

Workposition « 4-FLIGHT » at Paris ACC.

Modernization of infrastructure

A Satellite-based Surveillance Service for the Oceanic Airspace in French Guiana

The oceanic control center in Cayenne currently uses ADS-B solely for monitoring flights in the northern part of the land area. Although this system provides more accurate detection than the military radars currently in use, it remains insufficient for full coverage due to French Guiana's complex topography. To extend its surveillance capacity to oceanic airspace and improve service quality in the domestic sector, DSNA signed a service acquisition contract with Aireon in December 2024, based on its satellite coverage. Eventually, the minimum separation between aircraft over the ocean - currently set at 100 NM (185 km) could be halved.

Cayenne: control position with electronic stripping display (CACAO 2). The Cayenne FIR covers an area nearly three times the size of mainland France FIR.

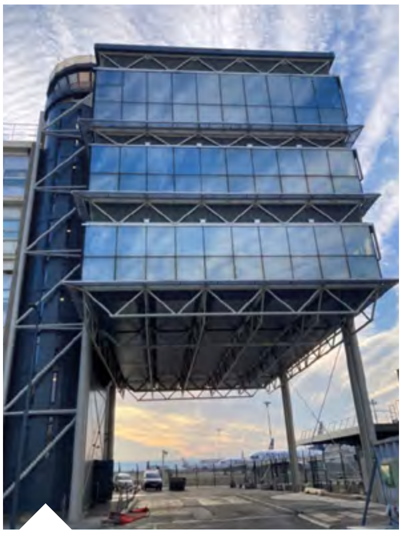
In 2024, DSNA also subscribed to another Aireon service for **Search and Rescue (SAR)** in its overseas centers (The French West Indies, French Guiana, French Polynesia, New Caledonia, Réunion). This service enables near-instant 3D visualization of the last ten minutes of an aircraft's flight. This satellite solution facilitates real-time confirmation in the event of lost communication with an ADS-B-equipped aircraft.

A New Technical Block in Marseille

The civil engineering work for the extension of the existing building has been completed, creating office space and new areas dedicated to the Tower and Approach simulator of SNA South-South-East. Installation of operational systems has begun. The technical room is scheduled to be available in May 2025, with the IFR room expected to be operational by the end of 2025.

A New Building for Regional Maintenance in Ajaccio

Regional maintenance in the South Corsica was previously isolated service. It was decoded to design a new building and relocate it at the foot of the control Tower (p. 16). The new building was inaugurated on June 18, 2024. It houses a technical supervision room, and in the event of an alert, ATSEPs work on all technical equipment related to the Ajaccio and Figari control units, as well as on remote sites with advanced radio antennas and ground-based radionavigation systems. A remarkable achievement addressing the major challenges of air transport in Corsica!



The new technical block in Marseille: a long-awaited new working environment for staff!

Technical supervision room in Ajaccio.

At the **European** level

DSNA leads its research within the framework of the European SESAR research and innovation program, the technological pillar of the Single European Sky. Involving all operational and industrial stakeholders in the sector, SESAR projects are shaping the future of air navigation in Europe by seeking harmonization of procedures to establish common standards.

DSNA is a founding member of SESAR 3 [2021, 2030]. In phase 1, DSNA is involved in 19 projects, with expected European co-funding of €5 million. Here is a focus on its participation in two projects.

- **The VITACY Project**

The VITACY project (Virtualisation and cyber-secure data-sharing) aims to continue developing the necessary services between ATM Data Service Providers (ADSPs) and Air Traffic Service Units (ATSUs) within a Virtual Center architecture, while addressing cybersecurity constraints. A planned exercise in 2025 will provide the necessary elements for standardizing these services, enabling **interoperability between ADSPs and ATSUs** equipped by different manufacturers.

- **The DIALOG Project**

This exploratory research project, led by DSNA and its German counterpart DFS, aims to understand the conditions under which a digital assistant can effectively assist the air traffic controller in specific tasks. To this end, DIALOG will anticipate controller's intentions in certain situations, and to develop real-time methods for assessing workload and attention. This effective collaboration between humans and **Artificial Intelligence** will comply with the framework set by EASA. Within DIALOG, DSNA contributes to defining the operational concept, to voice recognition on the control frequency, and modeling controller actions.

REDUCING ATM INEFFICIENCIES

Created in 2014 by the European Commission, the **SESAR Deployment Manager (SDM)** is responsible for coordinating and synchronizing the implementation of operational improvements as required by the Common Projects (CP) under EU regulations. A significant part of these advances has been financially supported by the European Union through the Connecting Europe Facility (CEF). Over the past ten years, the SDM has coordinated €1.5 billion in EU grants, mobilizing a total investment of over €3 billion.

Mariagrazia La Piscopia, SDM Executive Director, in front of 4-FLIGHT control positions at Paris ACC.

"We are proud to have strong partners like DSNA. As a founding member, DSNA has supported us with unmatched expertise and commitment. The successful implementation of 4-FLIGHT, which received European co-funding for expected benefits in terms of punctuality, fuel savings, and CO_2 reduction at the European level, is a great example of teamwork and how SESAR projects translate into tangible operational benefits."

sesar DEPLOYMENT MANAGER

The European ATM Master Plan

Making European skies the most efficient and ecoresponsible in the world! The new version of the Air Traffic Management (ATM) Master Plan, led by the SESAR Joint Undertaking, was published on December 12, 2024. It is a key tool for planning modernization in Europe and improving flight performance. The plan is based on accelerating the deployment of SESAR solutions so that by 2045, flights are optimized from departure to arrival for seamless connectivity. It also aligns with the new European defense and security context.

PART 3
An Adapted Organization

Human Resources

STUDENTS IN INITIAL TRAINING IN 2024

127
ATCO STUDENTS

86
ATSEP STUDENTS

94
TSEEAC STUDENTS

5 years
AVERAGE DURATION OF TRAINING FOR AN ATCO STUDENT **from entry at ENAC until qualification in an ACC in 2024**

Reims ACC : video session with You Tubeur Ludovic_B to promote ATSEP jobs to young people.

"In February 2024, Bordeaux SNA inaugurated its new simulator for air traffic controller training. After configuring the system, designing an exercise catalog, and training a pool of 'radar echo' pilots, we held the first training session in September. This new tool is highly appreciated as it increases local training opportunities across all control positions."
Training Division, Bordeaux SNA.

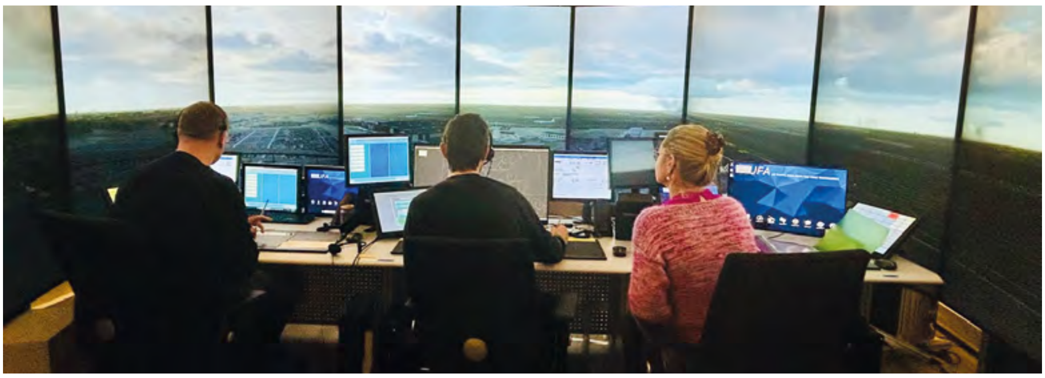
As of December 31, 2024, DSNA employed 7,002 people, with a gender distribution of 73% men and 27% women. Of these, 93% (6,512) were based in mainland France, and 7% (490) in overseas territories (the French West Indies, Indian Ocean, Saint-Pierre-et-Miquelon, and Pacific overseas collectivities: French Polynesia, New Caledonia, Wallis and Futuna).
DSNA manages the careers of technical corps including ICNA (Air Traffic Control Engineers) and ATSEPs (Air Navigation Systems Engineers). As for TSEEAC (Senior Aviation Technicians), 61% of them were working at DSNA as of December 31, 2024.

Recruitment and Initial Training at ENAC

By the 2030s, nearly one-third of operational staff will retire. Given the time required to be qualified, the DGCA has approved a multi-year recruitment plan (2023–2027) for ATCOs and ATSEPs: 128 students in 2024, 152 in 2025, 160 in 2026 and 2027 for ATCOs ; at least 300 students for ATSEPs.
DSNA entrusts the initial training of its operational staff to the Civil Aviation Academy (ENAC).
In this context of massive recruitment, DSNA, in collaboration with ENAC, has developed new communication materials, especially digital, to make these professions more attractive to new generations. A physical presence was ensured in student fairs, high school forums, preparatory classes, IUTs, and thanks to also high activity on social networks, the number of applicants for the 2024/2025 entrance exams has met expectations!
At the same time, ENAC is increasing its training capacity and working with DSNA to reduce the training duration.

Next-Generation Simulators in SNA

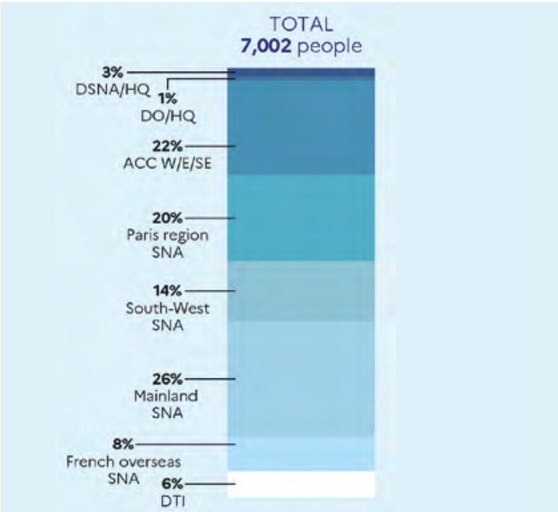
To optimize on-site training for air traffic controllers, DSNA launched a modern simulator acquisition plan under the STARSim program. In 2024, 10 simulators were already deployed at Paris-CDG, Paris-Orly, Paris-Saclay Versailles (Toussus), Brest, Bâle-Mulhouse, Bordeaux, Nantes, Nice, Lille, and Toulouse.
These simulators support training on 24 airfields. They provide effective, accessible, as close as possible to operational reality training, including for unusual situations. Moreover, they save training time.



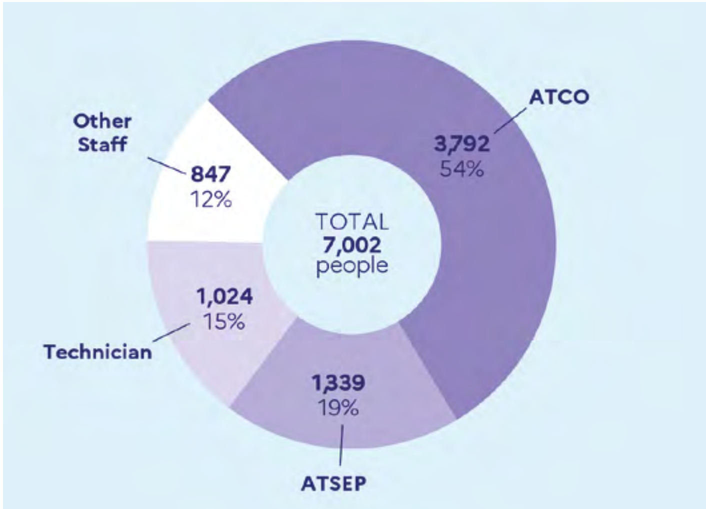
In some figures

Data in mainland France and in overseas Territories at 31 December 2024.

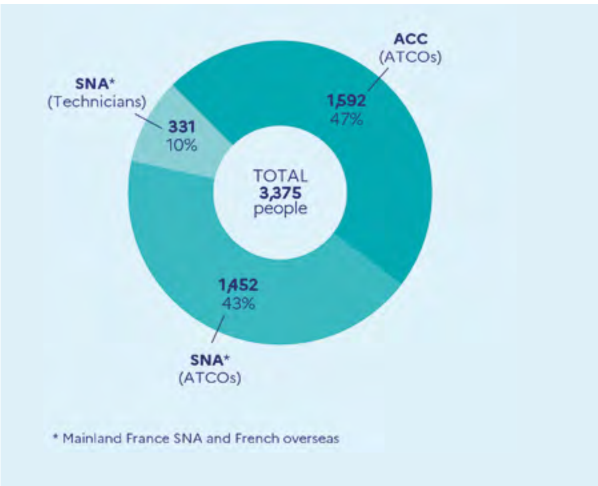
Staff distribution by service



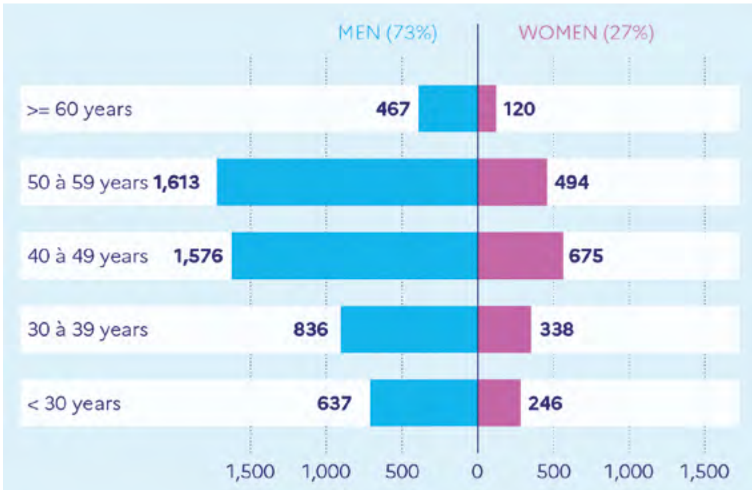
Staff distribution by category



Distribution of controller holding a valid licence by control unit type



Age pyramid



ROISSY-CDG AIRPORT CELEBRATES ITS 50TH ANNIVERSARY IN 2024!

To pay tribute to the professionalism and unwavering passion of the air navigation personnel who have accompanied the development of this airport, which has become one of the busiest in Europe, DSNA, in collaboration with the Civil Aviation Memory Mission at DGCA and the GIACRE Association, has organized a travelling exhibition retracing the major milestones in the evolution of air traffic control at this airport, closely linked to the activity at Le Bourget airport.
The Paris-CDG & Le Bourget air traffic control units, a collective force for professional excellence !

Financial resources

2024 Revenue

DSNA's budget is primarily funded through charges collected from airlines for air traffic control services. As such, its revenue is directly dependent on the volume of controlled air traffic. In 2024, 84% of DSNA's revenue in mainland France came from foreign-flagged airlines.

• Execution Compared to the Finance Act
In terms of charges, 2024 saw an overperformance in en-route fees, with a total budget of €1,593 million compared to €1,554 million forecasted in the Finance Act. This reflects a strong recovery in long-haul international flights. Terminal charges (RSTCA), however, were 2.8% below the Finance Act forecast, as traffic remained below 2019 levels.
In overseas Territories, collected charges reached €51.1 million, a record high!

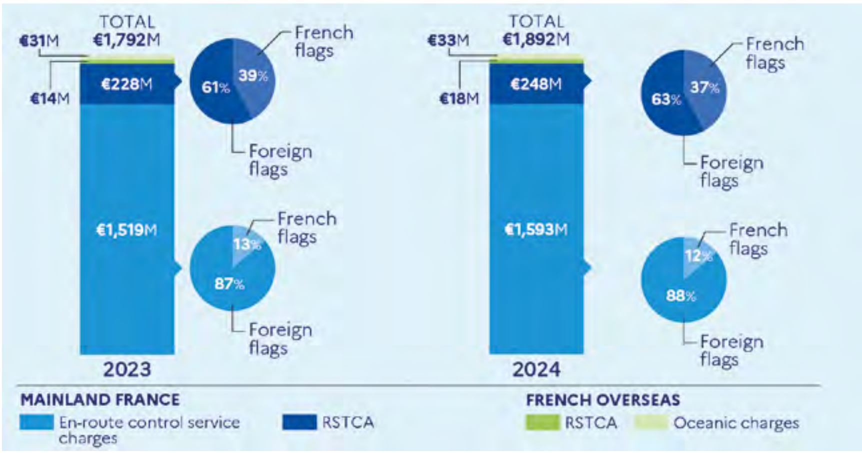
• Execution Compared to the Performance Plan

→ En-route Charges
2024 ended with a +7.8% increase in service unit volume (UDS) compared to 2023. The performance plan had forecasted a +6.5% increase to set the 2024 rate, resulting in a 1.2% over-recovery of UDS, equivalent to €20 million. However, this variation will not trigger the user reimbursement mechanism.
Compared with 2019, the average distance flown in French airspace is down 1.5% (-7 km) and the average takeoff weight is up 7% (+6 tonnes). This underlying trend reflects the optimization of trajectories with aircraft offering greater autonomy and capacity, and the gradual withdrawal of smaller modules by airlines.

DSNA revenues

			Number of service units (UDS)		Unit rates	
			2023	2024	2023	2024
Mainland France	En-route charges		21,087,600	22,734,272	73.60 €	70.88 €
	Terminal charges (RSTCA)	Zone 1	572,770	581,193	205.45 €	200.48 €
		Zone 2	493,300	502,372	247.90 €	277.01 €
French overseas	Oceanic charges		624,645	655,152	35.78 €	35.78 €
	RSTCA		2,993,078	2,898,224	12.00 €	12.00 €

Air navigation charges (invoice amounts)



DSNA's main customers
Airline's share of DSNA budget

Ryanair	↗	14,2 %	Vueling	→	3,7 %
Easyjet	→	10,5 %	British Airways	→	3,4 %
Air France	↘	7,8 %	Transavia France	→	2,8 %

July 26, 2024: air traffic bypasses the Paris region during the opening ceremony of the Olympic Games in the heart of Paris.

→ *Terminal Charges*

- For zone 1 (Paris): the 2024 UDS volume was set at 98% of 2019 activity and +4.6% over 2023 in the revised RP3 performance plan. The actual figures reached 96.2% and +2.7%, respectively, resulting in a -1.8% deviation from the plan and a €2.2 million under-recovery. Paris hubs (CDG and Orly) account for 53%

- For zone 2: the volume of UDS was set for 2024 at +2% of 2019 activity and +13.9% of 2023 activity in the revised RP3 performance plan. The actual figures for 2024 close at 92% and +2.7% respectively, i.e. -9.8% compared with the performance plan. This represents an under-recovery of -15 M€. This variation will give rise in 2026 to adjustments in the RP4 performance plan [2025, 2029], in accordance with the provisions of European regulation 2019/317.

The increase in revenue also enables DSNA to contribute to reducing the debt of the DGCA's annex budget (BACEA).
The new "Single European Sky 2+" regulation, published on November 11, 2024, introduces new measures such as the possibility to modulate en-route charges to encourage airspace users to reduce their carbon footprint.

Expenses 2024

While revenues are derived from fees collected for services provided, DSNA's expenses, as a French administration within the DGCA, fall within the framework of the Civil Service.
The 2024 budget has taken into account DSNA's major needs in terms of its technical investment program to meet its "DSNA 2030" strategic challenges, in particular maintenance in operational conditions and investment programs which have continued with :
• Modernization of technical systems (p. 17);
• An initial functional mapping of information systems to improve management of technological transformation;
• The acceleration of physical and cyber security at sites involved in the Paris 2024 Olympic Games.
• The launch of new "Low-carbon infrastructures" and "4-FLIGHT Revolution" operations

Operating costs	71,749,265 €	11 %
External organisations	223,439,057 €	34 %
Investments	355,493,886 €	55 %
Infrastructures	148,301,773 €	42 %
ATC	170,368,814 €	48 %
Services	36,823,299 €	10 %
TOTAL	650,682,208 €	

In 2024, DSNA consumed €650.6 million in payment credits (CP), representing 99.7% of the CP allocated in the Initial Finance Law. A remarkable result, thanks to the hard work of all those involved in the expenditure chain!

The iATS sytem with its 3 display screens.

An **Optimized New Work** Organization

The significant delays generated by the French air navigation system reflect an underperformance compared to neighbouring European control centers. This gap in air traffic control efficiency is partly due to an overly rigid work organization. Redefining operational needs with a more flexible structure, planning staff assignments over several years, and optimizing DSNA's territorial footprint are all key developments outlined in the "DSNA 2030" strategic plan. These changes will enhance productivity alongside modernization projects and improve both operational performance and resilience.

Staff Management Aligned with Operational Needs

DSNA is striving to optimize the management of its operational staff to ensure a more resilient and efficient service. A multi-year assignment plan (2025–2030) has been defined for ATCOs, and a similar initiative has been launched for ATSEPs. These measures will be valuable assets for better organizing workforce allocation.

→ Control Workforce : Adapting Staffing to Expected Traffic Load

To address capacity challenges and the "hyper-seasonality" of traffic, DSNA has implemented densified rosters in the five ACCs and in several major Approach units. In the ACCs, improved traffic forecasting, the development of new HR tools, and technological modernization allow for more precise sector openings based on demand, enabling better staffing in operations rooms.

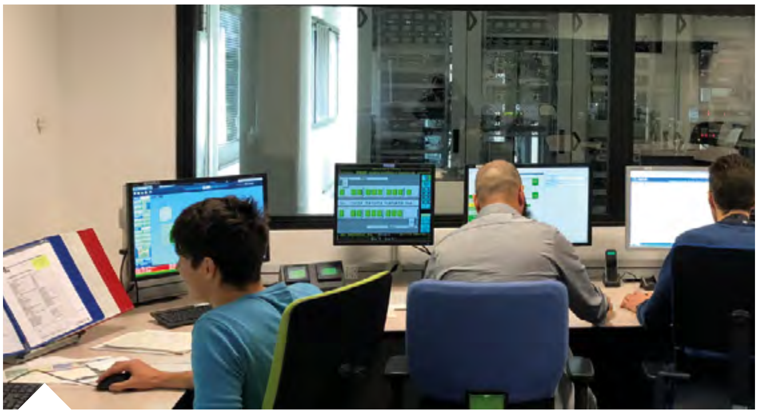
Redesigning Airspace for Optimized Management: Transfer of Airspace from Reims ACC to Strasbourg and Bâle-Mulhouse Approaches

With the gradual implementation of its new tools, DSNA is working to simplify the organization of its airspace, making it more efficient in terms of safety, capacity, and environmental performance of flights.
As part of this effort, the airspace managed by Reims ACC located between the Strasbourg and Bâle-Mulhouse TMAs and up to FL 195 (6,000 meters) was successfully transferred to these two Approach units on November 28, 2024.
For Reims ACC, this transfer allows it to focus its sector offerings on upper airspace and better tailor the specialization of ATC tools, airspace, and associated working methods. In fact, 75% of its traffic operates above FL 345 (10,500 meters), where technical modernization has delivered the greatest capacity gains. This reorganization will also facilitate continuous descent operations toward Luxembourg.
As for SNA North-East, it now manages a more coherent volume of airspace. Controllers benefited from high-quality training using a state-of-the-art simulator (the STARSim program), a tool that has helped reduce both training time and costs!

Approach room at Strasbourg control unit.

→ Technical Workforce : Strengthening Focus on Priority Tasks

The technical workforce encompasses a wide range of professions that are essential to system modernization and safety. It plays a key role in DSNA's operational and economic performance.
The implementation of an intensive program to modernize technical systems will gradually lead these professionals to take on new roles and acquire new skills. To support this transition, DSNA is exploring various scenarios to centralize certain tasks. Moreover, to ensure that the technical workforce can handle both system maintenance and modernization with limited qualified staff, a territorial reorganization of maintenance operations has been carried out:
- Since March 1, 2024: the Technical Department of SNA South-West (Bordeaux) has taken over ATM maintenance for Poitiers and CNS maintenance for Châteauroux ; the Technical Department of SNA North (Lille) has taken over maintenance for Deauville.
- Since July 1, 2024: the Technical Department of SNA South (Toulouse) has taken over CNS maintenance for Limoges.



Technical supervision room at Strasbourg control unit.

New Measures in the Event of Strikes

In 2023, national industrial actions related to pension reform were particularly frequent. For DSNA, they were by far the leading cause of air traffic delays, severely impacting airlines and passengers due to the lack of reliable information on the number of striking air traffic controllers in each team.
Following these events, the French Parliament introduced a requirement for individual strike declarations two days in advance. This measure aims to better anticipate available control capacity and implement proactive and proportionate traffic management measures.
The law on the predictability of air navigation services during social movements, and on aligning traffic reductions with the scale of strikes, was published on December 28, 2023.
This new approach had immediate effects in 2024: although the national context was less contentious, delays attributed to "Industrial Action" in air navigation dropped significantly, from 3 million minutes in 2023 to 200,000 minutes in 2024.

ATCOs On-Site Presence Monitoring

To meet a BEA safety recommendation, DSNA conducted on-site presence checks for operational staff. Measures were taken in cases of discrepancies between actual presence and scheduled shifts. These actions aim to enhance safety and facilitate the analysis of safety-related events.
In collaboration with social partners, DSNA plans to make these checks systematic in 2025.
Presence monitoring systems are also planned for installation at the five ACCs, as well as the Approach units of Paris-CDG, Paris-Orly, and Nice.
This type of monitoring is already in place at DSNA's European counterparts: DFS (Germany), Skyguide (Switzerland), ENAV (Italy), and ENAIRE (Spain).

Optimizing DSNA's Territorial Footprint

DSNA plans to gradually disengage from smal airfields in order to strengthen its position in airports of critical size. This approach aims to enhance service quality and safety, optimize the management of operational staff, ensure greater resilience, and control costs more effectively.

Control Tower at Merville (SNA North).

Currently, to manage lower airspace in mainland France, DSNA operates 28 Approach units and 79 Control Towers, whereas its German counterpart provides the same service with only 4 Approaches and 16 Towers.
This overly fragmented setup, combined with increasing staffing pressures and the need to refocus technical investments, calls for a redefinition of this scope. The goal is to enable DSNA to fulfill its mission in an ecoresponsible manner and with the level of performance expected by its customers and European authorities.
DSNA is targeting 18 Approach units by 2030 and around 50 control towers with ATC services by 2034.
The six airports included in the first phase of this reform, scheduled for withdrawal of ATC services by 2028, are: Quimper-Bretagne, Albert-Picardie, Merville-Calonne, Colmar-Houssen, Saint-Étienne Loire, and Agen-La Garenne.
The DGCA does not underestimate the complexity and sensitivity of this type of reform, particularly at the regional level. It is being carried out under the umbrella of Prefects, in consultation with local elected representatives, operators and main airspace users for these aerodromes.

Aerodrome Flight Information Service (AFIS)
Regarding the withdrawal of ATC services, the objective of the reform is to adapt the level of service to actual traffic, without jeopardizing the activity of the aerodromes concerned. It also aims to reduce costs for all airspace users and improve the overall performance of the DGCA.
Aerodrome operators concerned by the reform will be able to implement a service AFIS, which allows to ensure operations including commercial aviation, while maintaining flight safety. This service is often better suited to this level of activity and offers greater flexibility in terms of opening hours for both operators and users.
Dozens of AFIS units are already in operation across France today.

One Corps of Air Traffic Controllers
Currently, DSNA manages two separate corps of controllers:
• ICNA engineers, who work in ACC and at major airports,
• TSEEAC technicians, who operate in control towers at smaller airfields.
To improve human resource management and provide effective the continuous training of air traffic controllers, DSNA aims to establish one corps of controllers.
The process to amend the ICNA statutory decree has been completed, with implementation scheduled for July 2025.
The first airfields selected to transition toward this unified corps are: Avignon, Béziers, Cannes, Grenoble-Alpes Isère, Lognes, Lyon-Bron, and Toussus-le-Noble.

End of the Remote Tower Center (RTC) Project
This project aimed to provide remote ATC services for small airfields from a centralized center located in Toulouse, within the premises of SNA South.
However, due to resource constraints and delays in the implementation timeline, and as the project no longer aligns with the "DSNA 2030" strategy, DSNA officially terminated the project in April 2024.

Glossary

ACC	Area Control Centre
ACNUSA	Autorité de contrôle des nuisances aéroportuaires
ADS-B	Automatic Dependent Surveillance - Broadcast
ATC	Air Traffic Control
ATCO	Air Traffic Controller (ICNA)
ATFCM	Air Traffic Flow and Capacity Management
ATM	Air Traffic Management
ATSEP	Air Traffic Safety Electronics Personnel (IESSA)
BACEA	Annex Budget for Air Control and Operations
BEA	Bureau d'Enquêtes et d'Analyses pour la sécurité de l'aviation civile
CANSO	Civil Air Navigation Services Organisation
CAUTRA	Coordination automatique du trafic aérien
CDM	Collaborative Decision Making
CESNAC	Centre d'Exploitation des Systèmes de Navigation Aérienne Centraux
CNS	Communications Navigation Surveillance
CPDLC	Controller-Pilot Data Link Communication
DO	Direction des Opérations
DSAC	Direction de la Sécurité de l'Aviation Civile
DTI	Direction de la Technique et de l'Innovation
EASA	European Union Aviation Safety Agency
ENAC	École Nationale de l'Aviation Civile
ESSP	European Satellite Services Provider
FIR	Flight Information Region
FRA	Free Route Airspace
IFR	Instrument Flight Rules
ILS	Instrument Landing System
N-VCS	New Voice Communication System
PBN	Performance Based Navigation
RNAV	Area Navigation
RSTCA	Air Traffic Terminal Charge
RTC	Remote Tower Control
SESAR	Single European Sky ATM Research
SDM	SESAR Deployment Manager
SOC	Security Operations Center
SYSAT	Programme de modernisation des Systèmes des Approches et Tours
TOD	Top Of Descent
TSEEAC	Senior Civil Aviation Technician
VFR	Visual Flight Rules

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MINISTÈRE
CHARGÉ
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