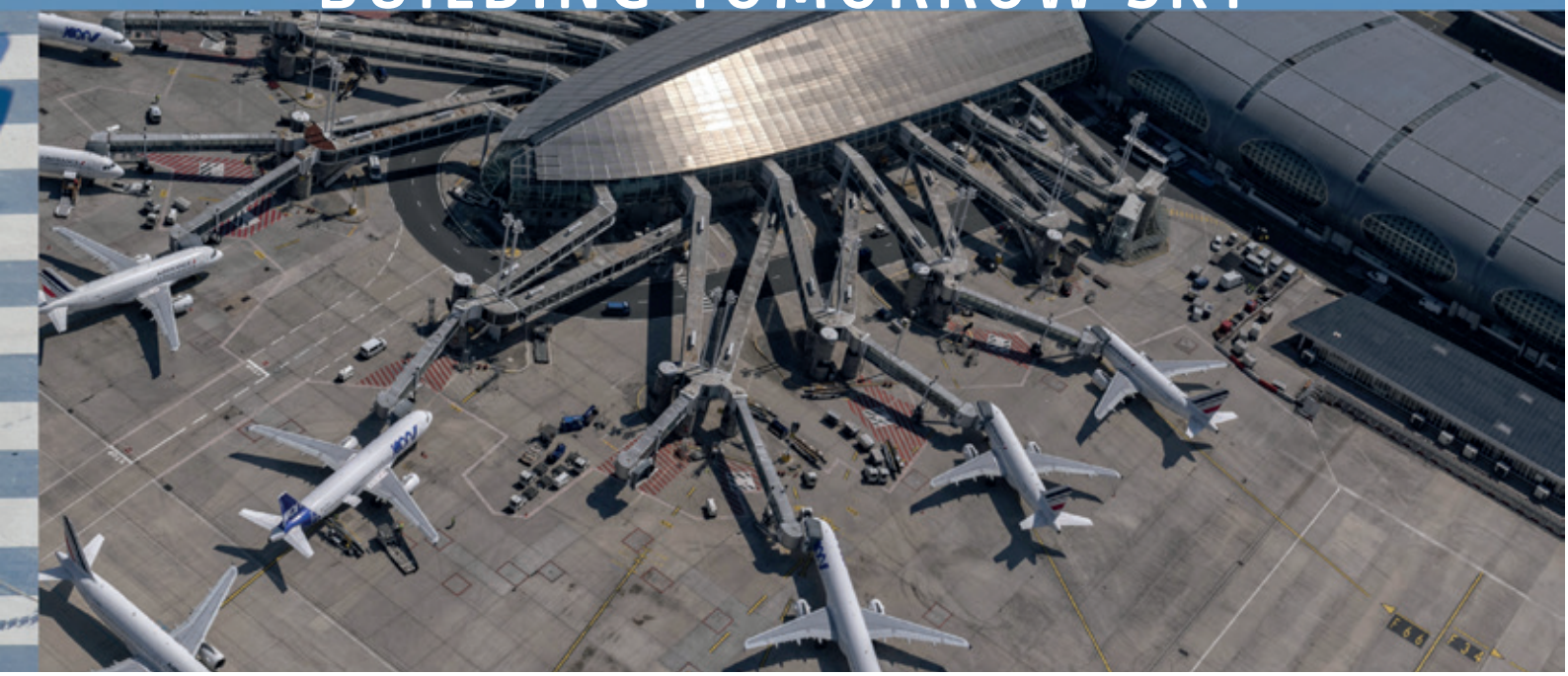
FRENCH CIVIL AVIATION AUTHORITY

BUILDING TOMORROW SKY



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RÉPUBLIQUE FRANÇAISE

MINISTÈRE CHARGÉ DES TRANSPORTS

dgac

Ministère chargé des Transports

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Ministry of Transport

dgac

ORGANISATION

FRENCH CIVIL AVIATION AUTHORITY

DSAC
THE NATIONAL OVERSIGHT AUTORITY

- Interregional directorates (7 Metropolitan)
- DSAC West Indies-French Guiana
- DSAC Indian ocean

DSNA
THE FRENCH AIR NAVIGATION SERVICE PROVIDER

- Operations directorate
- Paris Region Air Navigation Services (SNA)
- South West Region Air Navigation Services
- 3 CRNA - Area control centres
- 9 SNA - airports regional structures (SNA)
- Technical and innovation directorate

DTA
AIR TRANSPORT DRECTORATE

- Civil aviation technical department

SG
GENERAL SECRETARIAT

- Airport taxes management department
- National airport engineering departement
- Modernisation and IT departement
- National school of civil aviation

OCV
IN-FLIGHT CHECKING UNIT

GTA
AIR TRANSPORT GENDARMERIE

MALGH
LIGHT, GENERAL AND HELICOPTER AVIATION SERVICE

SEAC
STATE CIVIL AVIATION AUTHORITY

French Polynesia
Wallis and Futuna

DAC
DIRECTORATE FOR CIVIL AVIATION

New Caledonia

- General directorate
- Central administration
- National administration
- Public entity

SUMMARY

Our missions

The French Civil Aviation Authority (DGAC) guarantees the security and safety of French air transport and ensures its development is balanced with ecological transition goals. It is, at the same time, a regulatory authority, a security monitoring centre, an air navigation and training service provider, and a partner for aeronautical players. It supports research and innovation in aeronautical construction and the State's industrial policies in this sector.

SECURITY

An airport means the right to travel in the safest possible conditions. Today, our vigilance against terrorist risks is at its maximum, while preserving everyone's freedom. The effectiveness of civil aviation security can only be achieved through a commitment shared by all actors. Security is everyone's business.

SAFETY

Without safety, there would be no confidence from users and the public, and no possible development of air transport. The entire DGAC is primarily concerned with safety and acts in the field of certification and supervision of air operators on the basis of community legislation.

ECOLOGICAL TRANSITION

The DGAC strategy for the ecological and energy transition of air transport has three main priorities: to put aviation back in its rightful place, to combat climate change, and to reduce all local nuisances linked to air transport, in particular air quality at airports and the noise suffered by residents.

AIR NAVIGATION

French airspace is organised and managed so that flights can proceed safely, day and night, throughout the year. The DGAC provides efficient air navigation services of high quality in terms of safety, the environment and capacity, at the best cost.

AIR TRANSPORT REGULATOR

The DGAC is strongly involved in economic and social issues. It acts as the regulator of air transport. It is the contact point for airlines, airports and their customers. A partner of manufacturers and operators, the DGAC contributes to the activity of the aeronautics industry and pursues a policy of support for this major sector of the French economy.

EUROPE & INTERNATIONAL

The DGAC contributes to the development and defence of French positions in European and international bodies. It is actively involved in constructing the Single European Sky. The DGAC is fully committed to promoting French aeronautical know-how around the world

LIGHT AVIATION & UAV

Covering private transport, UAV and sports and leisure aviation, the DGAC offers a single point of entry for all these users. All the components of general aviation make an essential contribution to the development of the aeronautics sector, which is one of the economic assets of our country.

TRAINING

The National School of Civil Aviation (ENAC) is the leading aeronautical higher education institution in Europe. It trains practically all professionals working in the aeronautics and air transport sectors. ENAC supports the training needs of all public stakeholders (civil aviation authorities, air traffic control services, etc.) and private players (aircraft manufacturers, engine manufacturers, equipment manufacturers, airports, airlines, etc.) in these areas in France, Europe and worldwide.

RESOURCES

To steer and support the industry with the new challenges faced by civil aviation, the DGAC relies on a wide range of skills and a budget linked to the sector's activity to boost its performance and ensure better service quality for its users.

Security

The purpose of air transport security is to prevent criminal acts that could endanger aircraft and to do so using a combination of measures and material and human resources. The DGAC has created a policy setting out a framework of actions common to the multiple stakeholders involved on a daily basis in the implementation of security measures.

CONTINUOUS **VIGILANCE**

The DGAC coordinates the air transport security policy on French territory and ensures its implementation by the operators and the State services concerned. These missions are carried out by the Air Transport Directorate (DTA) for the regulatory part and the National Oversight Authority (DSAC) with regard to surveillance. These two departments rely on the expertise of the Civil Aviation Technical Service (STAC) to carry out these missions.

CONTINUOUSLY ADAPTING TO RISKS AND THREATS

European security regulations have steadily increased in recent years to deal with an ever-present and worrying terrorist threat. The DTA constantly adapts national enforcement rules by combining the effective prevention of acts of unlawful interference with the fluidity of passenger and cargo traffic. These regular regulatory adjustments have resulted in general monitoring involving State services and the air transport companies being strengthened.

MONITORING MULTIPLE PLAYERS

The DSAC checks security programmes, delivers approvals and monitors the various operators involved in security, including airlines, aerodrome operators, freight operators, and suppliers of goods on-board aircraft or used in airports. It checks that the training of security officers complies with European standards. By conducting regular tests, inspections and audits at airports, it can monitor the effectiveness of security measures

RISK ANALYSIS

The security measure policy gives priority to implementing efficient solutions, especially based on the analysis of real risks. The DGAC has set up a dedicated unit, the Civil Aviation Risk Analysis Centre (PARAC), which is jointly responsible with the intelligence community for providing the authorities and air transport professionals with the most precise information so they can best adapt their security postures.

THE EXPERTISE OF THE CIVIL AVIATION TECHNICAL SERVICE

The STAC carries out studies and expert missions. It promotes innovation and disseminates technical knowledge in strategic aviation areas. On behalf of the DTA, it works on the characterisation of security threats and on evaluating, in the laboratory and at airports, the effectiveness of new technologies to deal with them. Its skills are used for the certification of security equipment, but also for research and expertise concerning the implementation of new technologies. Its high-level expertise reinforces the credibility and the reach of France in international bodies.

Air transport gendarmerie

Up of more than 1000 police officers qualified in aeronautics and airport security, the Air Transport Gendarmerie (GTA) is civil aviation's aeronautical and judicial police. These officers are deployed in the «airside» zones of the largest French mainland and overseas airports to carry out surveillance and deal with safety and security issues. The GTA also plays a prevention and information role for users, both in the professional field and in recreational aviation.

Safety

Maintaining a high level of civil aviation safety is an ongoing concern for the DGAC. The National Oversight Authority (DSAC) monitors manufacturers, operators and aircrew.

AIR NAVIGATION **MONITORING**

As the national supervisory authority, the DSAC certifies and controls the organisation and content of the training of aircrew. It also monitors the procedures and systems of air navigation service providers, including the French Air Navigation Service Provider (DSNA). It issues approvals for the air traffic controllers' training bodies and the community control licence.

AIRPORT **MONITORING & CERTIFICATION**

The DSAC ensures the monitoring and certification of aerodrome operators. This monitoring activity covers both safety management by operators, conditions for the development and operation of aerodrome runways, prevention of animal hazards, aircraft fire-fighting services and aerodrome runway lighting.

AIRLINE **MONITORING**

The DSAC checks operators are complying with International Civil Aviation Organisation (ICAO) and European Union safety requirements. Monitoring French airlines particularly consists of issuing them with technical authorisations for operating their aircraft. As part of this mission, the DSAC checks exact compliance with the rules on aircraft usage. It carries out unannounced inspections on aircraft at French airports, whether operated by French or foreign companies.

AIRCRAFT **MONITORING**

The DSAC has authorised the Organisation for Civil Aviation Safety (OSAC), an external contractor, to carry out the activities necessary to issue approvals for organisations producing, maintaining and managing French company airworthiness monitoring and maintenance technician licences in line with European regulations.

UAV & SAFETY

The DSAC supports the development of the UAV sector, while guaranteeing a high level of safety for people on the ground and for other aircraft. The reporting system associated with standard scenarios covers most operating needs for UAV operators, while specific authorisations are issued for the most innovative uses.

AIRCREW

To ensure the technical and medical fitness of technical and commercial crew members, the DSAC provides and monitors training school approvals, simulator qualifications and approvals for aeromedical centres of expertise and doctors. It organises theoretical and practical examinations and issues licences and qualifications. To fulfil these missions, the DSAC has a team of specialists, including 3 doctors and 45 expert pilots, who, along with monitoring inspectors, are a day-to-day contact point for airlines, training schools, instructors and examiners.

THE FLIGHT CONTROL ORGANISATION

The Flight Control Organisation (OCV) is composed of 12 sworn onboard inspectors (10 aircraft pilots and 2 helicopter pilots). These pilots provide the DGAC with their skills and knowledge of the operational world to improve flight safety. The OCV provides advice and expertise to the Director General and their services, in particular regarding problems posed by operating transport aircraft. It performs flight checks on air carriers and on the ground in training schools, and provides part of the monitoring programme. It certifies simulation resources on behalf of the European Aviation Safety Agency (EASA) and the DGAC and participates in Operational Suitability Data (OSD) work.).

Safety & Security: what's the difference?

Safety is a matter of compliance with the rules governing the operation of aircraft and facilities by the personnel in charge of them. Security refers to the protection of persons, cargo, facilities and equipment from malicious, criminal or terrorist acts.

Ecological TRANSITION

The DGAC is committed to reducing noise and atmospheric pollution generated by air transport and to protecting biodiversity. It acts in a collective and coordinated manner at national, European and international levels to facilitate ecological and energy transition. It also maintains a dialogue with elected officials and representatives of airports' local residents.

PREVENTING POLLUTION **AND PROTECTING BIODIVERSITY**

The Air Transport Directorate (DTA) and the French Air Navigation Service Provider (DSNA) are stepping up their work to prevent population exposure to noise and polluting emissions: air traffic impact studies, air traffic noise measurement campaigns, a noise pollution action plan, specific maps, soundproofing aids for housing, etc. The DTA develops regulatory texts in this area using the expertise of the civil aviation technical service (STAC) to model and study environmental impact. Since 2013, the DTA has been committed to a taking a responsible approach to biodiversity to better understand aerodrome ecosystems and provide the operator with knowledge of spaces to facilitate management without compromising air transport safety.

REDUCING NOISE AND AIR POLLUTION

The DTA restricts the operation of certain airports, by, for example, prohibiting the noisiest aircraft, especially at night. It also ensures that airlines comply with environmental regulations and airports equip themselves with less polluting equipment. In the event of a proven infringement, the airport nuisance control authority (ACNUSA) sanctions airlines.

STRENGTHENING DIALOGUE WITH THE PUBLIC

For several years now, as part of a process of transparency, the DGAC has implemented a range of initiatives to answer questions from the public. It provides airports' local residents with information on aircraft flight paths and overflight conditions. It disseminates knowledge about air pollutants and regularly publishes information bulletins on air traffic in the Île-de-France region aimed at the general public.

CONTROLLING CO_2 EMISSIONS

Air activities are integrated into the European greenhouse gas emissions trading system (EU ETS) for all flights in the European Union. The system requires airlines to buy allowances to offset their emissions. This gives them an incentive to reduce their emissions. Moreover, global air transport is the only economic sector to have a universal and binding mechanism for controlling its CO_2 emissions: the CORSIA. Global civil aviation will have to offset all CO_2 emissions that exceed the level reached in 2020 by acquiring carbon offset units to fund sustainable development programmes. Lastly, the DGAC encourages the development of biofuels: a sustainable alternative to fossil fuels.

Carbon-neutral growth

The objective is to stabilise CO2 emissions at the level reached in 2020, while traffic is expected to grow by 5% per year. 4 levers are being used to achieve this: improving the environmental performance of aircraft, operational procedures to reduce fuel consumption, developing biofuels and economic measures.

INNOVATING BY SUPPORTING RESEARCH

In 2008, France set up the Council for Civil Aeronautical Research (CORAC). It brings together all French players in the sector (airlines, manufacturers, airports, etc.). They have made major environmental commitments for 2020, compared to 2000: reducing air traffic CO2 emissions by 50%, nitrogen oxide emissions by 80% and perceived noise by 50%. The CORAC sets out and implements research and innovation activities using a roadmap that aims to prepare the new generation of aircraft to meet the challenges of reducing environmental footprints, connectivity, increasing aircraft autonomy and, finally, industrial excellence.

IMPROVING AIR NAVIGATION PROCEDURES

To contribute to the energy transition, the DSNA implements a set of operational practices to improve the environmental and economic efficiency of air traffic. Gentle descents offer a smooth descent with reduced engine speed and less noise, fuel consumption and gas emissions.

Air navigation

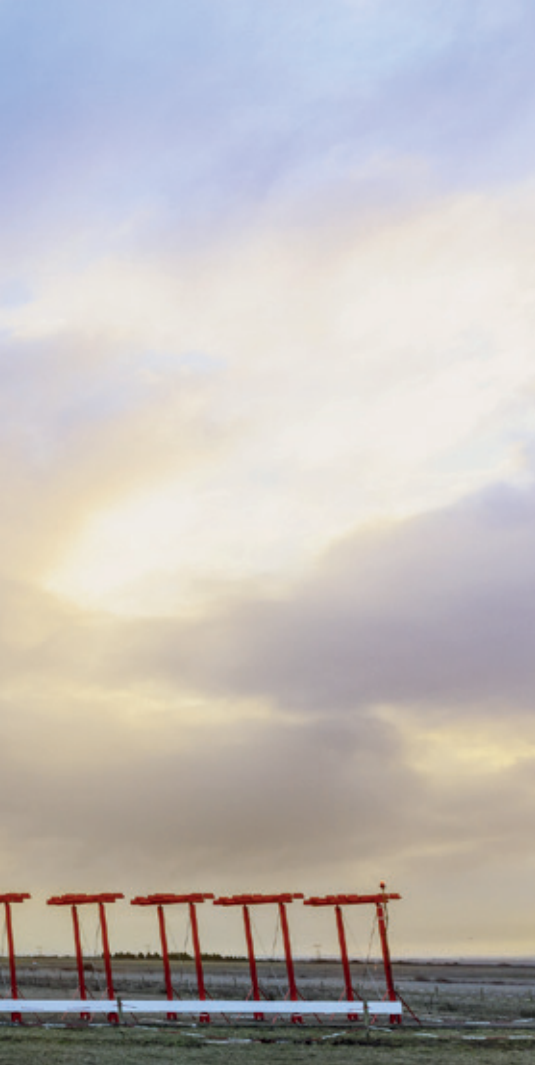
The French Air Navigation Service Provider (DSNA) is a service provider for airlines and general aviation. It provides air traffic services through its en-route control centres and control towers in mainland France and overseas territories.

AIR NAVIGATION **SERVICE PROVIDER**

Its mission is to ensure that the civil air traffic flows in a safe, fluid and rapid manner, day and night, all year round, while respecting the environment and controlling costs. The DSNA thus provides communication, navigation and monitoring services; it produces and disseminates aeronautical information needed to prepare for flights. It is certified by the national supervisory authority, the National Oversight Authority (DSAC), as an air navigation service provider.

ENSURING THE SAFETY AND REGULARITY OF AIR TRAFFIC

The DSNA carries out its French mainland missions in an air space of more than 1 million km² comprising areas above the open sea in the Atlantic and Mediterranean entrusted to it by the International Civil Aviation Organisation (ICAO). Its priority focus areas are flight safety, protecting the environment and the regularity of flights with controlled service costs.



FROM EN-ROUTE CONTROL **TO APPROACH AND AERODROME CONTROL**

The DSNA has two region air navigation services in Paris region and south-west region, three en-route control centres (CRNA) in Brest, Paris, Reims, Aix-en-Provence and Bordeaux, nine regional metropolitan departments in charge of approach control and aerodrome control, with headquarters in Nantes, Lille, Paris, Strasbourg, Lyon, Nice, Marseilles, Toulouse and Bordeaux, as well as three regional overseas departments in the French West Indies, in the Indian Ocean and in Saint-Pierre-et-Miquelon.

HUMAN RESOURCES

The DSNA's operational, administrative and supervisory staff are characterised by their high levels of skill and expertise and the fact that they receive significant initial and continuous training. The 7,400 highly qualified staff can adapt to a constantly changing environment and are committed to providing high-quality and cost-effective air navigation services on a daily basis.

Air space & professional UAV

The DSNA is highly involved in creating a new air space called U-space that is safe for professional UAV, secure, does not require capacity to be reduced, and protects both the environment and privacy.
In December 2018, the DSNA launched a call for partnerships to promote and structure U-space solutions that will improve UAV management in controlled airspace, integrate remotely piloted drones (RPAS) into civilian air traffic and satisfy the criteria of flight safety, security and economic efficiency.

The single EUROPEAN Sky

POWERED BY SESAR

The Single European Sky ATM Research (SESAR) programme is the technological branch of the Single European Sky initiative and aims to modernise the European air traffic management system (ATM) by developing innovative operational concepts in a new-generation technological environment with harmonised standards.
As part of the SESAR programme, the DSNA is implementing its technical modernisation strategy for all flight stages: an ambitious programme co-funded by the European Union. At the same time, the DSNA must keep existing systems up-to-date and operational, and develop operational technical solutions that are more agile, cooperative and digital.

DSNA TECHNICAL MODERNISATION

ERATO Electronic Environment
Electronic environment ATM system.

4-FLIGHT Next-generation stripless ATM system with innovative air traffic control tools.

Coflight Advanced flight data processing system that integrates new operational concepts and future technical system interoperability tools.

Data Link On-board digital data transfer (frequency transfer, air traffic control instructions, enhanced monitoring).

CssIP Modernisation of the DSNA navigation network using internet protocol.

SYSAT Next-generation ATM system for Approaches and Towers.

MAIN OPERATIONAL CONCEPTS

Free Route Airspace Planned direct routes (stage 1), User Preferred Routing (bespoke routes) (stage 2 since 2018)

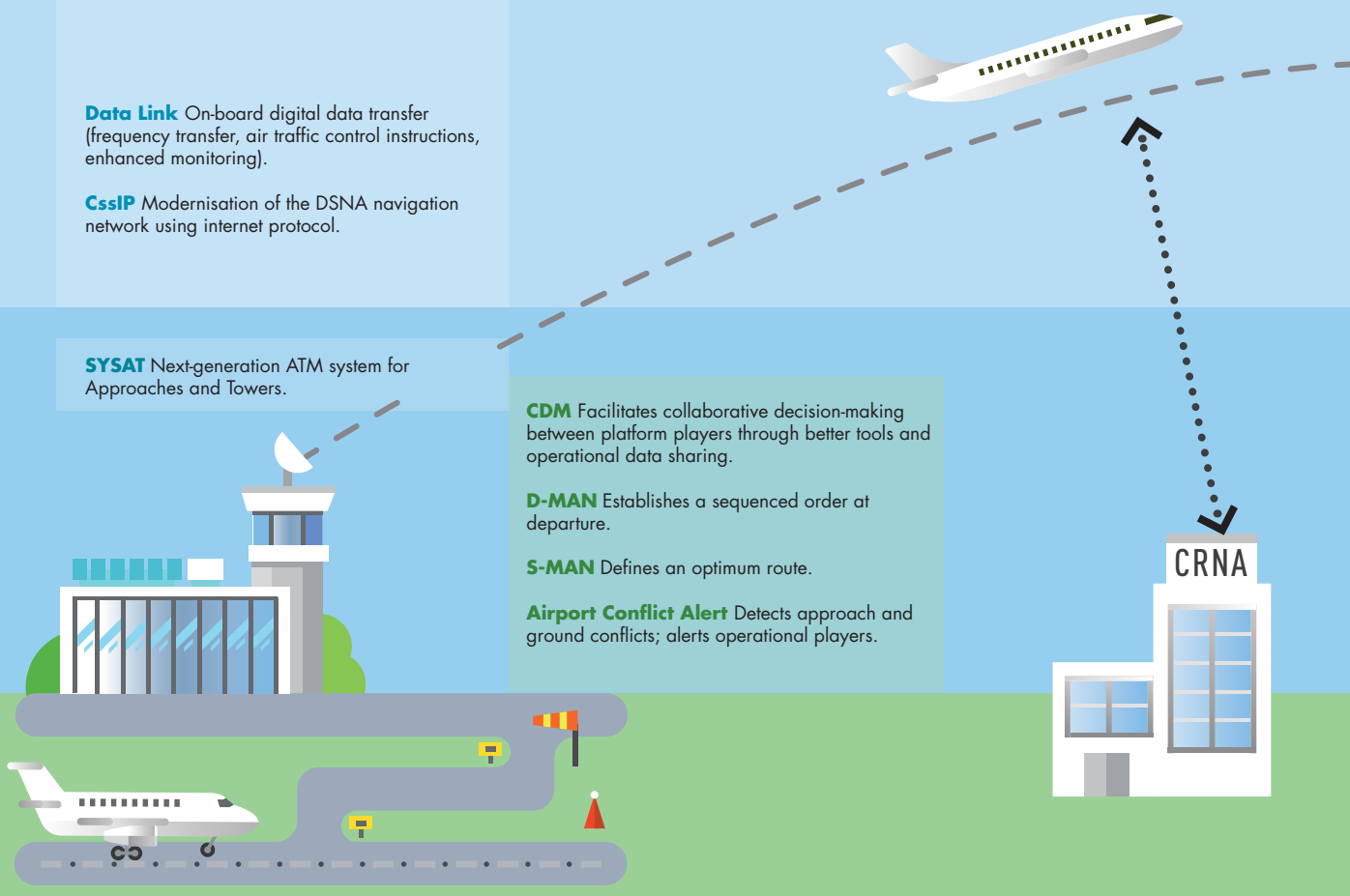
PBN Improves navigation accuracy by setting specifications for all flight phases

CDM Facilitates collaborative decision-making between platform players through better tools and operational data sharing.

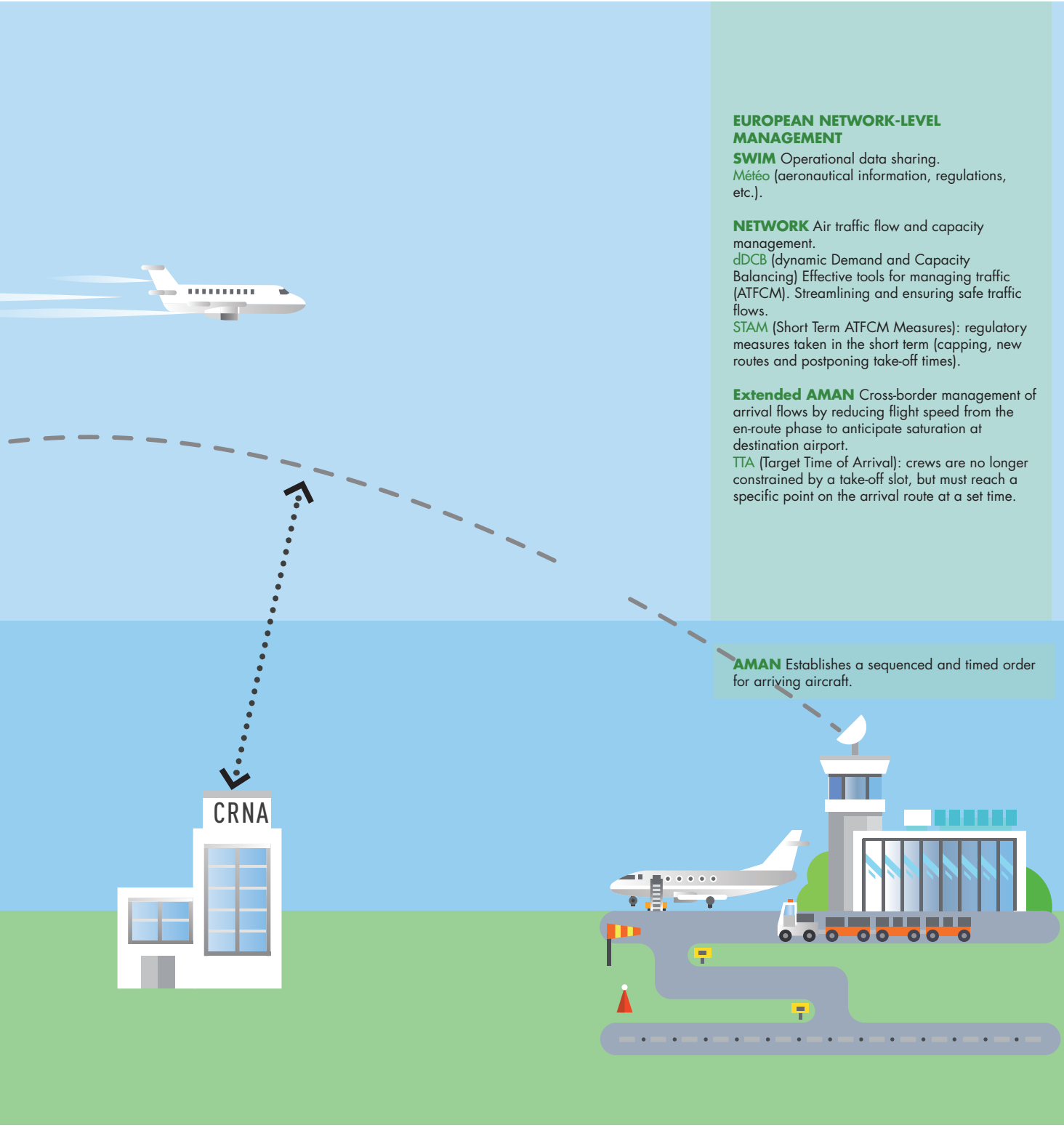
D-MAN Establishes a sequenced order at departure.

S-MAN Defines an optimum route.

Airport Conflict Alert Detects approach and ground conflicts; alerts operational players.



The future of French air navigation lies in one of the 9 major functional airspace blocks (FABs) that are independent of national borders. France, along with Germany, Switzerland and the Benelux countries, has committed to the Europe Central FAB (FABEC), located in the heart of Europe, which has some of the world's densest air traffic.



EUROPEAN NETWORK-LEVEL MANAGEMENT

SWIM Operational data sharing.
Météo (aeronautical information, regulations, etc.).

NETWORK Air traffic flow and capacity management.
dDCB (dynamic Demand and Capacity Balancing) Effective tools for managing traffic (ATFCM). Streamlining and ensuring safe traffic flows.
STAM (Short Term ATFCM Measures): regulatory measures taken in the short term (capping, new routes and postponing take-off times).

Extended AMAN Cross-border management of arrival flows by reducing flight speed from the en-route phase to anticipate saturation at destination airport.
TTA (Target Time of Arrival): crews are no longer constrained by a take-off slot, but must reach a specific point on the arrival route at a set time.

AMAN Establishes a sequenced and timed order for arriving aircraft.

AIR TRANSPORT REGULATOR

The DGAC is the contact point for airlines, airports, air transport employees and passengers for economic, legal and social matters. The Air Transport Directorate (DTA) develops public air transport policies in a European and international context.

MORE INFORMED DECISIONS

The DGAC requires optimum knowledge of the main economic factors to fulfil its role as regulator. This is why the DTA considers the future regarding the main ways in which the sector is set to change, based on market observation, surveys and economic studies.

SUPPORTING AIRLINES

The DTA monitors the economic and legal capacities of French airlines and issues them with air carrier licences. The DTA provides assistance to airlines established in France in defending their interests: it ensures that fair competition rules are followed and French air transport becomes more competitive. It acts at a European level by helping set community air transport policy. It also contributes to the financing of certain air routes considered essential for regional development.

MANAGING
AIRPORT POLICY

The DTA ensures that the entire territory has infrastructure adapted to its needs and capable of ensuring a high-quality and cost-effective transport supply, while boosting growth and employment. As part of its joint economic regulation mission with the Airport Charge Independent Supervision Authority (ASI), it pays particular attention to ensuring that airports guarantee their customers - the airlines - both a quality service and reasonable service charge rates.

PROMOTING
SOCIAL DIALOGUE

The DTA is in charge of all social issues concerning civil aviation personnel. As a contact for social partners in the sector, it promotes social dialogue and collective bargaining.

SUPPORTING MANUFACTURERS
TO INNOVATE

The DTA proposes and implements the State's support policy for the aviation industry, which is facing global competition. It aims to promote the design of competitive aircraft with enhanced environmental performance to support the ecological transition of air transport.

Aviation industry, an area of excellence

With turnover of €50,3 billion in 2018, the aviation industry sector is the leading national export sector. It is also a job-creating sector : a companies belonging to the French Aerospace Industries Association (GIFAS) employed 195,000 men and women and had recruited 15,000 people over the year (4,000 net jobs created).

PROTECTING
PASSENGERS

The DTA decides on and applies the rights and obligations of air passengers and promotes them internationally. It helps improve passenger journeys through the airport and protect their health. Annually, it receives and processes approximately 7,000 complaints from passengers not satisfied with responses provided by airlines. Disputes concern compensation, assistance, passenger care, etc. Airlines that do not respect passengers' rights are subject to financial penalties.

Europe & international

Civil aviation operates in an extremely European and international context. The DGAC contributes to the development and defence of French positions. It is committed to promoting the know-how of French companies abroad.

COORDINATING INTERNATIONAL ACTION

European regulations cover all areas of the DGAC's activity. The Air Transport Directorate (DTA) coordinates the participation of DGAC experts and directors in European and international organisations such as the International Civil Aviation Organisation (ICAO), Eurocontrol, the European Aviation Safety Agency (EASA) and the European Civil Aviation Conference (ECAC). It also organises bilateral meetings with foreign civil aviation authorities.

PROMOTING INTERNATIONAL COOPERATION

The DTA conducts and coordinates cooperation and technical assistance to foreign authorities who request it in all aviation areas: safety, air navigation, airport development, training and safety. It provides support to all industries in the sector who want to export their know-how and to set up industrial cooperation with foreign partners. The DTA also coordinates the response to European calls for tenders to help a European Union neighbourhood country comply with EU law on air transport through twinning arrangements. It also coordinates DGAC technical assistance projects carried out on behalf of the European Aviation Safety Agency (EASA).

EXPORTING FRENCH AIR NAVIGATION KNOW-HOW

DSNA Services is a French civil aviation consultancy. It promotes and exports the know-how of the DGAC and the National School of Civil Aviation (ENAC), particularly in the field of air traffic control, in order to contribute to improving the safety of air transport worldwide. This agency provides the experience of the professionals from the leading air navigation operator in Europe to successfully support its customers' modernisation projects. DSNA Services develops and implements innovative products and high-performance technical solutions used by air traffic controllers on five continents. This agency develops and provides specific training adapted to the needs of its customers by approved instructors.

An international network

300 DGAC staff regularly participate in the 800 European and international working groups.

In addition, 60 officers are posted abroad as part of:

- **The International Civil Aviation Organisation (ICAO) and the Permanent Representation of France to it;**
- **The economic services of the American, Brazilian, Indian, Chinese and Russian embassies;**
- **The European Commission and the Permanent Representation of France with the European Union;**
- **The European Aviation Safety Agency (EASA);**
- **Eurocontrol;**
- **Other organisations.**

THE NATIONAL SCHOOL OF CIVIL AVIATION, THE LEADING EUROPEAN AERONAUTICS SCHOOL

ENAC contributes to the conduct and coordination of cooperation and technical assistance to foreign authorities who request it in the field of air transport. It also takes part in the development of France's position in the main international bodies and promotes the know-how of the French grandes écoles abroad. Its expertise in the training of airline pilots and air traffic controllers enables ENAC to intervene in 70% of the actions carried out by the DGAC worldwide.

Light aviation & UAV

The Mission for Light, General and Helicopter aviation (MALGH) promotes the development of these aviation types by improving their safety. This one-stop shop for light and general aviation is designed for small operators.

A ONE-STOP SHOP FOR LIGHT AND GENERAL AVIATION

The DGAC supports the development of light and general aviation by serving private users such as private or commercial operators involved with light aviation, business aviation or helicopters.
The MALGH is a preferred initial contact point for users and their representative associations. It identifies who is most able to deal with their issues within the DGAC. It coordinates the processing of their requests in a timely manner. It acts as an interface. Reporting directly to the Director General of Civil Aviation, it advises on the implementation of public policies in this area and ensures they are implemented on its behalf.

MISSIONS

- Establish a permanent system of consultation and information with the users' representative bodies,
- Follow all national and European regulatory developments to ensure that the specificities of light aviation, general aviation and helicopters are taken into account, whether technical, environmental or economic aspects,
- Identify a network of skills within the DGAC and makes it known to users,
- Participate in setting out actions to promote safety and monitoring their implementation and results,
- -Support actions to preserve aeronautical heritage and activities to promote air sports.

The objectives of the MALGH are therefore to facilitate access to information and take into account the specificities of the operators and the coherence of policies and decisions concerning these singular economic sectors of civil aviation. To this end, it is necessary to ensure that their technical, social and economic realities are taken into account in the thinking preceding administrative decisions.

Electric aircraft: a way forward for aero clubs

The DGAC strongly supports the operational assessment of electric aircraft under way with a view to operating these aircraft in aero clubs. Electric aircraft have quiet engines. This has the potential to please both those learning to fly and those living near recreational aviation aerodromes: a type of aviation practised by over 2,000 clubs in our territory.

THE CONTROLLED TAKE-OFF OF FRENCH UAV

To accompany the safe development of civil UAV, the DGAC has, since 2012, developed a flexible regulatory framework that leaves room for future developments in the sector.

The key issue for regulation is to ensure the safety of other airspace users and overflown populations.

The regulations distinguish between two populations according to the use of UAV. These are the aeromodelling rules that apply for leisure or competitive use. For other uses, it refers to particular activities, in a professional context, and specific provisions have been developed. The various flight scenarios and the precise regulatory framework established guarantee safe operations while providing an environment conducive to the development of many uses.

Training

The DGAC is the guarantor of the quality of aeronautical training. The National School of Civil Aviation brings together training and research activities in aeronautical engineering, air navigation and aircraft piloting.

THE REFERENCE **FOR AERONAUTICAL TRAINING**

Created in 1949 in Orly, based in Toulouse since 1968, ENAC is the only example of a single school offering such a wide and complete range of training and activities for the aerospace industry and in particular for the air transport sector.
In just over 60 years of existence, with nearly 24,000 alumni, ENAC has gained recognition both in France and around the world for all participants in its field of activities.
Today, thanks to the recognised skills of its students, continuing education trainees, researchers, teachers and all its staff, ENAC is boosting its reputation throughout the world, and is always working to benefit its primary field: aeronautics.

FRANCE HAS **THE LARGEST AVIATION SCHOOL IN EUROPE**

Today, ENAC is an original higher education institution that is unique in Europe and provides training in practically all the air transport professions. It thus satisfies the training needs of many public and private stakeholders in this field in France, Europe and also around the world.
France is one of the leading aeronautical countries in Europe and, indeed, the world. More than ever, this requires ENAC to be one of the leading schools in Europe and worldwide as regards its three pillars of excellence: pilot training, aeronautical engineering and air navigation.

ENAC AND RESEARCH ACTIVITIES

The research activities conducted at ENAC are specific and rely on the school's original positioning, focusing on the operation and safety of the air transport system. Laboratories, lecturer-researchers and PhD students lead and participate in these research activities funded by French and foreign public and private organisations.
ENAC undertakes its own research into the scientific disciplines it teaches and in which it is able to innovate and create knowledge and skills: interactive computer science, optimisation, telecommunications, sustainable development, safety and security, drone systems, airline economics, etc.

THE ROLE OF ENAC IN CONSTRUCTING THE SINGLE EUROPEAN SKY

In the field of air navigation, ENAC is certified as a training centre for air traffic controllers and air traffic safety electronics engineers. These training courses are standardised and approved according to the requirements of Eurocontrol and the EASA and, in particular, allow the community air traffic controller licence to be issued.
ENAC is actively participating in the creation of joint training as part of the «Single Sky» in Europe. Educational facilities are at the height of these activities: air traffic control simulators, flight simulators, wind tunnels, a drone aviary, a flying platform, a fleet of 116 planes, laboratories and research programmes at the forefront of innovation, developing technologies that look to the future of aeronautic professions.

ENAC, an international presence

ENAC has nearly 80 partner universities and grandes écoles. 40% of its students are from almost 70 different countries outside France, and with many professional training courses open to foreigners, ENAC is one of the most dynamic institutions in terms of international relations. ENAC offers numerous training courses abroad and uses its know-how to help train aeronautics professionals from all around the world: China, India, United Arab Emirates...

Key figures

30 traning programme

3 000 pupils - 66 different nationalities

3 500 continuing education trainees

500 teachers and instructors

155 researchers

24 000 alumni worldwide

Resources

To drive and provide support with new challenges facing civil aviation, the DGAC relies on a wide range of skills and a budget linked to the sector's activity.

EXPERTISE **FOR INNOVATION**

Civil aviation is inherently innovative. It requires its supervisory authority, the DGAC, to have wide-ranging expertise and a high level of competence so it can meet the needs of partners and users. Engineers, technicians, aircrew, administrative staff and skilled workers in many fields form a solid foundation with their specific and unique skills. Fully committed to modernising the administration, the DGAC is working in several areas of innovation: simplifying procedures, digitising processes, adapting regulations to the economic climate and social changes, and implementing public policies to fuel our economy while complying with regulatory standards.

A BUDGET FOR THE CIVIL AVIATION SECTOR

The DGAC is a State administration with a budget known as the "air traffic control and operations" (BACEA) ancillary budget. The purpose of this funding method, fully powered by the sector, is to guarantee, within a unified framework, the safety and security of air transport, taking into account the high-priority ecological and energy transition. This budget supports the economic development of air transport by providing efficient services and prescribing technical safety standards arising from international and European commitments.
The State's share of the general budget, meanwhile, covers the DGAC's sovereign activities, in terms of infrastructure and land use links, and supports aeronautical research and development to innovate and create the civil aviation of the future.

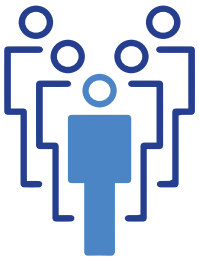
EXPERTISE
IN AERONAUTICAL LAW

French airlines, like the various players in the aircraft construction and airport sectors, are currently facing an increasingly legalised society. One aspect of this is the increase in complaints made by passengers and legal action taken for damages. At the same time, international organisations and professional federations at the local level are requesting appropriate information. As a fundamental element of collective performance, the DGAC oversees compliance with the procedures and rules of law and defends the administration by handling litigation.

MAINTAINING
THE PROPERTY ASSET BASE

The uniqueness of civil aviation's property asset base and its management make the DGAC a dedicated operator, directly related to France's services in the field. The National Airport Engineering Service (SNIA) has three objectives: to contribute to the development of airport engineering, to allow users to benefit from good operating and reception conditions, and to provide State officials with a high-quality and practical working framework.

KEY FIGURES 2018



10,500
Agents in French territories serving all types of aviation

3,462
Air traffic controllers

3,224,532
Flights controlled

1,142,000
Direct and indirect jobs in French aviation

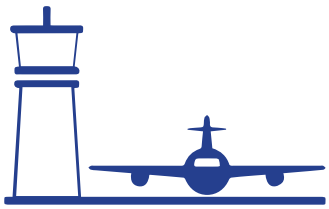
206 millions
Passengers

190
Airlines

€50,3 billion
Turnover of the aeronautics sector french

719
Aeromodelling zones

831
Public and private aerodromes



2,261
Safety checks on commercial aircraft

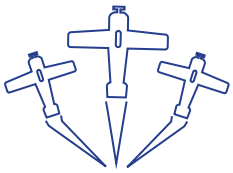
53,602
Professional pilots

2%
CO_2 emissions

37 887
Private pilots

15 805 **Aircrolights usies**
7 002 **glider pilots**

905
Helicopter pads



+ 323
Air events

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