



ENAIRe 

# EXECUTIVE SUMMARY ENAIRe 2021



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First prize "Capture your SDGs in ENAIRe 2021"



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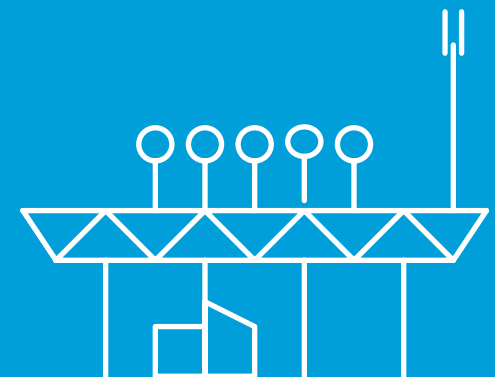
# 1

## ABOUT ENAIRE

1.1 ENAIRE public company

1.2 Our Vision, Mission and Values

1.3 Strategic objectives FP2025





# 1 ABOUT ENARE

## 1.1 ENARE PUBLIC COMPANY

We are a Public Business Entity attached to the Ministry of Transport, Mobility and Urban Agenda, with its own legal status, independent from the State. We carry out our activity within the framework of the Government's general transport policy, providing our services in Spanish airspace.

We were created between 1990 and 1991 as 'Spanish Airports and Air Navigation' (Aena) and in 2014 we became ENARE. Since 2015, we have held 51% of Aena's capital.

"We are leaders and international key players providing air navigation services."

**ENARE**  
public air  
navigation  
manager



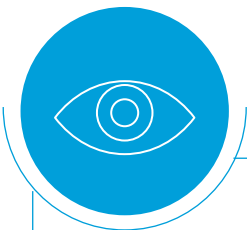


# 1.2 OUR PURPOSE, VISION AND VALUES



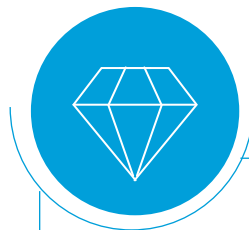
## PURPOSE

“We take care of your flight to make sure it is safe, fast, efficient and sustainable”.



## VISION

“We want to turn ENAIRE into a global operator, a leader in the air navigation sector, based on people, innovation and digitalisation”.



## OUR VALUES

- ✓ Safety first
- ✓ Committed to Customers and Society
- ✓ We are one big Team
- ✓ “Hunger” for improvement of our Organisation

## 1.3 STRATEGIC OBJECTIVES 2025 FLIGHT PLAN



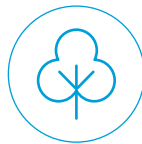
### SECURITY

We pay special attention to security culture, the human factor and cybersecurity in the face of new and emerging risks.



### QUALITY, SCALABILITY AND SERVICE RESILIENCE

We care about improving the quality, scalability and resilience of services delivered through digitalisation, modernisation of airspace and operational concepts, and the reinforcement of the culture of customer and stakeholder orientation.



### SUSTAINABILITY

We want to contribute to sustainable mobility in the sector, minimising the impact of ENARE's activity on the environment and driving its decarbonisation.



### BUSINESS AND INTERNATIONALISATION

We want to internationalise our business and position ourselves as leaders and key players in the air navigation sector on a global scale.



### EFFICIENCY AND COMPETITIVENESS

We are working to ensure the economic recovery and future viability of ENARE, and to increase the efficiency, productivity and therefore the competitiveness of the company in order to overcome the crisis and adapt to the structural changes of the sector, whilst contributing to the global recovery of the aviation sector.



### TRANSFORMATION AND DIGITALISATION

We have set out to accelerate ENARE's cultural and organisational transformation and modernisation, taking advantage of new technologies in order to be more flexible and efficient, developing an organisational culture centred on our people as the company's main asset.

# 2

## ENAIRE 2021 IN DATA





# 2

## ENAIRE 2021 IN DATA

### KEY ACTIVITY FIGURES

ENAIRE is made up of air traffic controllers, specialised engineers, operations and maintenance technicians, and experts in management and administration.

We are a group of professionals who manage air traffic, maintain the systems and facilities for the provision of air navigation services, manage our business and develop solutions to improve the safety and efficiency of air transport.



**+4,000**  
people



**+than 850**  
customers



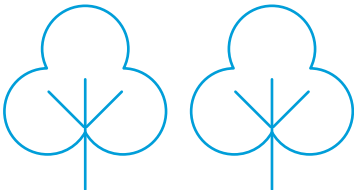
**2.2** million  
km<sup>2</sup>



**2** million  
annual flights (2019)

# ENAIRE 2021 IN DATA

**33,000** ↗  
tonnes of CO<sub>2</sub>  
reduced compared  
to 2019



**€177 M**  
procurement of  
goods and  
services



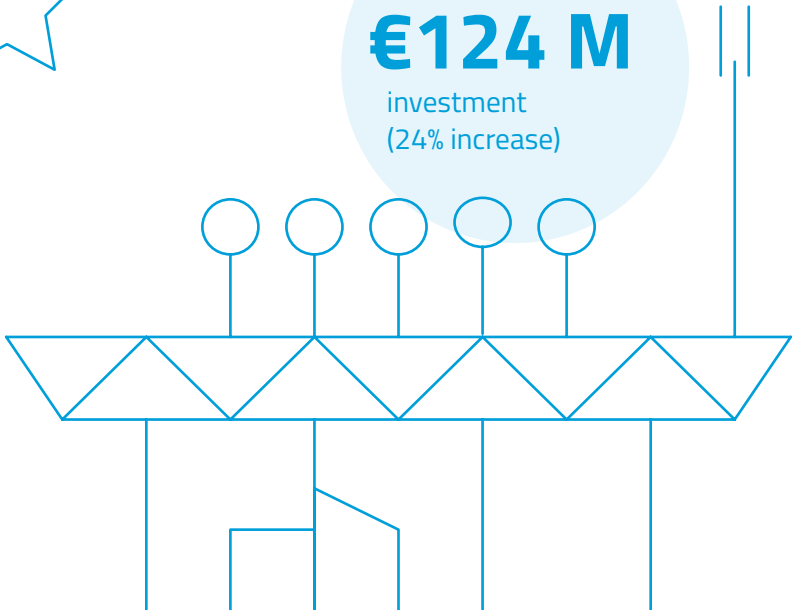
**+€86 M\*** ↗  
of revenue (+23%)



**+40%** ↗  
traffic 21/20 and  
-45% 21/19



**€124 M**  
investment  
(24% increase)

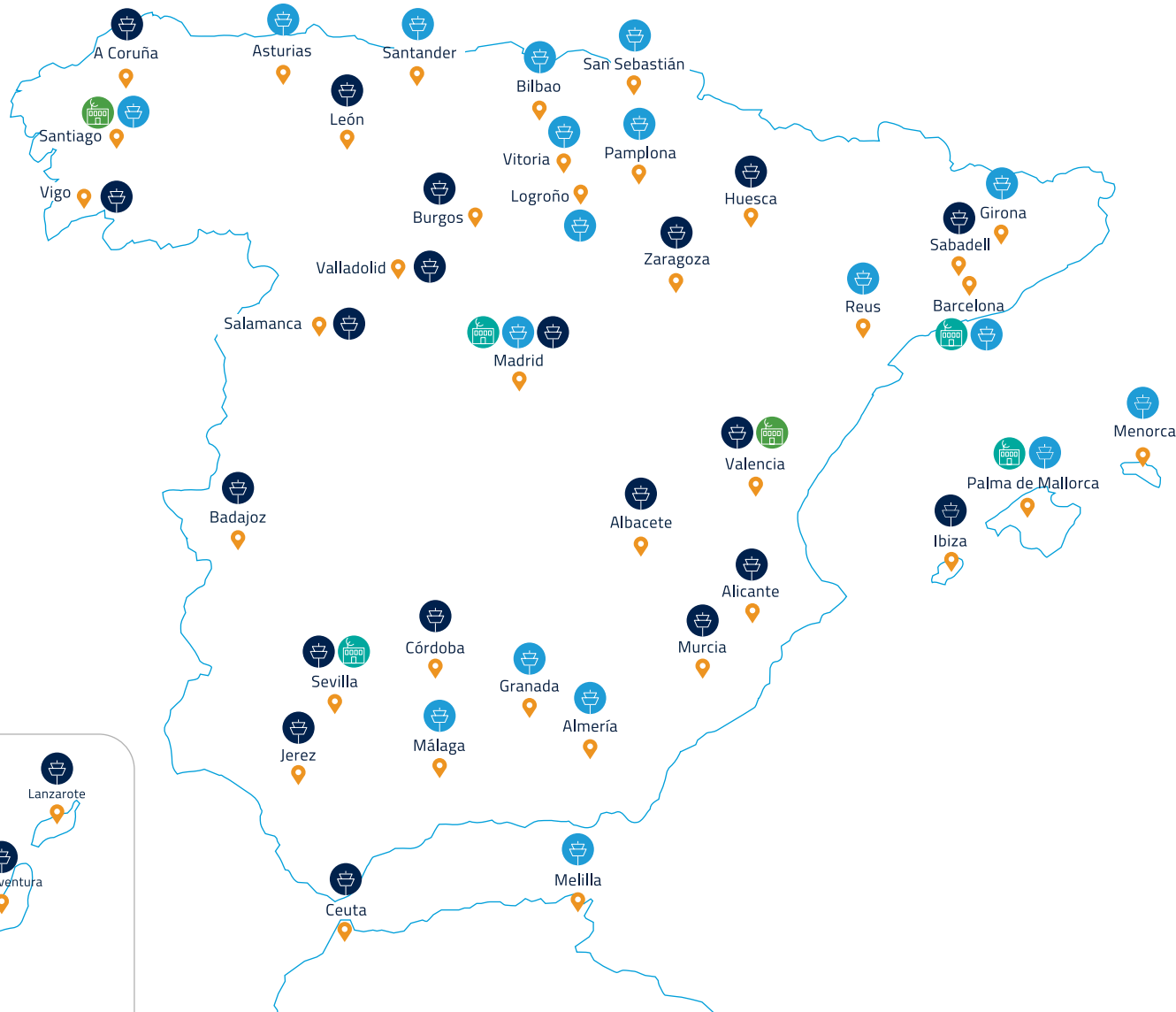
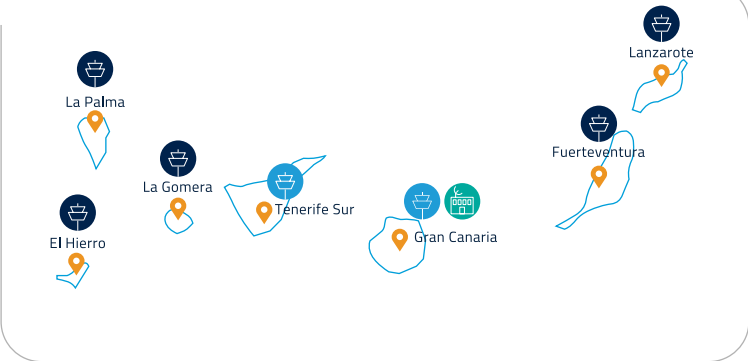


\*Pending final approval

# Location of air navigation services

-  Control tower: air traffic services and CNS
-  Control tower: CNS services
-  Control centres: air traffic services and CNS
-  Terminal Control Area Centres: air traffic services and CNS

## Canary Islands



CNS: Communication, Navigation and Surveillance



3

A YEAR FOR  
RECOVERY



# 3 A YEAR FOR RECOVERY



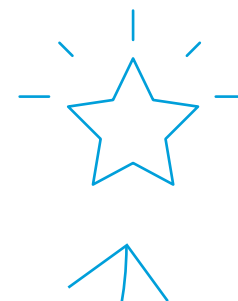
“At ENAIRE we have implemented measures in several areas to overcome the effects of the COVID-19 pandemic on the 2020 results”.

## Air navigation services recovery plan

With the **Recovery Plan**, at ENAIRE we are working in close cooperation with EUROCONTROL to coordinate the operational criteria for restoring pre-pandemic flight levels with the guarantee of the provision of services, combining this with measures to prevent the health of its workers and essential staff.

This plan was implemented in the summer of 2020 and ended in September 2021, more than a year later.

The plan has enabled the recovery of air traffic control operations in a scalable manner according to the expected demand and scheduling criteria, making efficient use of available resources.



## Reduction of air navigation charges

To boost the recovery of the aeronautics sector, at **ENAIRE we drastically reduced our air navigation charges in 2021** to support the recovery from the crisis in the aviation sector caused by COVID-19: in the case of **Mainland route charges in 2020 (-16.7%) and 2021 (-11%) by 26% and Canary Islands (-12.5%/-8.5%, respectively) by 20%.**

Spain, thanks to the work of ENAIRE, is the country that lowered its route charges the most in 2021 within the group of 38 countries that make up EUROCONTROL. The Spanish rate is 8% lower than the average European rate.

**Air navigation charges will remain below 2019 levels until 2024.** For example, the mainland rate in 2022 will be 19.4% lower than in 2019 and in the Canary Islands it will be reduced by 14.4%. However, it is important to mention that at ENAIRE we were already operating at the lowest and most competitive rates of the last ten years in Europe.

## Staff protection measures

Throughout 2021, the COVID-19 protection measures established by PRL have been maintained/implemented depending on the evolution of the pandemic and the infection situation throughout the year, with the adoption of special measures when required in coordination with the Social Agents. In addition to these measures, others aimed at reconciling people with their family environment have been incorporated.

## Obtaining grants from the Recovery, Transformation and Resilience Plan (RTRP) for the project "Actions for the development of the Single European Sky"

**ENAIRE is participating in the Next Generation EU exceptional recovery funds approved by the European Council on 21st July 2020** to address the economic and social consequences of the pandemic.

The core element of Next Generation EU is the Resilience and Recovery Mechanism (RRM): 723.8 billion euros in loans and grants available to support reforms and investments undertaken by EU countries.

Member States can access funds under the Recovery and Resilience Mechanism through its Recovery, Transformation and Resilience Plan (RTRP).

**ENAIRE is contributing to the Spanish Plan with Project C06.I02 "Actions for the Development of the Single European Sky",** classified within Component 6 "Sustainable, Safe and Connected Mobility" and the

"National Transport Network: Trans-European Transport Network - Other actions" Measure, for which the Ministry of Transport, Mobility and Urban Agenda (MITMA) is responsible, through the execution of 25 investment actions.

**The amount granted to ENAIRE for the RTRP Grant is €107,253,427** which will materialise through the execution of the 25 investments, from 1st February 2020 until, at the latest, 30th June 2026. In 2021, €32,455,085 was approved.





4

AIR  
TRAFFIC



# 4 AIR TRAFFIC

We have closed 2021  
with figures similar to  
those of 1999

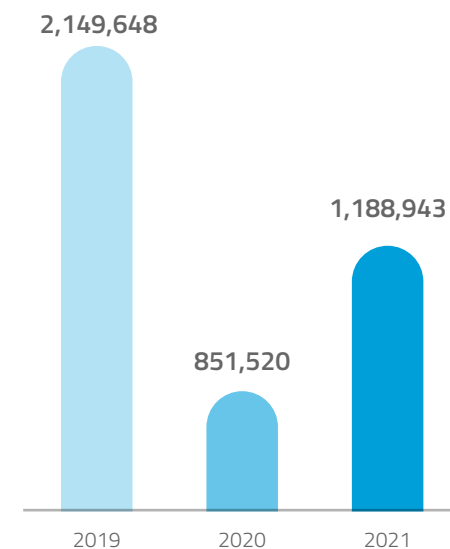
"In 2021 we have recovered,  
on the yearly average, 55.3% of  
flights in comparison to 2019  
levels."

At ENAIRE we managed close to 1.2  
million flights in 2021 (1,188,943),  
44.7% less on average across the  
entire network compared to 2019, the  
benchmark year, as traffic fell to very  
low levels in 2020 as a result of the  
effects of COVID-19.

The summer season in mainland  
Spain and the Balearic Islands and the  
autumn/winter season in the Canary  
Islands in 2021 had traffic figures  
equivalent to 2019.

If we compare the flights managed by  
ENAIRE in 2021 with those of 2020  
(851,520), there is an increase of 40%  
(39.6%).

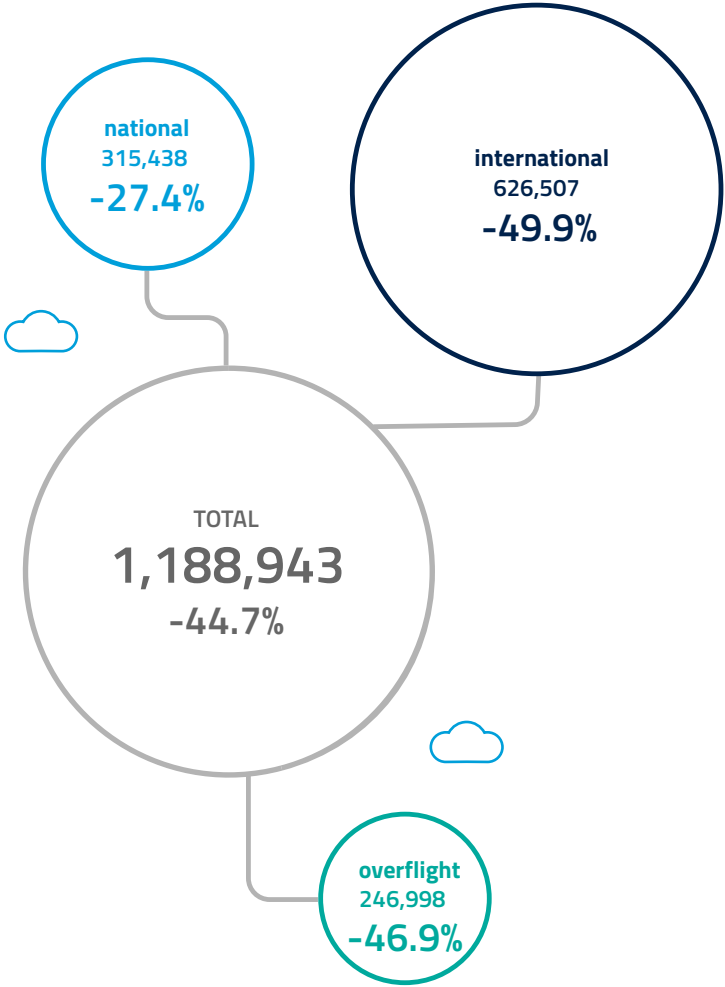
Flights managed  
by ENAIRE



The trend in the number of flights is positive and shows the recovery and resilience of the sector. During 2021, 72.6% of domestic flights and 50.1% of international flights were recovered compared to 2019 data. On the other hand, overflights (which do not originate or terminate at any Spanish airport) saw a recovery of 53.1%.

"In 2021 the daily average of flights was 3,257 compared to 5,889 in 2019."

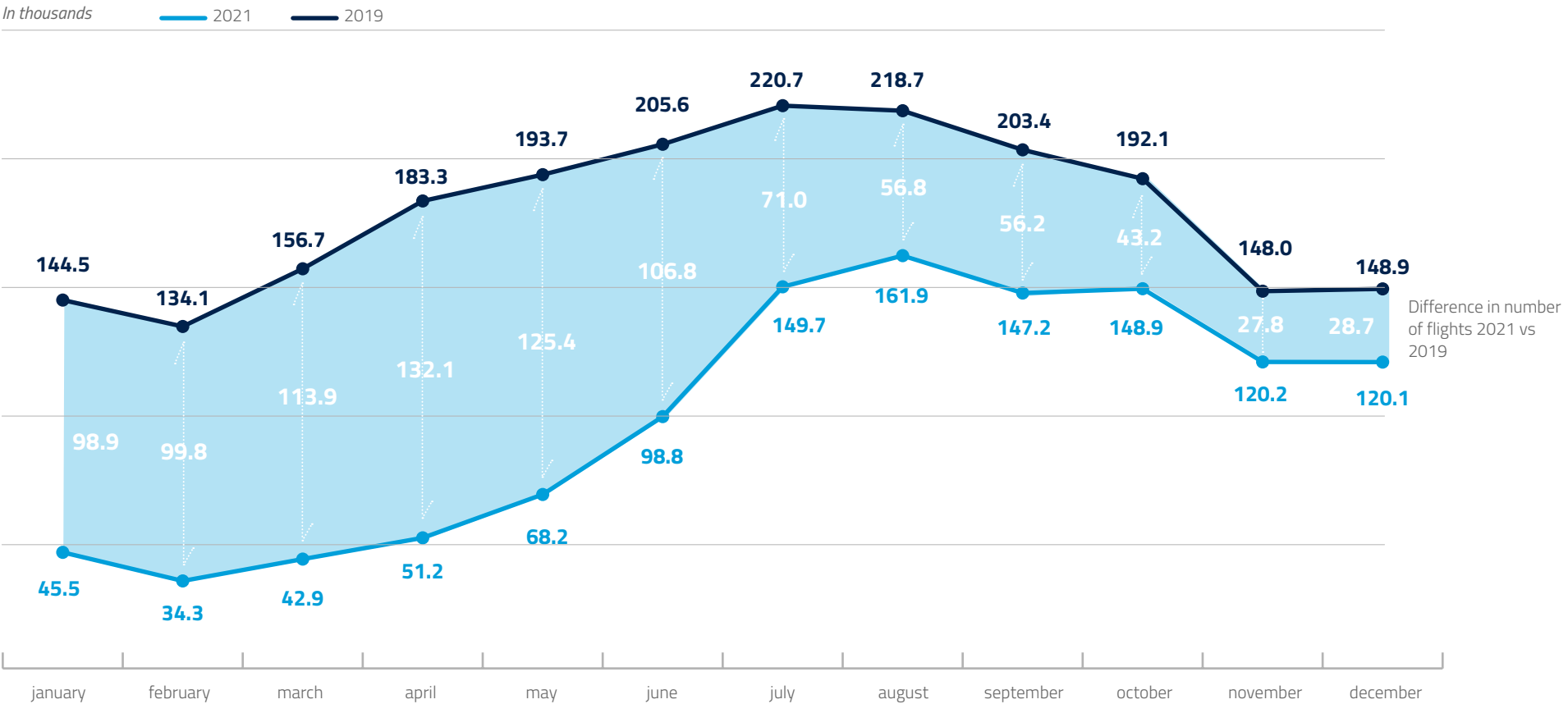
Flights Spain  
compared to 2019





# Monthly evolution Number of flights 2019 vs 2021

The recovery in air traffic was the result of a significant increase in the number of flights during the second half of 2021. Whilst in the first quarter 28% of flights were recovered, compared to the data for the same period in 2019, in the last six months recovery reached 75%.



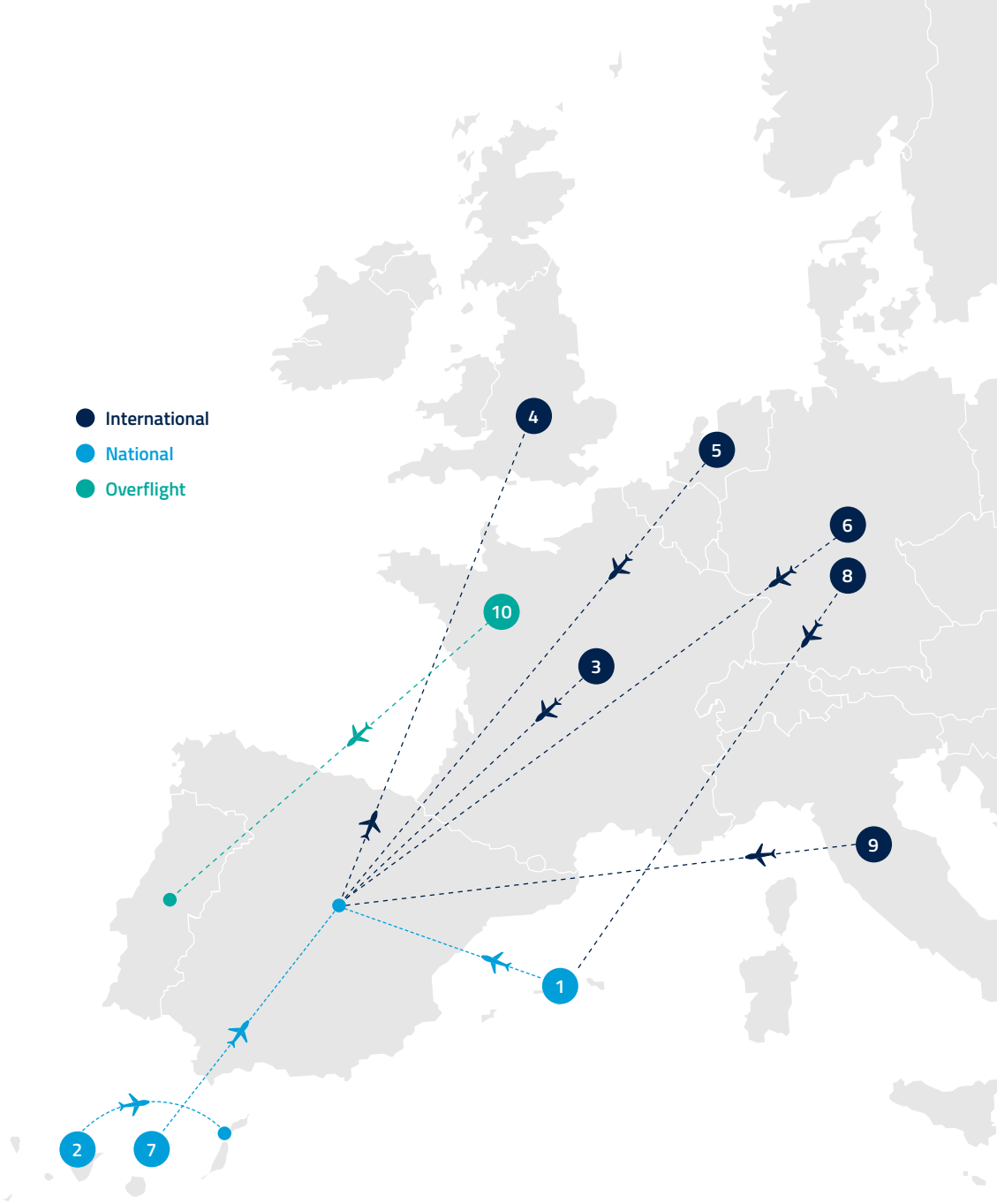


# Information on main flows

Air traffic flows

	TYPE	TOP 10 FLOWS	2021	21 vs 20	20 vs 19
1	NAT	Balearic Islands-Spain	66,645	46.9% <div><div></div></div>	-22.9% <div><div></div></div>
2	NAT	Canary Islands-Canary Islands	65,747	17.0% <div><div></div></div>	-28.7% <div><div></div></div>
3	INT	France-Spain	53,055	45.2% <div><div></div></div>	-46.8% <div><div></div></div>
4	INT	Spain-United Kingdom	52,783	-1.3% <div><div></div></div>	-68.9% <div><div></div></div>
5	INT	Netherlands-Spain	50,994	42.4% <div><div></div></div>	-37.1% <div><div></div></div>
6	INT	Germany-Spain	46,678	32.1% <div><div></div></div>	-50.1% <div><div></div></div>
7	NAT	Canary Islands-Spain	45,909	46.7% <div><div></div></div>	-19.2% <div><div></div></div>
8	INT	Germany-Balearic Islands	44,007	121.6% <div><div></div></div>	-35.5% <div><div></div></div>
9	INT	Italy-Spain	43,249	48.0% <div><div></div></div>	-54.5% <div><div></div></div>
10	OVER	France-Portugal	33,594	36.0% <div><div></div></div>	-37.4% <div><div></div></div>
Acumulative TOP 10			502,661	36.7% <div><div></div></div>	-43.9% <div><div></div></div>

- International
- National
- Overflight



# 5

## 2025

## FLIGHT PLAN

Take-off with the  
2025 Flight Plan



# 5 2025 FLIGHT PLAN

## Targets and results achieved 2021

Provisional data

FUNCTIONAL AREA	Indicator	Closures	Closures	Target	Result	Compliance
Security	Weighted Level of Security (WLS Ground)	17.57	10.86	≤ 13.50	12.16	✓
	Efficiency Management of Security (EoSM)	C	C	C	C	✓
	Cybersecurity Maturity Index (BMI)	84.70%	87.10%	≥ 87.0%	87.6%	✓
Quality, service scalability and resilience	Quality Level Perceived	70.5	72.7	≥ 72.0	75.4	✓
	Route delay (min/flight)	0.47	0.4	≤ 0.12	0.09	✓
	Arrival delay (min/arrival)*	1.02	0.3	≤ 0.44	0.19	✓
Sustainability	Inefficiency routes network (KEA)**	3.67%	3,11%	≤ 3.51%	3.30%	✓
Efficiency and Competitiveness	Unit costs Global Route (€2017)	43.5	108	≤ 86.6	75.6	✓
	Financial solvency	1.5	1.5	≥ 1.40	1.44	✓
Transformation and Modernisation	Work climate	3.03	--	--	--	
	Digital Maturity	41.3	--	≥ 45.0	64.7	✓

\*Corresponding to ENAIRE for the 7 airports of Madrid, Barcelona, Palma de Mallorca, Malaga, Gran Canaria, Alicante and Ibiza

\*\*ENAIRE's Meta Kea as a contribution to Spain's RP3 target. Closing data 2019, 2020 for Spain

With the implementation of the Strategic Plan 2021-2025 - 2025 Flight Plan - we want to turn ENAIRE into a global services operator capable of adapting to the major changes facing the air navigation sector.

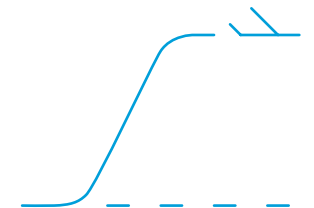
This strategic plan will allow us to:

- » **Ensure the future viability of ENAIRE** and, at the same time, contribute to the recovery of the aviation sector in the face of the severity of the crisis caused by COVID-19, coming out better and stronger after the pandemic.
- » **Lead the construction of the Single European Sky** and facilitate Spain's compliance with the European objectives set by the European Commission for the 2021-2024 period under the new European performance framework (RP3).
- » **Adapt to the structural changes in the sector** marked by the globalisation, offshoring and liberalisation of services.

The 2025 Flight Plan is a major commitment to transform and modernise the Public Business Entity and turn ENAIRE into a global operator of air navigation services that relies on people, innovation and digitalisation in order to access and grow in other markets.

**This strategic plan includes 11 Action Plans and 38 strategic initiatives** covering the improvement of services, thanks to the development of more efficient, sustainable and competitive solutions; business development with the evolution of services towards global and offshore models; and the provision of new services, such as, for example, drones, and the consolidation of ENAIRE's cultural transformation.

"The ENAIRE 2021-2025 Strategic Plan, **2025 Flight Plan**, was approved by the Board of Directors in April 2021, subject to the relevant ministerial approvals"





# 6

## OUR COMMITMENT

6.1 Sustainable Development Goals and the 2030 Agenda

6.2 Our commitment to stakeholders

6.3 Our commitment to the environment

6.4 Our commitment to transparency and good governance





# 6 OUR COMMITMENT

## 6.1 SUSTAINABLE DEVELOPMENT GOALS AND THE 2030 AGENDA

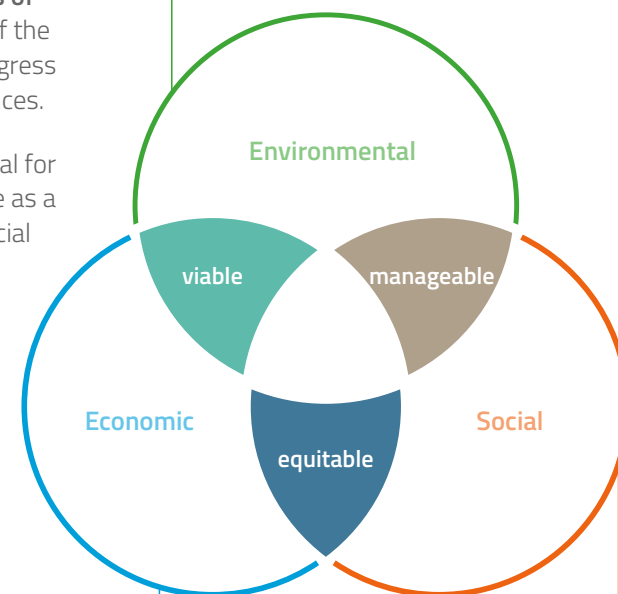
At ENAIRE we adhere to the **Principles of the United Nations Global Compact** and are committed to contributing to the **SDGs of the 2030 Agenda** and to the policies of the Spanish government, reporting on progress and the implementation of good practices.

At ENAIRE we are part of the "New Deal for Europe", which aims to position Europe as a global leader in terms of economic, social and environmental sustainability by 2030.

Our contribution to sustainability focuses on **four strategic lines of action**

### 1. Environmental sustainability

Minimise the environmental impact of air transport and of our own activity.



### 2. Transparency and good governance

Ethical management and transparency of the organisation.

### 3. Society and culture

Social engagement and promotion of education and culture.

### 4. Employees

Commitment and motivation to offer quality and secure employment.

## 6.2 OUR COMMITMENT TO STAKEHOLDERS

We are making a major effort to strengthen relationships with our stakeholders, with whom we maintain coordination mechanisms with the aim of offering an optimum service to air transport users.

To **strengthen our relationships with customers and organisations involved in the aeronautical sector, we have developed fluid communication channels** both internally and externally and thanks to our management system and our materiality studies, we gather information and expectations from our stakeholders and incorporate them into strategic management.

In the year **2021 we held five national days of meetings with our customers and stakeholders and three other regional days with airlines and pilots.** All of these meetings, held via videoconference, enabled the exchange of information and discussion on both strategic and operational issues of mutual interest.

Last October, **ENAIRE obtained the EFQM 500 European Seal of Excellence awarded by the Excellence in Management Club: The EFQM model** enables organisations to assess, by means of European standards, its culture of improvement and innovation aligning the consistency of its goals to the creation of value for its stakeholders.

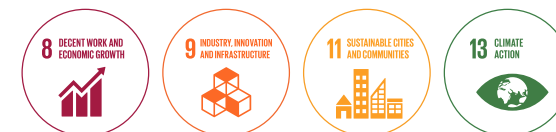
Perceived Quality Level (PQL 2021): The **Perceived Quality Level by ENAIRE's customers reached 75.4%, the highest PQL ever achieved.**

segment	2019	2020	2021
Airports	81.30%	81.30%	<b>90.95%</b>
Airlines	71.01%	75.80%	<b>75.80%</b>
Commercial pilots	59.90%	63.20%	<b>63.20%</b>
General Aviation	65.33%	65.33%	<b>64.00%</b>
<b>OVERALL PQL</b>	<b>70.5%</b>	<b>72.7%</b>	<b>75.4%</b>

## Our contribution to the Sustainable Development Goals (SDGs):

### Impact

Contribution to the 2030 Agenda



### Contribution

For proper functioning of our activity and to ensure that our management is sustainable and socially responsible:



### Input

As a public entity, our participation in the international environment and our collaboration with the stakeholders with whom we interact:





# 6.3 OUR COMMITMENT TO THE ENVIRONMENT



## WE LAUNCHED THE DEPLOYMENT OF ENAIRE'S PHOTOVOLTAIC PLANTS.

The photovoltaic installations at the Seville and Canary Islands control centres came into operation, and the projects for the photovoltaic plants at the Madrid and Barcelona control centres were contracted. Madrid and Barcelona represent ENAIRE's two largest self-consumption photovoltaic power plants, with an estimated annual production of 3.22 GWh. These plants will join those already in operation at the Canary Islands and Seville control centres. Overall, the photovoltaic installations of ENAIRE's control centres mentioned above will produce 4.17 GWh annually, which represents 17% of the electric consumption of these units.



70%

directs



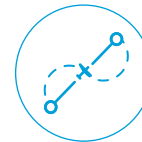
10,500

TM fuel savings in relation  
to 2019



-33,000

TM issuance  
CO<sub>2</sub>



96.7%

efficiency of the route  
network



**IN 2021 WE REGISTERED  
ENAIRE'S CARBON FOOTPRINT WITH THE  
MINISTRY FOR ECOLOGICAL TRANSITION  
AND DEMOGRAPHIC CHALLENGE**, as part of  
our commitment to sustainability and our goal of  
becoming CO<sub>2</sub> neutral by 2030.

With this milestone, "Calculate", the first of  
the necessary phases, is complete. In the  
following years the "Reduce" and "Compensate"  
phases will be addressed to conclude ENAIRE's  
commitment to neutrality in its Green Sky  
Sustainability Plan.

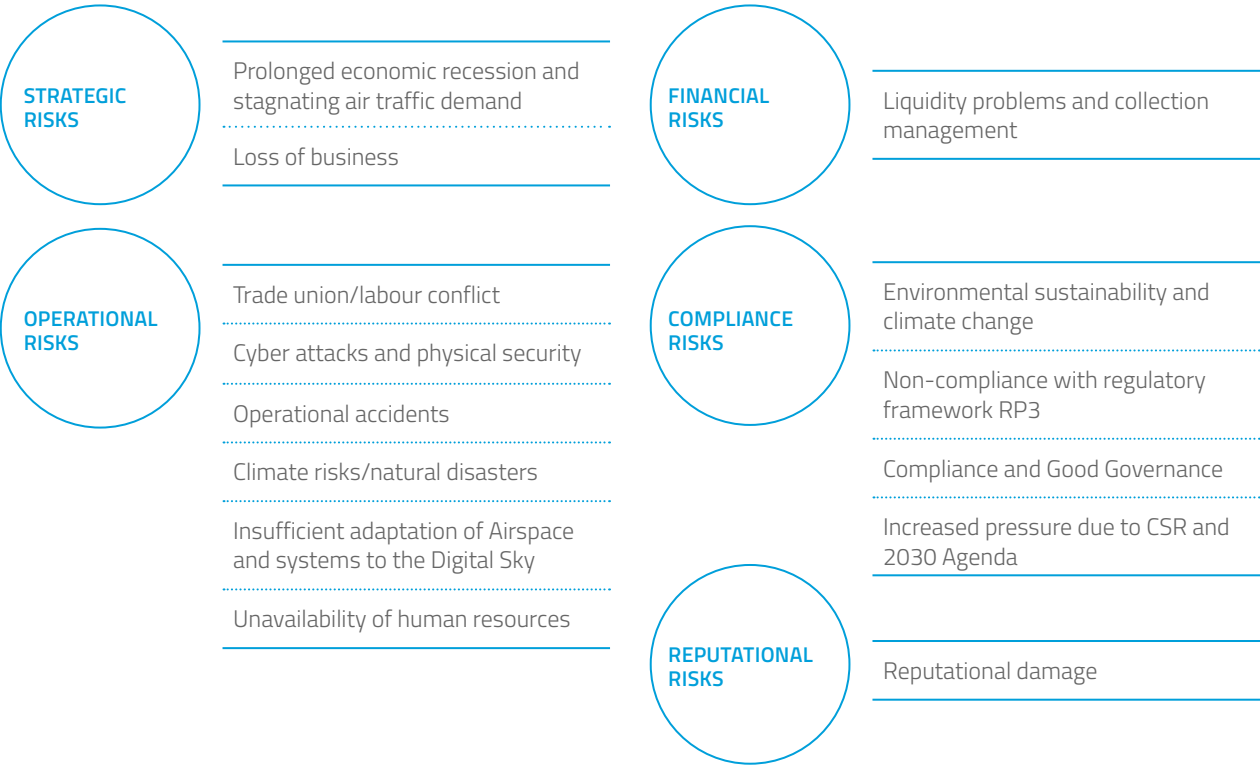
The measures implemented by ENAIRE to reduce  
the distances flown in our airspace have led to an  
improvement in the efficiency of Spain's air route  
network, reaching 96.7% in 2021 compared to  
96.3% in 2019.

- » generating savings of 1 million NM for airlines  
compared to 2019
- » representing a reduction of approximately  
10,500 MT of fuel compared to 2019
- » which has meant that 33,000 MT of CO<sub>2</sub> are no  
longer emitted into the atmosphere



# 6.4 OUR COMMITMENT TO TRANSPARENCY AND GOOD GOVERNANCE

## 2021 Risks



At ENAIRE, we remain committed to working on promoting a culture of transparency within the organisation and we adhere to legal requirements such as those required by **Law 19/2013 on Transparency**.



**13**  
queries  
received on the  
Transparency  
Portal

**115**  
contested  
parliamentary  
initiatives

We have a **Criminal Defence Model** with its associated bodies and a **Code of Ethics** applicable to the entire company, as well as a **whistleblowing channel**.



**5**  
complaints

**2**  
admissible  
complaints

At ENAIRE we have an **Integrated Risk Management System**. Risks were updated and assessed annually. In addition, the corresponding risk map for each year was approved.

# 7

## NOTEABLE PROJECTS

7.1 Security

7.2 People

7.3 Operations

7.4 Innovation and Drones

7.5 Technology and digitalisation

7.6 Certification



# 7

## NOTEABLE PROJECTS

### 7.1 SECURITY

#### PHYSICAL / CYBER SECURITY



##### **New Strategic Plan and Cybersecurity Operation Plan**

designed to further strengthen measures to protect against cyber-attacks, as well as other structural measures in the field of training, awareness-raising and investment in the short, medium and long term.

Security (C1), Security Culture (C2), Security Risk Management (C3), Security Assurance (C4) and Security Promotion (C5).

**By obtaining the highest score, ENAIRE consolidates its position as a leader and benchmark in Security Management at the European level**, a position that the national air traffic manager in Spain has already achieved following the publication of the 2019 results and endorsed with the assessment for 2020.

- » New methods for monitoring daily operations. In October, at the International Civil Aviation Organisation High-Level Security Conference, the NOM (Normal Operation Monitoring) method, led by ENAIRE, was highlighted.
- » Mass data analysis processes for security.

#### OPERATIONAL SECURITY



##### **Continuous improvement of the safety management system**

in order to maintain ENAIRE's position as a leader among European suppliers as published in 2020 and also in 2021. The end result of the safety management effectiveness assessment process has been very positive for ENAIRE. In line with the European standard, **ENAIRE has the highest possible level (100% maturity) of the Safety Management System** in its five components: Policy and objectives of



### We finalised the Air Navigation Services Recovery Plan. In

September the Plan was formally

terminated, which mainly addressed the risks of this recovery period: the possibility of sudden increases in traffic and the loss of competition from controllers after a long period of very low levels of traffic. The measures set out in the Plan proved effective, with no major security incidents occurring during the recovery.



### We deployed the fatigue and stress risk management system by enabling channels for reporting and

investigating events of this nature, as well as

associated **training**. In September, ENAIRE's Human Factor Days were held in conjunction with Eurocontrol and the US Federal Aviation Agency, where the relationship between technology and personal skills was analysed.

## 7.2 PEOPLE

### Operational staff

	2018	2019	2020	2021	Growth in 2021 in relation to 2020
Number of employees	3,936	4,011	3,968	4,005	↑ 0.93%
People I Group Agreement	1,892	1,911	1,901	1,922	↑ 1.10%
People II Control Agreement	2,044	2,100	2,067	2,083	↑ 0.77%
% Women of total staff	34.32%	34.48%	34.32%	34.36%	↑ 0.11%

\*This figure does not include employees of the 2nd Control Agreement on SPL (Special Paid Leave in anticipation of retirement) and AR (Active Reserve, as an intermediate step between the withdrawal of functions and their retirement), to which Control staff are entitled, nor partial retirees and duplicated own interim employees.







We put ÁBACO into service in the majority of ENAIRE's premises: A shift planning and management tool for both agreements and APP for employees through which they can view their schedules in real time, manage their service changes, leave and holidays.

Work is currently underway on a rolling programme of improvements with the aim of bringing the pending facilities into service as soon as possible.



We successfully negotiated the 2nd Group Agreement: Complaint, constitution of the negotiating table and elaboration of the business platform.



We are recruiting 90 air control posts: published in the BOE on 29/11/2021 with the selective process beginning in January 2022, with the aim of having as many qualified controllers as possible before the summer of 2024.



Development of tools in the field of ATC training: Improvements and developments in the Gammasim simulator, CEFIRO (Digitalisation of the skill assessment process) and HECCO (Update of the ATC training monitoring tool).



We drafted, negotiated and obtained approval for the new Equality Plans of both agreements for their adaptation to the new regulations. Development and establishment of the pay register as a tool for pay transparency.



We implemented the remote work and digital disconnection policy of the 1st Group Agreement, signed by ENAIRE and trade union representatives on 15th June 2021, which came into force on 16th September: for positions that can be performed remotely, there is the option of working remotely 6 days a month (or 2 days and 11 afternoons for structural staff), with a maximum of 2 days a week.



We are recruiting for **occupational medicine posts** and engineering grants.



On 11th May 2021, ENAIRE signed an agreement with the Polytechnic University of Madrid, the General Foundation of the Polytechnic University of Madrid and the Autonomous University of Madrid for the joint organisation of the Master's Degree in Air Navigation Services Management (a unique postgraduate qualification in which international organisations such as ICAO and EUROCONTROL, CANSO, universities and training centres participate). The 2nd edition of the Master's degree was inaugurated on 8th September 2021 in the presence of Isabel Pardo de Vera, Secretary of State for Transport, Mobility and Urban Agenda and President of ENAIRE.

# 7.3 OPERATIONS

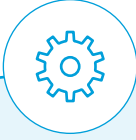
In 2021 we would like to highlight

We continue with the digitalisation of ATM processes. At ENAIRE we are the most timely ANSP in the migration of tools to the new versions of EUROCONTROL.



We updated the procedures for managing intruder drones in airport environments.

We implemented new procedures and tools to support flow management.

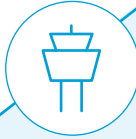


We promoted the implementation of new processes for the flexible use of airspace and improved route efficiency.

In September 2021 we improved the accessibility and operational safety of the airport of San Sebastián Airport with the implementation of new procedures based on satellite navigation for departures and arrivals.



In November 2021 we introduced a new improvement in the operation of Josep Tarradellas Barcelona-El Prat Airport with new approach procedures based on satellite air navigation.



In October 2021 Bilbao Airport passed the test phase operating as an "advanced tower" (Eurocontrol flight management system).



## 7.4 INNOVATION AND DRONES

We continued with our commitment to open innovation, starting the **activities of the iFOCUCS-ACSI proposal**, the winning idea of the second edition of the ENAIRE Innovation Award, consisting of the design of a localised extraction system in the air traffic controller's work area (iFOCUCS) which reduces the risk of infection by any virus that can be transmitted through the air, winner of the Innovation 2020 award. In 2021 there were 2 winning projects: GIDAL-DRONE (GNSS Interference Detection and Localisation from Drone) and ENAIRGY+, the project consists of the application of the Passivhaus standard at a specific site: the VOR (evor/SVL) equipment room. Passivhaus aims to reduce consumption in thermal conditioning through insulation, absence of thermal bridges, airtightness, controlled mechanical ventilation with heat recovery and high performance carpentry.

### We developed the EYWA ecosystem

This system, already available to internal ENAIRE users, is capable of integrating data and analysing network information in real time, fostering the exchange of knowledge among its users and supporting decision-making and efficiency.

We started the work for the implementation of the **ENAIRE U-space Platform**, specified in accordance with the European Commission Implementing Regulation (EU) 2021/664 of 22nd April 2021 on a regulatory framework for U-space for the automated and digital management of unmanned aviation operations, allowing ENAIRE to be certified and designated by the State as a Common Information Services Provider (CIS Provider), who will facilitate the exchange of operational data between U-space service providers (USSPs) that manage in an automated manner the operations of drone operators, air traffic management providers and other stakeholders, enabling the safe and efficient provision of these services in designated U-space.

### Predator Programme

With the Spanish Air Force, we coordinated a **pioneering military intelligence**, surveillance and reconnaissance system unmanned flight programme called PREDATOR.

**startical**

"STARTICAL was created ,  
as a 50/50 joint venture  
with INDRA, for  
innovation in the provision  
of satellite services in air  
navigation."

In a pioneering project, the new partnership seeks to develop and put into orbit a satellite platform that will extend surveillance and communications coverage with aircraft, especially to vast oceanic or remote areas without coverage by air navigation systems based on ground infrastructures.

## 7.5 TECHNOLOGY AND DIGITALISATION

"In 2021, we upgraded and modernised the air navigation system, by incorporating new technologies to increase efficiency and improve the quality of the service provided."

We implemented necessary measures and **investments to comply with the European regulatory framework for the Single European Sky (SES)**, and we participated in the different groups established for this purpose (SESAR, EUROCONTROL, etc.). The overall aim being to improve the global performance of air navigation services.

### Actions



**Digital Transformation:** Projects aimed at increasing process automation and efficiency in ENAIRE, digitalisation of aeronautical documentation (data and mapping) available to users for flights.



**Spanish Automated Air Traffic Control System (SACTA):** Upgrading of the system's infrastructure to increase its resilience and suitability for the required operational capabilities.



**Satellite technologies (EGNOS, ADS-B):** Installation of a new high-performance aeronautical data network.



**Improvements to the logistics information available and the SIRA/ORION project:** actions to improve the technical monitoring system.



**Improvements in the provision of aeronautical information:**

- » In 2021 we updated the ENAIRE Drones app in line with new regulations.
- » We developed specific functionalities for the management of drone operations for the Ministry of Defence; ENAIRE Drones MD.

Evolution and improvement of the Insignia digital tools as well as the presentation of the AIP, having become a much more modern and organised website in order to facilitate access to information.





## COMMUNICATIONS SYSTEMS

We commissioned the voice and ground-to-air communications systems in the airport control towers of Lanzarote and Vigo (remote tower).

In addition, we commissioned the Communications Centre (CECOM) of Cabeza de Manzaneda.

We deployed the Last Resort Voice system (LRV), with the commissioning of the CATS room at the ACC in Seville. The Barajas LRV was also commissioned.



## MONITORING SYSTEMS

We implemented the Mode S radar with ADS-B functionality of **Paracuellos II**. Renewal of the old secondary radar with a new generation radar.

We installed independent ADS-B stations in **Vejer and Yeste**, and **co-located stations with mode S radars in Monflorite, Alicante, Tenerife South, Gran Canaria, As Pontes, Palma and Begas**. ADS-B stations allow for an additional layer of surveillance service.



## NAVIGATION SYSTEMS

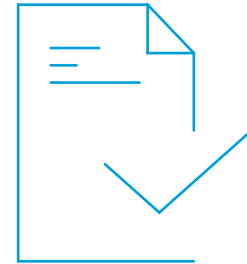
We installed RECNET nodes in **A Coruña, Almería, La Palma, Lanzarote and Gerona**. The RECNET network is a GNSS performance and interference analysis network, which allows monitoring of the usability of satellites at airports with PBN performance-based manoeuvres.

We renewed the radio aids systems, VOR/DME of Salamanca.



## 7.6 CERTIFICATION

"In 2021, ENAIRE extended the CNS services certificate to include Automatic Dependent Surveillance by Broadcast (ADS-B)."



### Extension of the scope of the Airspace Management Service (ASM) Level 3

In 2021 we developed an implementation plan in order to be able to provide the ASM Level 3 service on an ad hoc basis in any unit other than those included in the scope of the ASM Level 3 Operational Manual (S41-19-MAN-004). 12 of the 13 actions contained in the plan have already been implemented.

**ENAIRE has developed an ADS-B Implementation Plan to comply with Regulation (EU) 1207/2011,** based on the installation of ADS-B Extended Squitter stations, which will optimise the air navigation surveillance network from an economic, environmental and service quality point of view.

In the first phase of this plan, we installed ADS-B stations at Alicante, Granada and Menorca airports, where it was also necessary to adapt the associated equipment for their commissioning.

Once the technical deployment of the stations was completed and in order to be able to provide ADS-B services, we analysed and demonstrated compliance with the requirements of Regulation (EU) 2017/373 to start the certification process with EASA in March 2021, requesting the Agency to modify the scope of ENAIRE's certificate as CNS service provider to include ADS-B.



8

# INTERNATIONAL ACTIVITY





# 8 INTERNATIONAL- AL ACTIVITY

We support the creation of the new European partnership “Single European Sky ATM Research (SESAR) 3”, which will centralise and manage European R&D in the period 2022- 2031, and of which ENAIRE is a founding member, following the signing of the LoC (Letter of Commitment) by ENAIRE in December 2021. Within the framework of this new public-private partnership, initial and advanced research and development and demonstrator activities will be developed in accordance with the European ATM Master Plan.

In 2021, ENAIRE assumed the annual rotating presidency of the iTEC (Interoperability Through European Collaboration) steering committee, an alliance that develops the interoperability of air traffic systems.

## ENAIRE

We are one of the key pillars in the initiative launched by the A6 Alliance for the establishment of the **ATS Common Data-Link Service Governance through the signing of the ATS Common Data Link Services (ACDLS) Governance Memorandum of Cooperation**, which took effect on **1st of October 2021**, following the signing of the 18 parties involved in the process.

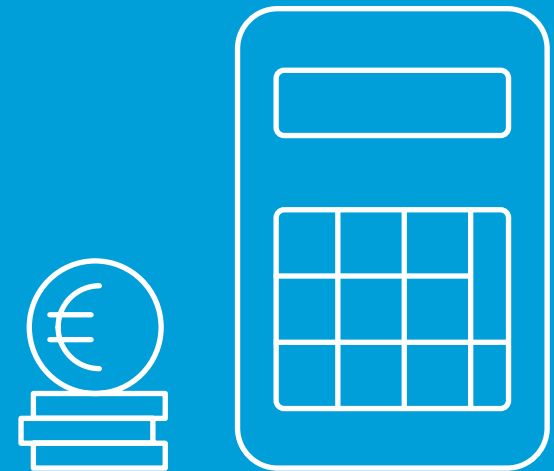
Agreement for the establishment of a Consortium with EUROCONTROL/Network Manager for the new SESAR Deployment Manager.

This Agreement has been one of the most important milestones for ENAIRE in the year 2021, at international level, as it is the result of more than two years of intense work in which ENAIRE has collaborated in the different groups created, in all phases of the project.



# 9

## ECONOMIC- FINANCIAL SITUATION



# 9 ECONOMIC- FINANCIAL SITUATION

Data for the 2021 financial year corresponding to the Entity's Annual Financial Statements, presented to the Board of Directors on 30th March 2022, pending final approval.

"ENARE continues to be significantly affected by the impact of the COVID-19 crisis."

- » Our main source of revenue comes from the route tax charged to airlines for the air navigation services provided to each flight, to/from a Spanish airport as well as overflights in our airspace.
- » Traffic levels (in service units) are still 45% below those recorded in 2019, which has a very significant impact on revenue.

On 31st December 2021, the aerodrome services agreement ended between ENARE and Aena, which is ENARE's second largest source of revenue.

We signed a new services contract with Aena for the 2022-2026 period, for a total amount of €601 million over the entire period and €122 million in the first year 2022.

11%

MAINLAND SPAIN

8.5%

CANARY ISLANDS

A regulatory review affecting the RP3 Yield and Pricing Regulation has been carried at European level, due to the crisis caused by the COVID-19 pandemic, resulting in a new Spanish Performance Plan for the entire 2020-2024 period.

ENARE lowered the route tax in 2021 by 11% in mainland Spain and 8.5% in the Canary Islands, which has been a significant aid for airlines.

According to the contents of the Plan, by 2022 the rates will rise moderately with an increase of 9% in mainland Spain and 7% in the Canary Islands, in line with the expected recovery of traffic and airlines.

## SUMMARY

The Operating Result was **-€309.68 M** compared to -€354.59 M in 2020, an improvement thanks to the recovery of traffic in spite of the tariff decrease. This results in an EBITDA of **-€220.20 M**, compared to -€267.25 M in 2020.



REVENUE

**€466M** (23%)



EXPENDITURE

**€776M** (6%)



EBITDA

**-€220M** (-18%)

(€ millions)	2019	2020	2021	% 2021/2020
Operating income	922.26	380.24	465.84	23%
Operating costs	806.56	734.83	775.52	6%
Operating result	115.70	-354.60	-309.68	-13%
EBITDA	209.04	-267.25	-220.20	-18%
Financial result	531.57	14.71	3.96	-73%
Profit before tax	647.27	-339.89	-305.72	-10%





## REVENUE

Revenue increased compared to 2020 but is still far from normal levels, mainly due to the effect of the COVID-19 crisis which continues to have a significant impact on traffic (-45% compared to the last normal year 2019), as well as the decrease in route tax in 2021 by -11% on the mainland and -8.5% in the Canary Islands.

With regard to 2020:



REVENUE  
**+€86M** (23%)



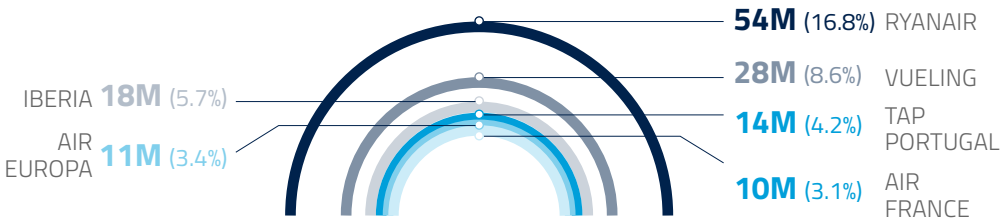
BILLED TO AIRLINES  
**+€76M** (30%)



FROM THE SERVICE AGREEMENT  
WITH AENA SME SA  
**+€6M** (5%)

(€ millions)	2019	2020	2021	% 2021/2020
<b>Turnover</b>	912.83	371.93	455.47	22%
<b>Air navigation services</b>	<b>912.66</b>	<b>371.75</b>	<b>455.24</b>	<b>22%</b>
Route assistance services	751.59	243.35	314.10	29%
Approach assistance services	24.11	9.36	14.23	52%
Aerodrome services	131.23	113.37	119.53	5%
Publications and other	5.72	5.66	7.38	30%
<b>Other services</b>	<b>0.18</b>	<b>0.18</b>	<b>0.23</b>	<b>28%</b>
<b>Other income</b>	9.42	8.31	<b>10.38</b>	<b>25%</b>
<b>Operating income</b>	<b>922.26</b>	<b>380.24</b>	<b>465.84</b>	<b>23%</b>

Only 6 airlines have a turnover of more than €10M:





## COSTS

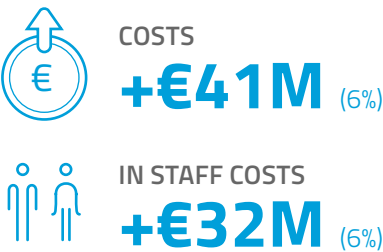
By item, the 41% increase in procurement stands out, due to the participation of AEMET and AESA services in route services, for which the agreement is conditioned by traffic levels.

The staff costs increased by 6%, reflecting the salary increase approved in the PGE 21 and an increase in the number of staff.

Other operating costs did not increase despite a sharp rise in inflation in 2021 and higher electricity supply costs.

Amortisation increased by 2% due to the growth in investments.

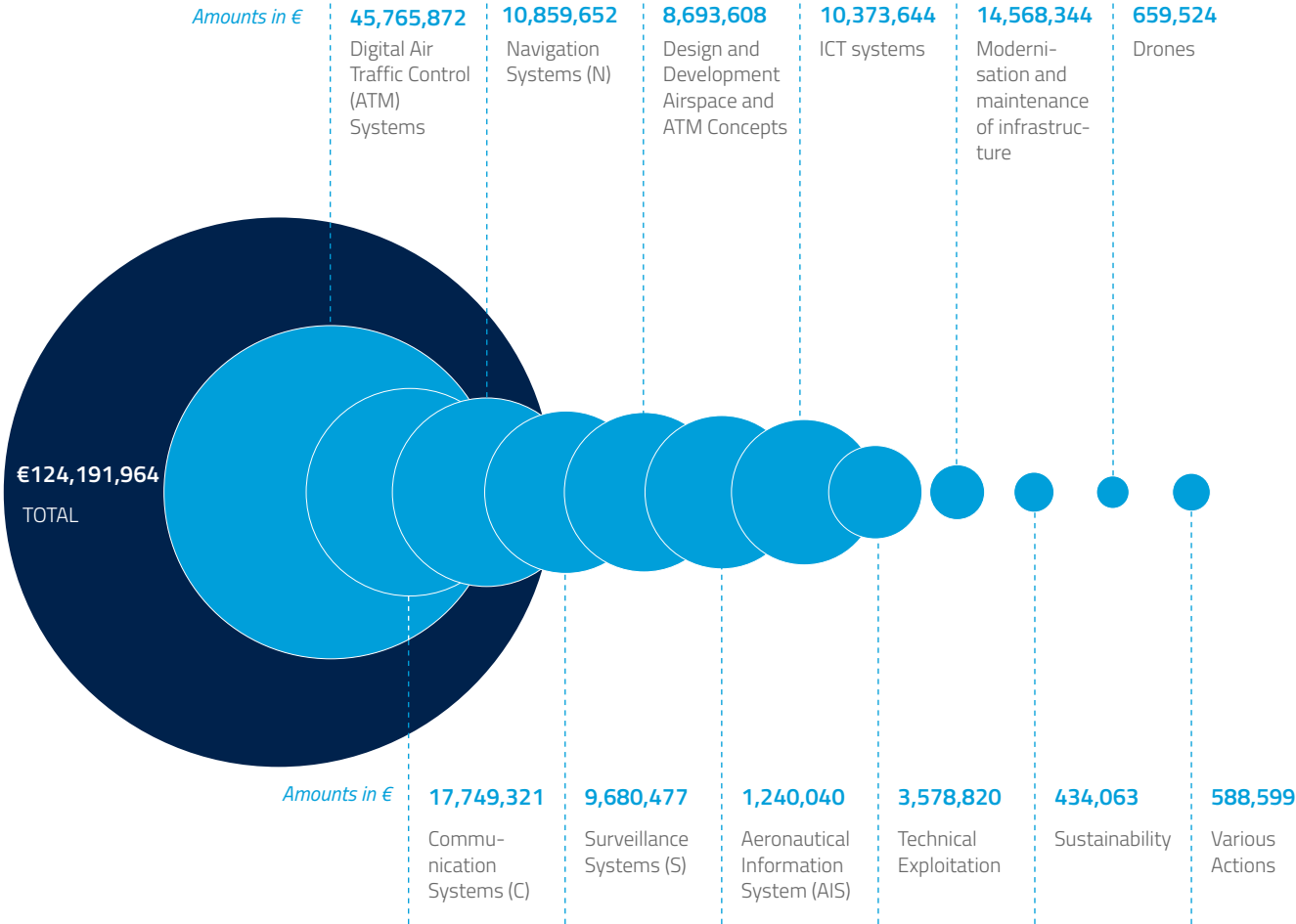
With regard to 2020:



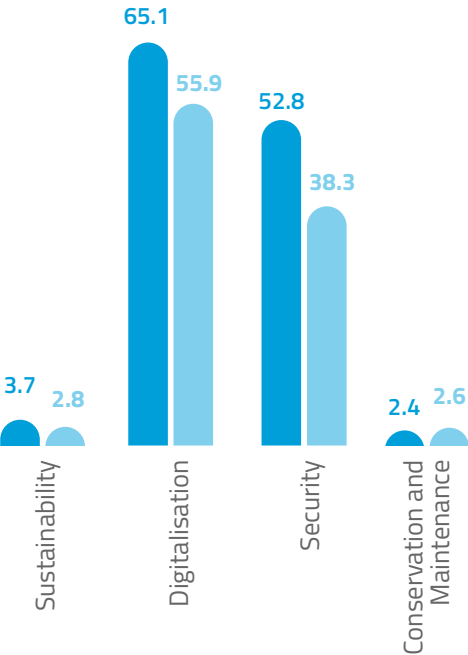
(€ millions)	2019	2020	2021	% 2021/2020
Procurement	36.34	13.70	19.26	41%
Staff costs	571.28	536.50	568.80	6%
Other operating costs	106.10	97.71	98.01	0%
Amortisation	93.34	87.35	89.48	2%
Damages and other results	-0.51	-0.42	-0.02	-95%
Operating costs	806.56	734.83	775.52	6%



# INVESTMENTS BY PROJECTS PAP 2021



# COMPARISON OF OUR INVESTMENTS 2020 VS 2021



# 10

MAIN  
RECOGNITIONS



# 10 MAIN RECOGNITIONS



**We were honoured by the Real Aeroclub de España.**

The award recognises our strong support for general aviation. During the closing gala of the Raid Centenario Bases Aéreas, which commemorates the 100 years of the air bases of León, Tablada, Getafe and Zaragoza, which took place at its headquarters at Madrid Cuatro Vientos Airport, the club presented the "Icaro Award" to ENAIRE.



**At ENAIRE we were recognised with the EFQM 500 seal for the safe, efficient, innovative and sustainable management of air navigation services:**

EFQM is a Management Model that promotes the transformation of organisations. As explained, ENAIRE has been awarded this seal for the following reasons:

- » Its commitment to transformation through its 2025 Flight Plan.
- » Its forward-looking strategic approach.
- » Positioning its stakeholders at the centre of its purpose, vision and strategy.
- » The flexibility and capability demonstrated by the organisation to face the challenges of the environment and the sector.





The EFQM 500 seal recognises our **sound strategic approach to meeting the challenges** we face, reflected in the 2025 Flight Plan, which clearly conveys our purpose (we care for your flight) and our vision (to be a leading global air navigation operator), as well as our commitment to partnerships as a driver to achieve it, e.g. CRIDA (research, development and innovation) or STARTICAL (satellite constellation for air navigation).

It also highlights ENARE's ability to carry out this transformation, providing its services in a fluid and efficient manner with safety as the main priority, relying on the **existing internal talent, recognition outside Spain, experience in services and the financial capacity** to implement the investments.



At ENARE we received the **"Company Award"** for our outstanding role in the implementation of diversity and gender equality policies.

The **Ellas Vuelan Alto** association, which seeks to give a voice and visibility to women in the aerospace sector, has recognised the dedication and work we carry out at ENARE **to promote diversity**.

The air navigation manager has launched the **'ENARE Enfemenino'** project, which is a collaborative network that gives professional women from different occupations, backgrounds and visions the opportunity to gain visibility, creating space for networking and job opportunities for women in the sector and addressing the importance of equality in female professional development and leadership.



**We won the VII Great Company 2021 award for Change Management.**

The [IMM Group-Institute for Positive Change Management](#) awarded us the 2021 Great Company Award for Change Management in December 2021.

We were awarded in recognition of our "Ágora de Transformación" project, a space built on ENARE's Values and created for debate, open to all our professionals, and which promotes the improvement of our organisational culture.

**ENARE received the award for Diversity Management.**

ENARE was the winner of the VII International Awards for Diversity Management organised by the Diversity Foundation, within the category of institution or public company.







**ENAIRe** 

If you have any doubts or queries about this Executive Summary, please contact:

**Gabinete de la Dirección General de ENAIRe**

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