

ADIF ALTA VELOCIDAD

2022

MANAGEMENT REPORT





STATEMENT OF NON-FINANCIAL INFORMATION.

MANAGEMENT REPORT OF THE PUBLIC BUSINESS ENTITY ADIF ALTA VELOCIDAD, 2022.



STATEMENT FROM THE CHAIRWOMAN OF ADIF AND ADIF AV

The Spanish Ministry of Transport, Mobility and Urban Agenda (MITMA), under the framework of the Safe, Sustainable and Connected Mobility Strategy, and Adif and Adif Alta Velocidad (Adif AV), as public entities adhered to that framework, are firmly committed to **sustainable and decarbonised digital mobility and universal accessibility**.

In 2022, the budgets presented by Adif and Adif AV were more ambitious than in previous years. Aside from the customary lines of investment, Adif and Adif AV received a total of €5,974.1 million out of the €6,243 million in direct investment awarded to the railway industry under Spain's National Recovery and Resilience Plan (NRRP), officially titled **Recovery, Transformation and Resilience Plan**. Component 1 of the NRRP — aimed at the development of sustainable, safe and connected mobility in urban areas — was allocated a total of €1,508.9 million. Meanwhile, Component 6 is to receive an estimated €4,465.2 million, broken down as follows: €2,970.6 million for the development of European corridors, €1,015.1 million for the Trans-European Transport Network (TEN-T Network) and €479.5 million for logistics intermodality. Thus, the investment programme of both entities for the year ahead targets three main priorities: the development of new railway lines to complete the TEN-T network, the adaptation and improvement of the conventional network and improved connections for rail freight traffic.

This investment is to be received under the **Recovery and Resilience Facility (RRF)** of the NextGenerationEU instrument, which seeks to mitigate the economic and social impact of the coronavirus pandemic and drive recovery on the path to making European economies and societies more sustainable and resilient, and better prepared for the challenges and

opportunities that lie ahead in relation to the twin green and digital transition. We know how important these European funds are for our country and for society as a whole, and with that in mind we have set up a space within our Group for continuous communication and training on how to manage these funds properly, including measures against corruption, fraud and conflicts of interest. We likewise ensure absolute compliance with all of the Group-wide principles governing this type of funding, including the DNSH (Do No Significant Harm) principle enshrined in the EU's Green Taxonomy Regulation.

In relation to the ongoing **deregulation** of the passenger rail transport sector that began in 2021, in 2022 Spain reached the milestone of becoming the first European country to have three different companies operating within the same network (Renfe, Ouigo and Iryo). The deregulation of the railway industry is essential in creating sustainable mobility, in having more trains running and in offering citizens new options, timetables and prices, among other benefits. In order to democratise transport and return to society the efforts that have been made to make Spain the EU country with the very best high-speed network, the aim is now to extrapolate and migrate the deregulation model to other corridors, thus allowing the entry of more railway operators as we move forward.

Deregulation has also expedited the adaptation of Spain's main stations to the future challenges that must be overcome if we are to assimilate and cope with the significant increase in passengers within the framework of a multi-operator environment. It has also accelerated the adaptation of systems to make them safer and more accessible, sustainable and connected, and improved the urban integration of stations and their commercial running and performance.

Rail traffic rose by 14.8% in the first half of 2022 and 10.5% in the second, according to cumulative data on rail traffic (trains per kilometre), for a total increase of 12.6% compared with 2021. The was most due to the steady increase in traffic throughout 2021 and 2022 as we emerged from the COVID-19 pandemic.

Under the **2030 Strategic Plan** (SP 2030), Adif and Adif AV carried out quarterly monitoring in 2022 of the more than 90 strategic initiatives and related KPIs envisioned in the plan. This involved more than 1,228 actions (596 in progress and 295 completed) to assess the extent to which these initiatives undertaken by both entities contribute to the Sustainable Development Goals (SDGs), showing that the Plan is closely aligned with the United Nations 2030 Agenda.

The **Climate Change Action Plan**, one of the initiatives under the SP 2030, illustrates Adif and Adif AV's firm commitment to environmental sustainability. The Plan lays the foundations for further action in relation to both climate change mitigation—with the aim of reducing energy consumption and greenhouse gas emissions of the railway system—and climate change adaptation, as we look to make railway infrastructure more resilient. The Plan is also allowing us to respond to one of the eligibility requirements for European funding (RRF, ERDF, etc.) when it comes to analysing the vulnerability of infrastructure to the adverse effects of climate change.

In the field of rail **innovation**, 2022 witnessed the official launch of Europe's Rail Joint Undertaking (EU-Rail) partnership, a European research programme, with Adif taking part as a founding member and submitting proposals for flagship projects. Adif and Adif AV both play central roles through formulas

such as public-private partnership, following a change of mentality at the company in response to digitalisation, the need to involve suppliers in open innovation and the importance of feeling safe when using public transport. When it comes to sustainability, I would certainly highlight the progress made towards various proposals relating to the supply of alternative fuels and the hydrogen management model, in order to champion its use in rail vehicles and thus reduce the carbon footprint.

In the realm of **digital transformation**, Adif and Adif AV are working hard to build the 5G network into the portfolio of telecommunications assets by installing a fibre optic network spanning some 24,000 kilometres. The aim is to offer the network as a base for telecommunications operators in order to bring connectivity to the more depopulated rural areas of Spain. Further highlights during the period include the actions taken to digitalise and optimise rail infrastructure planning and capacity management processes, rail traffic processes, and logistics and intermodal transport processes (SIMPLE technology platform), with a positive effect on the multimodal logistics chain.

Rail freight nodes are going through a period of transition as they adapt to the requirements of logistics chains, both in terms of their infrastructure and the way they are managed. Key highlights here include the various actions under way within the framework of the **Mercancías 30 Plan** at strategic intermodal

and logistics terminals in a bid to improve capacity management and coordination of freight traffic entering and leaving ports. The aim is also to build priority corridors for rail motorway services—a key concern for the logistics and transport sector—, while also setting up a support and advisory office. The goal is to reach a 10% share of freight transport by 2030, to be achieved by developing the trans-European rail freight corridors, the Mediterranean Corridor and the Atlantic Corridor.



The year also saw work begin on the regeneration of the Madrid Chamartín-Clara Campoamor station, as part of the larger Madrid **Nuevo Norte Project**, the biggest urban regeneration project going on in Europe right now. The project will ultimately make Madrid Chamartín-Clara Campoamor station an international benchmark for sustainable mobility.

From a social perspective, both entities are strongly committed to **equality and diversity**, which they view as key priorities when it comes to people management, corporate culture and social commitment. Adif and Adif AV, together with companies from the MITMA group, firmly endorse the action plan to set up *Puntos*



Violetas (Purple Points) at stations to help in the fight against gender-based violence. As a show of their ongoing commitment to building a **diverse and inclusive** company—and one that lives and breathes equality and diversity— both Adif and Adif AV have been taking part in various international initiatives since 2020, including the **Target Gender Equality programme** of the UN Global Compact, to which 37 Spanish companies are adhered and which is the tool they have designed and are now implementing

to measure the gender gap. Thanks to this commitment, Adif was able to report significant levels of equality in 2022.

Inspiring the next generation of women who enter the railway sector and attracting women to STEM disciplines is one of the aims we are pursuing by taking part in the **Women in Engineering Project** of the Spanish Royal Academy of Engineering. In 2022, the third edition of the **Lidera** programme was held, which Adif and Adif AV carry out on a regular basis in a bid to promote female leadership within the company.

Further progress was also made during the year towards an exciting and challenging project that will lay the foundations for what we want both entities to be in the future, namely the **Cultural Change Project**, seeing as though Adif and Adif AV are in the throes of an unprecedented process of generational handover whereby three quarters of our total staff will be renewed by 2030. Once this project is complete, both entities will be ready and able to face the most immediate challenges facing the railway industry, such as deregulation, digital transformation, the new safety culture and the energy transition.

The year also witnessed the largest **public sector job posting** programme in the history of both public entities, within the framework of the Multi-year Employment Plan, through which Adif and Adif AV will recruit upwards of 6,000 employees between 2021 and 2025 to drive this generational handover. A total of 1,316 openings were up for grabs in this latest edition (78.3% for operational staff, 10.7% for the occupational category of technician and 11% for technical staff).

In relation to **high-speed network launches**, highlights in the period included the new connections added to Spain's high-

speed network in 2022, which reached 4,000 km in the year, making it the largest network in Europe and the first in the world when it comes to kilometres of track featuring the ERTMS signalling system (more than 2,700 km). The high-speed sections inaugurated during the period were the Burgos-Venta de Baños section (86.5 km) — making Burgos the main central node connecting the high-speed network with the north of the country — and the Plasencia-Badajoz section (150 km) on the high-speed line in Extremadura.

On the international stage, highlights included the exchange of experiences in high-speed training. One of the key events in 2022 was our participation in the 13th **Innotrans fair** held in Berlin, the largest international trade fair devoted to passenger and freight transport by rail. The event showcased the involvement of Spanish companies in various major railway projects currently ongoing across five continents, such as CPK (Poland), Rail Baltica (Baltic States), HS2 (United Kingdom), Tren Maya (Mexico), the light rail project in Ottawa (Canada), and the Haramain high-speed connection linking Mecca with Medina (Saudi Arabia).

The Spanish rail industry has become a top-tier partner and a benchmark across all phases of any rail project, from design engineering and construction through to commissioning and subsequent operation, from infrastructure to rolling stock, and from technological and industrial aspects to the deployment of the most cutting-edge innovations.

As **sustainable financing** is still very much a key concern at Adif AV, so is its commitment to green bond and environmental, social and good governance (ESG) criteria. Sustainable and responsible investment (SRI) increased by 21% in Spain last year and for the first time ESG assets outnumbered traditional assets.

In 2022, Adif AV completed its **sixth issue of Green Bonds** worth a total of €500 million. With this latest issue, Adif AV remains

the second biggest issuer of green bonds in the Spanish public sector (behind only the Spanish Treasury). Among both public and private issuers, it ranked sixth in Spain, with a total green bond issuance volume of €3,500 million. From an investment standpoint, for this latest green bond issue, the percentage of participants classified as socially responsible remained at 73%, in line with the previous year's issue.

In 2022, **Sustainable Fitch** issued a Second-Party Opinion on Adif AV's revised green finance framework, which is aligned with the Green Bond Principles of the International Capital Markets Association (ICMA), assigning it a rating of "excellent". The report highlights the Company's extended sustainability scope, holding a particularly positive view of the CO₂ and GWh reduction targets of the Climate Change Action Plan, its Strategic Plan, the adaptation to the European Taxonomy and the progress made in terms of compliance with the DNSH principle and Circular Economy.

Also in 2022, two **ESG rating agencies** carried out their assessment of Adif AV's ESG profile: Sustainalytics ranked Adif AV second within the transportation infrastructure sector (178 companies analysed) and twenty-third within the global universe (out of 15,635 entities analysed); and ISS ESG rated the entity as "Prime", meaning that it "meets the stringent sustainability requirements of ISS ESG in its sector." Adif AV was assigned an overall rating of B+, placing it firmly among the top 10% of companies in its sector.

For both Adif and Adif AV, adapting to the challenges that lie ahead will require solutions that fit seamlessly into the major international and national strategies, including the UN Sustainable Development Goals, the European



policies set out in the Green Deal, the Safe, Sustainable and Connected Mobility Strategy of the MITMA in Spain and, naturally, the 2030 Strategic Plan of Adif and Adif AV.

That is why Adif and, by extension, Adif AV, as **signatories of the UN Global Compact**, have reasserted their firm support and commitment to the initiative and its principles, pledging to comply with the Ten Principles in the core areas of Human Rights, Labour, Environment and Anti-corruption, and promoting meaningful change in the way companies approach corporate responsibility and make it part of their strategy and business operations in order to improve their performance and generate a positive impact on society. In doing so, Adif and Adif AV are actively helping to achieve the SDGs, with the ultimate goal of generating value for all their stakeholders and making further progress towards sustainable development.

María Luisa Domínguez González

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EXECUTIVE SUMMARY

1 EXECUTIVE SUMMARY

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- 1.2.2. Key ESG indicators
- 1.2.3. Key figures on investments made
- 1.2.4. Key contract award figures

1.3. SUSTAINABLE DEVELOPMENT GOALS

1.1. Context. Highlights in the period

- Recognition of Adif and Adif AV's Chairwoman at the **Women in Rail Awards** organised by international magazine International Railway Journal (IRJ), for her outstanding achievements.
- Official launch of the **European Research Programme** partnership known as Europe's Rail Joint Undertaking (EU-Rail), with Adif AV involved as an affiliate.
- Start of work on the **Madrid Nuevo Norte urban development project**, the most significant urban regeneration project in Europe, which is taking shape at Madrid Chamartín-Clara Campoamor station.
- **5G network built into the portfolio of telecommunications assets** through the installation of a fibre optic network spanning some 24,000 kilometres. The aim is to offer the network as a base for telecommunications operators in a bid to bring connectivity to the more depopulated rural areas of Spain.
- New edition of Public Job Postings, with **12 new employees** joining Adif AV.
- **Target Gender Equality international programme** of the UN Global Compact Spain, to which 37 Spanish entities are adhered, with Adif AV managing to achieve an advanced level in equality.
- Increased competitiveness in passenger transport, with Ouigo **now providing rail services** on the Madrid-Valencia line, Ilsa-Iryo on the Madrid-Barcelona and Madrid-Valencia lines, and Inoui (SNCF) on the Barcelona-Paris line.
- **CEF financing** of €145.4 million in order for Adif AV to complete the Bergara-San Sebastián-Bayona (Atlantic corridor) construction work.
- Green finance: Adif AV's **sixth green bond issue** worth a total of €500 million.
- **Sustainable Fitch** certification of Adif AV on its revised green financing framework, assigning it a rating of "excellent".
- **Commissioning of the following sections of the high-speed network:**
 - + Valladolid-Venta de Baños-Burgos-Vitoria high-speed line. Venta de Baños-Burgos section (86.5 km).
 - + Eastern High-Speed Line. Madrid-Castile La Mancha-Valencian Community-Region of Murcia. Beniel-Murcia section (15.176 km).
 - + Vitoria-Bilbao-San Sebastián and Basque Country high-speed line. Chamartín-Torrejón de Velasco section (36.4 km).
 - + Extremadura High-Speed Line. Plasencia-Badajoz section (150 km).
 - + La Sagrera-Sant Andreu: new Sant Andreu station.



1.2. 2022 in figures

1.2.1. OPERATING AND FINANCIAL FIGURES FOR THE YEAR¹



€16,615.9 M

Nominal value of borrowings.

€-296.8 M

Loss for the year.

€2.155 M

investment in RD&I.

€4,555.28 M

investment in urban integration*.
(€147 M annual investment in urban integration).

€1,621.7 M

Of operating income.

€231.8 M

EBITDA.

€6 M

Investment in digital transformation*.



257

Employees.

>20

Work-life balance measures.

24.51%

Women.

4.54%

Pay gap for managerial positions (favouring men).

211

Permanent contracts.

57.98%

Covered by collective bargaining agreement.

42,646

Hours of training.

1.52

Absenteeism rate.



152.864 M

Users of Adif AV passenger stations.

946

Trains operating per day on average.

3,926 Km

Of railroad under management.

€24.50 M

Revenue from commercial operation of fibre optic network.

86.88%

Passengers boarding/alighting at Adif and Adif AV accessible stations*.

€500 M

Of green bonds.

46 stations

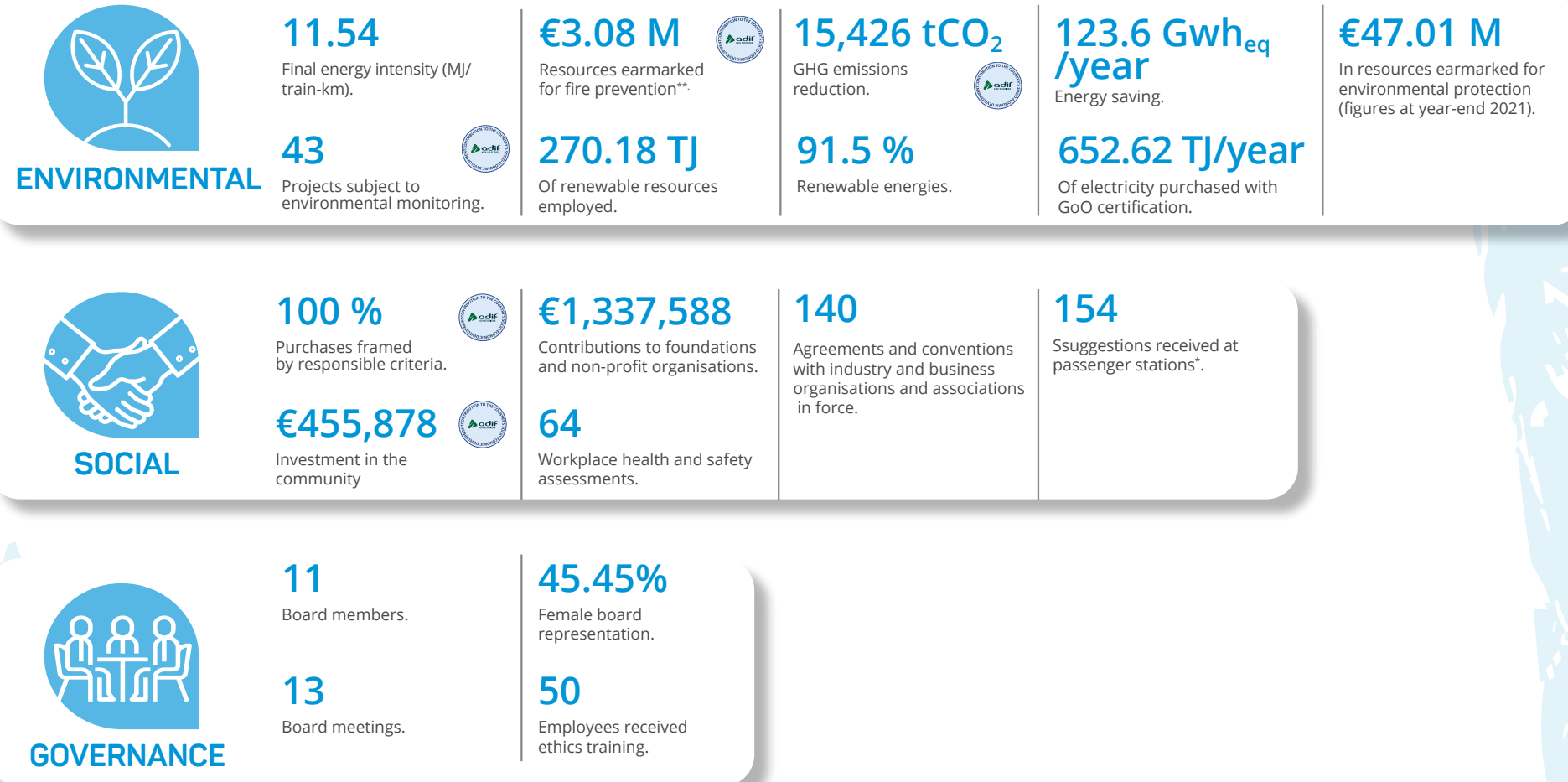
Owned by Adif AV.

3,497.4 km

Of electrified lines in service.

¹ Figures with *: Adif + Adif AV

1.2.2. KEY ESG INDICATORS









* Adif + Adif AV

** Latest available year-end 2021. Figure updated as at year-end 2022 with the publication of the environmental report in May 2023.

1.2.3. KEY FIGURES ON INVESTMENTS MADE




INVESTMENT MADE

	2020	2021	2022
 Investment in construction of new line (€M), including VAT	1,062.51	1,006.78	1,333.47
 Investment in replacing and improving assets in operation in the HS network (€M), including VAT	186.80	270.30	202.57
 Investment in drafting projects and carrying out works at stations (€M), excluding VAT	23.56*	23.9*	2.80
 Investment in work to improve station accessibility (€M), excluding VAT*	7.92	5.80	4.86
 Investment in RD&I (€M)	0.596	3.187	2.155
 Investment in digital transformation (€M)*	5.10	5.90	6.00

* Adif + Adif AV

1.2.4. KEY CONTRACT AWARD FIGURES

AMOUNTS AWARDED

	2020	2021	2022
 Annual amount for construction (awarded) (€M), excluding VAT	340.39	1,045.92	1,313.08
 Annual amount (awarded by Adif on Adif AV's behalf) of high-speed network maintenance work (€M), excluding VAT	118.98	63.16	65.40
 Annual amount allocated to maintenance work on behalf of Adif AV (€M), excluding VAT	9.64	46.97	9.31

1.3. Sustainable Development Goals



€1,333.47 M

Investment in construction of new lines (including VAT).

269 Km

Of high-speed lines commissioned.



€147 M*

Annual invested in urban integration (€4,555.28 M* of cumulative investment).



87.1 %

Of carbon footprint are Scope 2 emissions (electricity with GoO certification).

€500 M

Of Green Bonds.

* Adif + Adif AV



2

WHO WE ARE

2) WHO WE ARE

2.1. THE COMPANY

2.2. PURPOSE, MISSION, VISION AND AMBITION

2.3. BUSINESS MODEL

2.4. ORGANISATIONAL STRUCTURE OF ADIF AV

2.5. ADIF AV OUTSIDE SPAIN

2.6. OBJECTIVES AND REGULATION

2.7. OUTLOOK: CHALLENGES AND OPPORTUNITIES

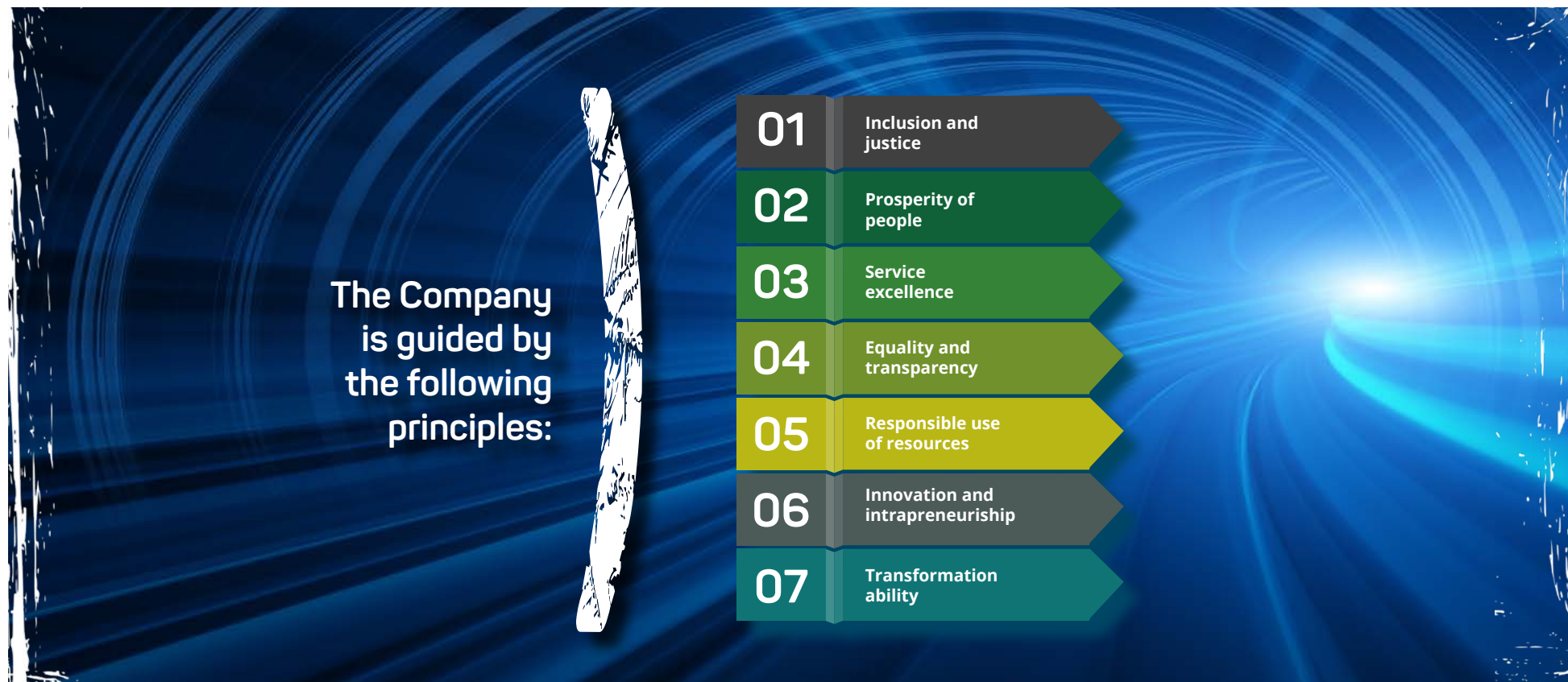
2.8. THE GOVERNANCE, TRANSPARENCY AND RISK MANAGEMENT MODEL

- 2.8.1. Governing bodies and internal management
- 2.8.2. Business ethics and transparency
- 2.8.3. Risk management

2.1. The Company

Adif Alta Velocidad (Adif AV) is a Spanish state-owned enterprise attached to the Ministry of Transport, Mobility and Urban Agenda. It is tasked with building and running high-speed railway lines and railway infrastructure that are part of the General Interest Railway Network and also managing the construction work and other projects entrusted by the Government.

Adif AV is aware of the need to integrate the circular economy, social cohesion, the climate emergency, equality and diversity with railway infrastructure management, with each of these elements enjoying an equal footing. Accordingly, the starting point for our business strategy is our concern to contribute towards social and economic development through actions to mitigate climate change.



2.2. Purpose, mission, vision and ambition

Based on these principles and following a clearly defined corporate purpose, Adif AV's 2030 Strategic Plan (SP 2030) seeks to advance and achieve the vision, mission and values of the Company. Our vision reflects our goals for the future; our mission encompasses the actions

we must take to discharge our assigned duties; last but not least, our values are the principles that must guide our employees to successfully perform the Company's role. Adif AV's corporate culture is clearly expressed in the definitions of the Company's vision and mission¹.

PURPOSE

To operate a rail network committed to the Sustainable Development Goals

MISSION

To operate, manage and build a smart rail network geared towards the new technological, competitive and sustainable ecosystem, thus contributing to the SDGs

VISION

To be a benchmark organisation focused on the management of resilient, sustainable, safe and smart infrastructure that contributes to the new model of ecological transition

AMBITION

To offer resilient infrastructure to all of society

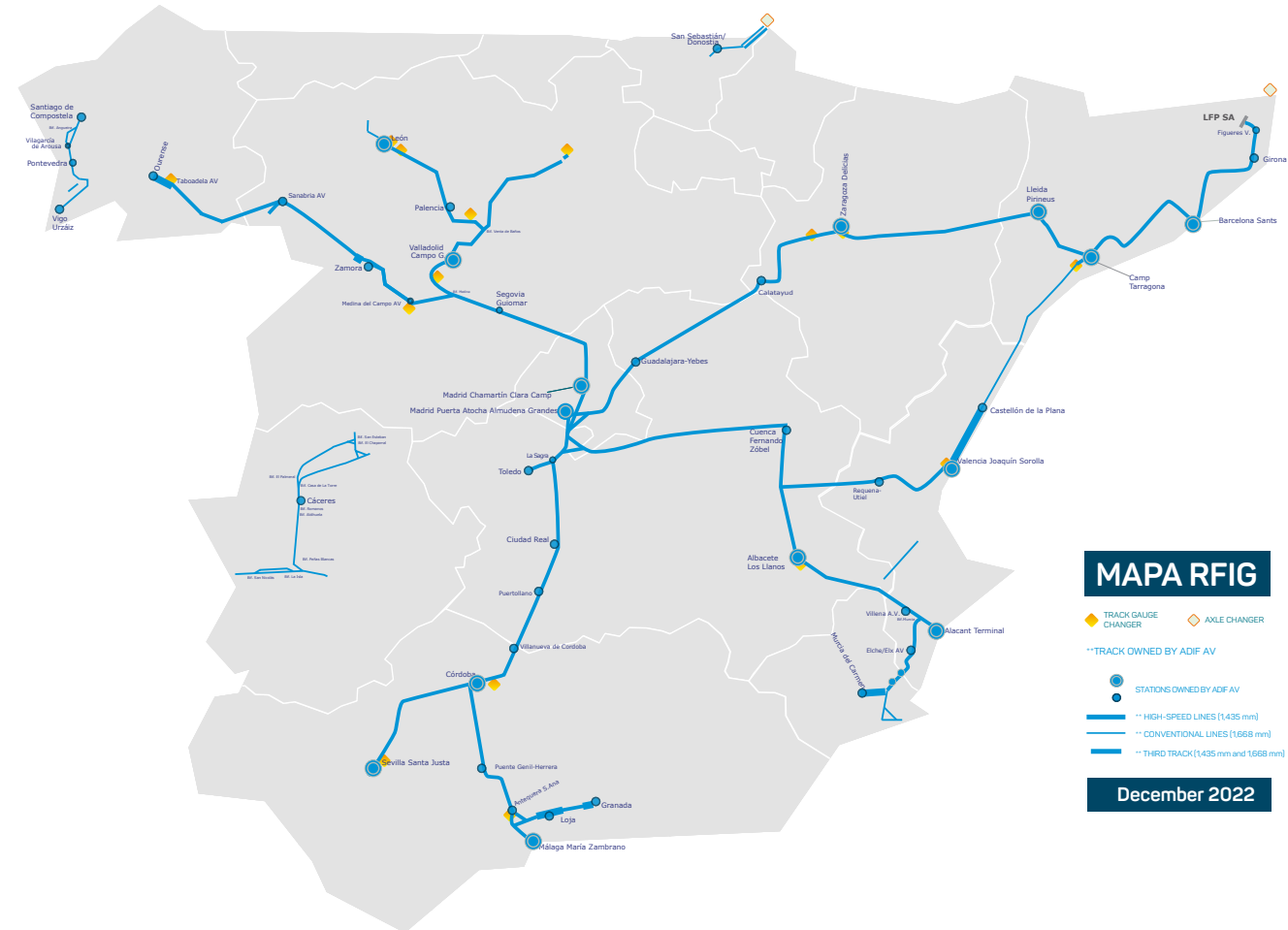
2.3. Business model

Adif AV's business model is designed to create and manage sustainable, high quality, resilient and safe infrastructure, while achieving innovation and modernising the transport system. In addition to building and managing high-speed railway lines, the Company*:

- Manages telecommunications infrastructure.
- Manages the supply of electricity to railway operators.
- Advises on and oversees environmental and energy efficiency actions undertaken by Adif.

The Company is seeking to switch the traffic and capacity it manages towards a **circular economy system** based on a restructuring and reallocation of available resources









TOTAL NETWORK MANAGED AND OWNED BY ADIF AV



* Content related to disclosure **GRI 2-6: Activities, value chain and other business relationships**



MAIN ACTIVITY INDICATORS – ADIF AV

	2020	2021	2022
 Number of passenger station users	71,551,281	98,371,997	152,863,819
 Km commissioned in high-speed lines	123.6	162.6	269
 Km of existing network managed	3,622	3,762	3,926
No. of companies operating on the Adif AV network	15	12	18
 Standard gauge high-speed network (UIC)	2,782	2,926	3,027
 Trains running (average no. of trains/day)	691	783	946
Traffic (total)	252,998	285,854	345,228
Volume of traffic, km-train (daily average)	104,897	128,321	169,382
 Volume of traffic, km-train (total)	38,392,375	46,837,143	61,824,519
 Lines electrified in km	3,275.5	3,429.7	3,497.4
 Number of stations owned by Adif AV	42	46	46

In relation to the positioning of the **Corporate Group**, Adif AV works hard to play a meaningful role in the management of its investees and regularly analyses the competitive, economic, legal, operational, social, sustainability and environmental benefits and rewards of continuing to hold a stake in such companies. In 2022, Adif AV held stakes in more than 26 different entities (companies, consortiums, foundations, economic interest groupings and associations, etc.), which make up its so-called “Corporate Group”.



In relation to **Integration Operations** and, within the framework of the 2030 Strategic Plan, an Action Plan is now being developed with the main aim of establishing the mechanisms and analytical capabilities needed to improve and optimise the management of Integration Operations carried out in relation to the Urban Integration Joint Ventures. Alternative options may also be proposed in a bid to make the urban rail integration actions viable and sustainable in terms of mobility and the economic, social and environmental well-being of the city.

The following contributions are also made to make Adif AV a more economically sustainable enterprise:

- Adapting the corporate objects of subsidiaries as and when needed. For example, the corporate objects of Redalsa and Emfesa are currently being modified to improve the business activities of both companies.
- Analysing active advertising on the websites of the urban integration JVs to ensure compliance with transparency laws.
- Weighing up the merits of selling or divesting in certain companies.

Adif AV's current relations with the various companies are summarised in the following table:


* Cumulative figures. The calculation made in previous years may be raised in subsequent years once the terms of new agreements are finalised.
 ** Aggregate data for Adif and Adif AV, considering the contributions made by Adif, Adif AV and the other entities or administrations taking part in the urban integration projects under the agreements signed.

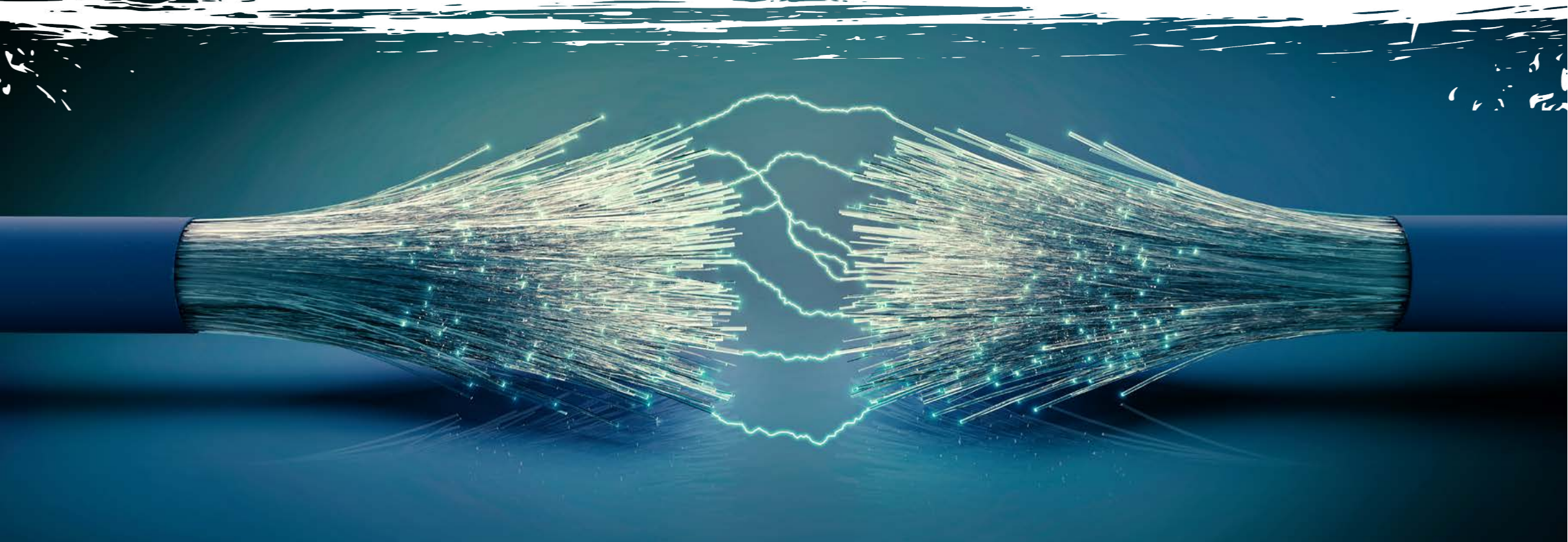
	2020	2021	2022
 Urban integration agreements, protocols, addenda, and so forth, signed and managed within the framework of the urban integration JVs in which Adif AV holds a stake*	56	62	71
 Urban integration investment (€M cumulative investment made) (excluding VAT)**	4,230.36	4,408.51	4,555.28



As regards the **Fibre Optic Network business**, Reintel has been assigned the rights over the commercial operation of part of the fibre optic network and related elements owned by Adif AV, in an assignment comprising 12,000 km of FO backbone network or long distance network, more than 4,000 km of access networks in the vicinity of cities or dedicated cable and space in telecommunications parks and electricity supply to regenerate the signal.

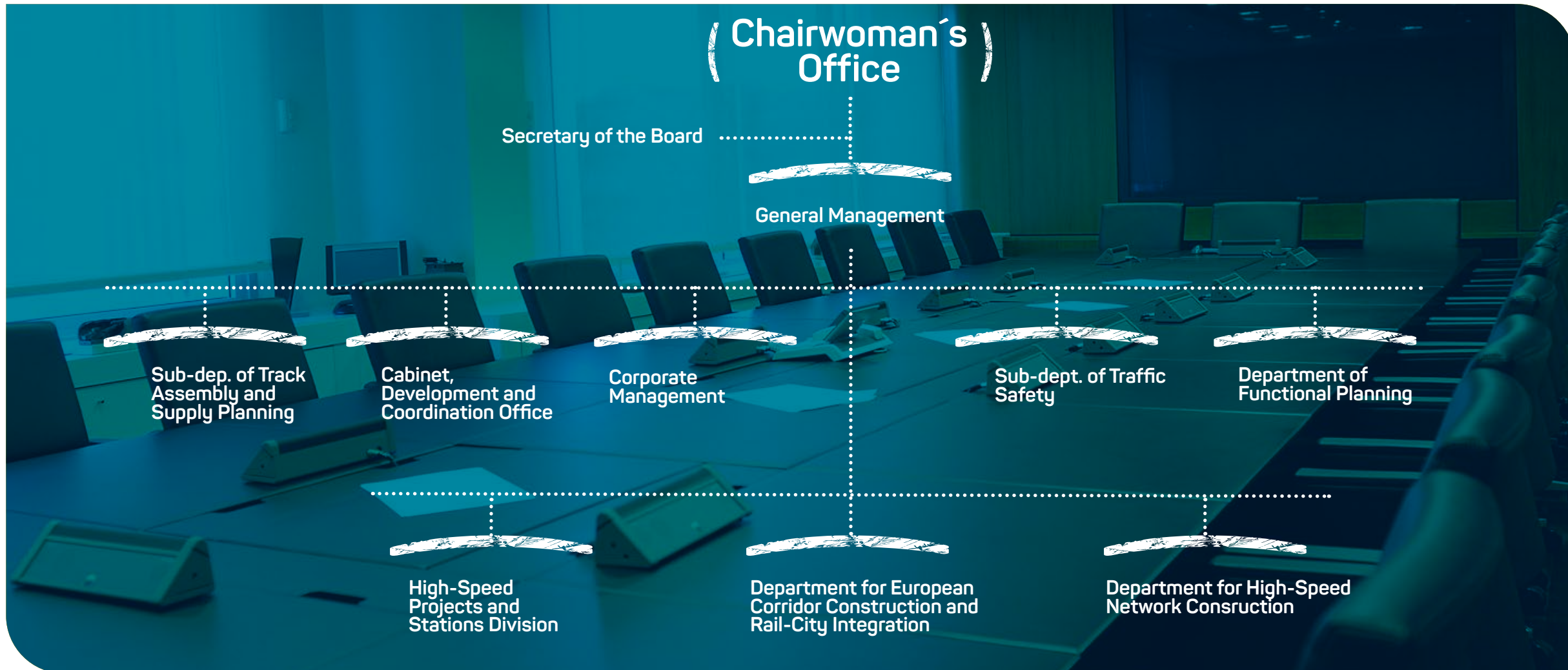
In addition, Adif AV and Reintel are pursuing a turnkey plan to renew the fibre optic network under modality with an annual execution commitment of 4,000k/year.

	Ejercicio 2020	Ejercicio 2021	Ejercicio 2022
 Revenues from commercial operation of the Fibre Optic Network (€M) (excluding VAT)	19.93	21.66	24.50



2.4. Organisational structure of Adif AV

The organisational chart below depicts the structure of Adif AV as it stood in December 2022:



2.5. Adif AV outside Spain

International organisations allow the company to have a voice and gain knowledge on a wide range of issues. Benchmarking can be used to learn best practices among infrastructure managers. The Company's International Department also seeks to improve the image of Spanish industry and engineering by welcoming and hosting international delegations that visit Adif AV facilities, which are a showcase for the knowledge and excellence of Spanish companies.

The aim is to build **alliances and nurture international cooperation** in order to promote the best railway in Spain, Europe and the world. To succeed, the Company is a member of numerous organisations, enabling to keep up with and have a say in regulatory and technical decisions. It also builds commercial relations with partners all over the world to promote the railway as a clean and sustainable means of transport, while indirectly creating jobs in Spain for companies.

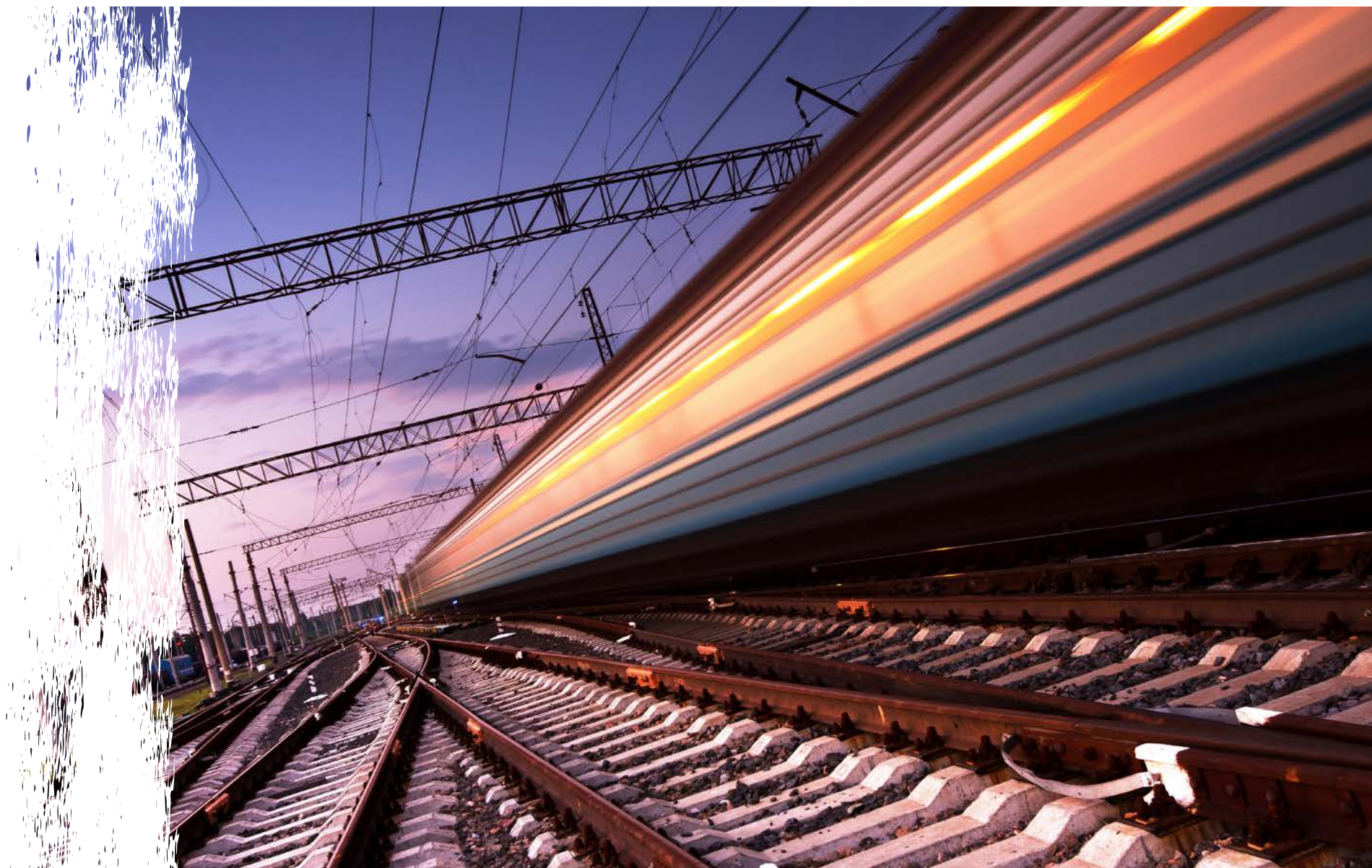
It contributes directly to the reduction of transport emissions in Europe by actively partaking in the **European Atlantic and Mediterranean Freight Corridors**, which seek to **promote a modal shift** from air and road to rail, thus achieving more efficient and less polluting transportation

Notable actions and developments to have taken place during the year:

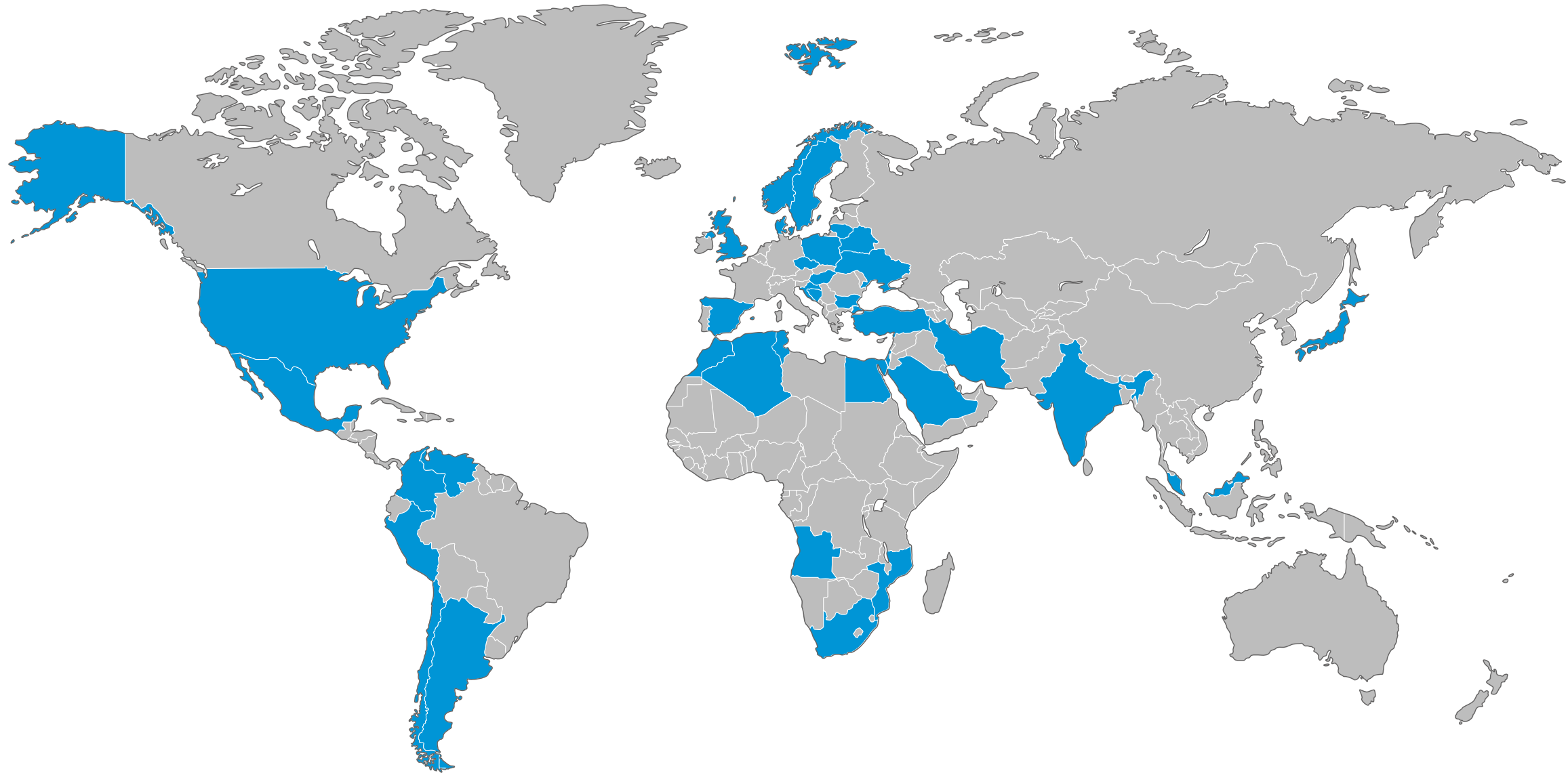
- Technical and operational assistance for other infrastructure managers, as well as advice on how best to undertake their projects. Hosting international delegations (Poland, Czech Republic, South Africa, etc.).
- Making valuable contributions to general assemblies and regular meetings of organisations such as RNE, UIC, EIM or PRIME.
- Coordinating and overseeing Adif's involvement in the European Atlantic and Mediterranean Freight Corridors.
- Participation in INNOTRANS to promote the Spanish railway industry.
- Actively involved in organising rail-related events, such as the international Rail Live trade fair.
- Start-up of Europe's Rail Joint Undertaking initiative.

When it comes to Adif's international presence, it continues to carry out **international commercial activities** in Argentina, Colombia, the United States, India, Egypt, Japan, Saudi Arabia, the Czech Republic, Croatia, Norway, Poland, Sweden and the Ukraine, among other countries. Regulatory and standardisation activities are also ongoing, mainly with other European countries or members of the International Union of Railways (UIC).

Adif AV takes part in **several European Economic Interest Groupings (EEIGs)** such as the TGC Pyrenees with France, AVEP with Portugal, Vitoria Dax with France and the Mediterranean and Atlantic freight rail corridors with various European countries. Measures are discussed and scrutinised at all of these associations to improve cross-border connections in relation to international rail corridors and Trans-European Transport Networks (TEN-T), a legal grouping that brings together companies from various European countries.



100%



2.6. Objectives and regulation

Adif AV is a state-owned enterprise under the responsibility of the Spanish Ministry of Transport, Mobility and Urban Agenda, in accordance with Law 40/2015, of 1 October, governing the public sector. It has separate legal personality and equity and full capacity to engage in its corporate objects, which are governed by the following regulatory provisions:

- Law 40/2015, of 1 October, governing the Spanish public sector.
- Law 39/2015, of 1 October, governing administrative procedure, i.e., the rules on how government bodies interact with one another, with companies and institutions and with private individuals.
- Law 38/2015, of 29 September, governing the railway industry.
- Royal Decree-Law 15/2013, on the restructuring of Adif and other urgent economic measures. This statutory instrument created a new state-owned enterprise, namely Adif AV.
- Royal Decree-Law 4/2013 introducing measures to support entrepreneurs and stimulate growth and job creation. Adif was given ownership of the hitherto State-owned railway network under its management.
- Royal Decree-Law 22/2012 to streamline and restructure the rail industry. Part of Ferrocarriles de Vía Estrecha (FEVE), a state-owned enterprise that operates local railways, was spun off and merged into Adif.
- Law 47/2003, of 26 November, Spain's budget act for 2003.
- Royal Decree 1044/2013, of 27 December 2013, adopting the charter of the state-owned enterprise Adif Alta AV.

However, for railway infrastructure construction or overhaul work (other than maintenance, signalling and electrification works) Adif AV is subject to the laws and regulations that govern public sector procurement, notably Law 9/2017. All matters relating to our property and assets are governed by the Government Property Act.



2.7. Outlook: challenges and opportunities

Our SWOT (**strengths, weaknesses, opportunities and threats**) analysis carried out under the SP 2030 revealed the following opportunities:

- *Liberalisation (deregulation) as a determining factor in making the sector a more competitive place*
- *Rail transport as a people-centred mode*
- *Transitioning towards more sustainable transport*
- *Digitisation in rail transport*
- *Exporting know-how*
- *Promoting a culture of innovation*
- *Increasing transparency through effective communication*
- *Securing additional financing capacity through European Next Generation EU funding*

Along these lines, Adif AV continues to work towards energy efficiency, greenhouse gas reductions and carbon footprint reduction. To succeed, it continues to make progress in the decarbonisation, digital transformation and technological innovation of the railway system.

Moreover, the opening up of the passenger market presents an opportunity for the democratisation of transport by increasing supply, so as to transfer passengers from other modes of transport and also to generate induced demand, thus improving the country's performance in sustainable development.

To achieve all these actions, a PESTEL analysis has been carried out, revealing various global challenges at a strategic, operational and business level that the company must overcome over the coming ten years and which also arise from the identification of 1+10+1 key challenges:



2.8. The governance, transparency and risk management model

In 2022, significant efforts were made to identify possible needs to improve processes and a review of existing procedures was also launched. This improvement process will indirectly

support the responsible management of the company, as it will lead to a more efficient, yet also more human-oriented, use of resources.

2.8.1. Governing bodies and internal management



MILESTONES

- Implementation of the new Adif AV **e-Office**, which has allowed for the integration of electronic services.
- Implementation of the **GM-T tool** to enable the internal electronic processing of requests and complaints for all procedures available via the e-Office.



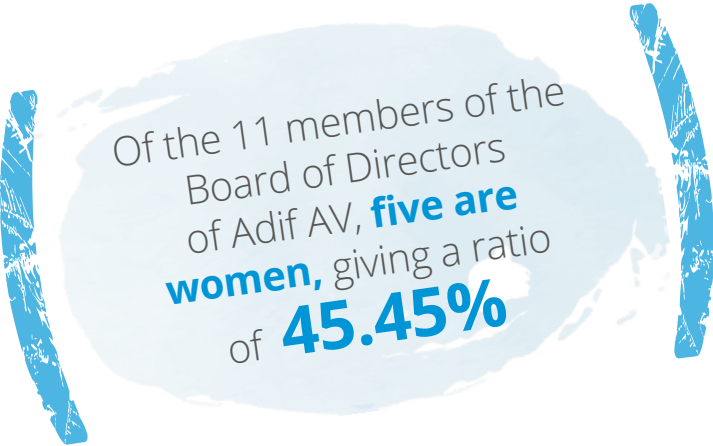
COMMITMENTS

- **Electronic processing** of new administrative procedures that fall within the Company's remit (claims to recover damages from the State, requests for authorisations in areas affected by railway infrastructure, development of new procedures to improve the electronic management of administrative activity, such as expropriations and administrative concessions).

For railway infrastructure construction or overhaul work (other than maintenance, signalling and electrification works) Adif AV is subject to the laws and regulations that govern public sector procurement. All matters relating to our property and assets are governed by the Government Property Act¹.

The Board of Directors is Adif AV's highest governing body and has the broadest powers to manage the Company. The Board can decide on its own structure and functioning, adopt annual budgets, financial statements and management reports, and authorise any lending or borrowing by the Company.

The Company has gone beyond the scope of its charter to create various committees of its own. Those committees are: the Audit Committee, the Ethics and Compliance Committee, the Appointments and Remuneration Committee, and Adif AV Internal Code of Conduct for Securities Market Dealings Compliance Committee. Further decision-making and advisory bodies are attached to the Chairman's Office, such as the Management Committee and the Procurement Committee.



¹ Content related to disclosure **GRI 2-9** Governance structure and composition

BOARD OF DIRECTORS

The Board of Directors operates in accordance with the rules set out in the charter of the state-owned enterprise Adif AV. The charter is available on the website www.adifaltavelocidad.es. In addition, the Board follows its own internal rules, and is governed by Law 40/2015 setting out the legal regime for collegial bodies within the public sector.

Adif AV's charter provides that the Board of Directors comprises a Chair (who also chairs the board of Adif) and a minimum of nine and maximum of 10 Directors, whose appointment and dismissal falls within the remit of the Ministry of Transport, Mobility and the Urban Agenda. The Secretary of the Board of Directors is the same person as the secretary of the board at Adif (Article 25 of the charter of Adif AV). The Secretary may speak at Board meetings, but has no vote, unless he or she is also a director².

In the year ended 31 December 2022, the Board of Directors met 13 times (11 ordinary meetings and two extraordinary meetings) and consisted of 11 members: the Chairwoman, the Secretary of the Board and nine members³.



² Content related to disclosure **GRI 2-10:** Nomination and selection of the highest governance body

³ Content related to disclosure **GRI 2-11:** Chair of the highest governance body

ADIF AV 2022 BOARD OF DIRECTORS



27/07/2021

D^a. María Luisa Domínguez González



30/01/2019

D. Guillermo Martínez de Simón

(decision by the Board Appointments Committee as Secretary of Adif's Board of Directors of 30/01/2019, pursuant to Article 25.1 of the Adif AV Charter, which states that the Secretary of the Company's Board of Directors will be the Secretary of the Board of Directors of Administrador de Infraestructuras Ferroviarias (Adif))



03/06/2022

D. Francisco Alfonsín Bellido



19/05/2021

D. Pedro Aller Fernández



14/03/2022

D^a. Eva Ballesté Morilla



12/04/2022

D^a. María del Carmen Corral Escribano



24/03/2022

D. Juan Pedro Fernández Palimino



12/04/2022

D. Casimiro Iglesias Pérez



31/05/2022

D^a. Estela Ríos Muñoz



06/09/2021

D. Raul Miguez Bailo




28/12/2022

D^a. Isabel Vela Cuevas


STEPPED DOWN

Individuals who stepped down/were dismissed from the Board of Directors in 2022:




28/12/2022

D. José Antonio Atienza García




03/06/2022

D. Rafael García Martínez



12/04/2022

D. Jorge Ballesteros Sánchez




25/03/2022

D. Julian González Cid




31/05/2022

D. Domingo García Díez




10/11/2022

D. Javier Herrero Lizano




12/04/2022

D. Jesús Miguel Fumanal Orús




14/03/2022

D. Jesús Miguel Pozo de Castro



10/11/2022

D. Fernando Fernández Domínguez



31/05/2022

D^a. María Pilar Seisdedos Espinosa

The main duties vested in the Board of Directors are as follows:

- Determining the Company's structure and the guidelines for modifying its workforce and key remuneration terms.
- Establishing the rules of operation and resolution ratification within the board.
- Approving annual operating and capital expenditure budgets and the multi-year action plan and presenting them to the Ministry of Transport, Mobility and the Urban Agenda.
- Approving the annual financial statements, management report and proposed distribution of profit.
- Authorising loans and other types of borrowings.
- Acting as contracting authority for contracts with a tender budget in excess of €6 million.

Proxy voting is not allowed under the Adif AV charter or the rules and regulations of the Company's Board of Directors. Board resolutions are carried via an absolute majority of votes among its members in attendance or duly represented by proxy. The Chairwoman has the casting vote in the event of a tie. The members of the Board of Directors receive no remuneration or compensation for attending the meetings.

(OTHER INTERNAL MANAGEMENT BODIES

Audit Committee	<p>The Audit Committee supervises the Company's financial reporting, reports to the Board of Directors on its work, and addresses other matters of concern. In 2022, the Audit Committee met on two separate occasions. It comprises four members (50% women).</p>
Management Committee	<p>The Management Committee, which was formed at the discretion of the Board outside the scope of the Company charter, advises the Chairwoman on executive decisions. It has the following duties:</p> <ul style="list-style-type: none"> • Advising the Chairwoman on matters within its remit. • Advising the Chairwoman on Board matters that must be reported to or approved by her. • Discussing other matters pertaining to Adif AV added to the agenda at the initiative of the Chairwoman or any member of the Management Committee. <p>The Adif AV Management Committee met 34 times in 2022. It comprises three members (0% women).</p>
Nomination and Remuneration Committee	<p>At its meeting of 29 January 2018, the Board of the state-owned enterprise Adif AV decided to create an Appointments and Remuneration Committee. It comprises a chair and two members. The members appointed on 29 January 2018 no longer sit on the Board of Directors of Adif AV. Its main duties are as follows:</p> <ul style="list-style-type: none"> • Setting a target for presence on the Board for the least represented gender. • Ensuring that the directors of Adif AV comply with the duty to avoid conflicts of interest and other states of affairs that would legally bar them from performing their role as a director. <p>The Appointments and Remuneration Committee of Adif AV did not meet at all in 2022. It comprises three members, although all are currently vacant (0% women).</p>

Procurement Committee	<p>The Procurement Committee, which was formed at the discretion of the Board outside the scope of the Company charter, advises the Chairwoman on procurement decisions. It has the following duties:</p> <ul style="list-style-type: none"> • Advising the Chairwoman on procurement matters within her direct purview or so delegated by the Board and on matters within the purview of the Board that must be reported by it to or approved by the Chairwoman. • Discussing any other matter pertaining to procurement at the Company. <p>The Adif AV Procurement Committee met 34 times in 2022. It comprises three members (0% women).</p>
Adif AV Internal Code of Conduct for Securities Market Dealings Compliance Committee	<p>The Adif AV Internal Code of Conduct for Securities Market Dealings Compliance Committee falls outside the scope of the Company's charter and comprises a chair and three further members, its functions include:</p> <ul style="list-style-type: none"> • Assessing the effectiveness of internal procedures and overseeing compliance with the safeguards surrounding inside information in accordance with the Code. • Taking steps to provide training to employees on matters that fall within the scope of the Code. • Interpreting the rules of the Code, resolving queries as to how to apply it, and adapting it to prevailing laws and regulations. • Reporting each year to the Code of Ethics and Conduct Oversight Committee on any significant incidents that may have arisen. <p>The Adif AV Internal Code of Conduct for Securities Market Dealings Compliance Committee did not hold any meetings at all in 2022. It comprises four members, although all are currently vacant (0% women).</p>
Risk Committee	<p>The Risk Committee is the main body entrusted with the Company's Enterprise Risk Management function. As set out in the Enterprise Risk Management Policy, its responsibilities include:</p> <ul style="list-style-type: none"> • Creating the Company's risk map and updating it at least annually and whenever needed. • Tacking identified risks and their related controls, indicators and action plans at the required intervals. • Adopting specific risk management policies as appropriate. • Determining and reviewing the Company's desired risk profile and ensuring that it is aligned with the Company's strategy. • Reporting to the Management Committee and submitting proposals as required for the proper performance of the risk management function. <p>Adif AV's Risk Committee met four times in 2022. It comprises 25 members (24% women).</p>

Internal Control over non-Financial Reporting (ICnFR) Committee

In accordance with the terms of reference of the Committee, its roles include:

- Delimiting the scope of the system, primarily its key processes.
- Conducting an annual review of and validating all ICFR processes.
- Producing an annual ICFR progress report.
- Scrutinising the performance of Internal Audit in supervising the ICFR system.
- Proposing that the ICFR system undergo an external audit.

The ICnFR Committee of Adif AV met on two separate occasions in 2022. It comprises 15 members (40% women).

Ethics and Compliance Committee

Body tasked with overseeing and, ultimately, enforcing, the Code of Ethics and Conduct.

The Adif AV Ethics and Compliance Committee met two times in 2022. It comprises six members (16.67% women).



2.8.2. Business ethics and transparency



MILESTONES

- Stronger **mechanisms for the prevention, detection and correction of fraud**, corruption and conflicts of interest.
- Updated policies to **improve the Corporate Compliance Model**.
- Implementation of a new **Whistleblower Protection Policy**.



COMMITMENTS

- **Foster a culture of ethics** through the communication, awareness and training plan.
- Launch an **anti-fraud plan**.
- Get involved with the international **Business & Human Rights Accelerator programme** of the UN Global Compact.

This chapter provides a brief description of how Adif AV manages corruption, bribery, the fight against fraud and the protection of human rights across all of its activities.

PRIORITIES IN RELATION TO CORRUPTION AND BRIBERY



PREVENTION



AWARENESS-RAISING



RISK ASSESSMENT



DISCIPLINARY
CONDUCT

2.8.2.1. Anti-corruption and bribery

VALUES, PRINCIPLES, STANDARDS, AND NORMS OF BEHAVIOUR

Adif AV's Board approved the **Code of Ethics and Conduct** in 2009. The Code was revised and updated in March 2015 to factor in regulatory developments in corporate criminal liability and the principles underpinning Law 19/2013 on transparency, access to public information and governance. The Ethics Model of Adif AV was reviewed and updated in 2019 as part of the continuous improvement process, with updates made to the Code of Ethics and Conduct and new various policies and procedures approved¹.

This set of policies and procedures lays out the expected standards of integrity, accountability and transparency for all employees in the day-to-day performance of their duties and in their professional relationships. Notably, the signatories of the 1st Collective Bargaining Agreement of Adif and Adif AV, Management and Trade Unions have all adhered to these policies and procedures.

In 2022, **50 employees** received training in ethics

The Code, which was included in Clause 12 of the first Adif and Adif AV collective bargaining agreement, can be found on Adif AV's intranet and is also in the public domain via the corporate website. **Adif AV provides its employees with mandatory training on ethical management practices.**

¹ Content related to disclosure **GRI 2-24**: Embedding policy commitments.

Adif AV thus makes sure that all of its employees are familiar and act in accordance with its principles. The Code lays down the Company's values with the aim of formalising the conduct expected of everyone belonging to the organisation and its governance bodies. The Code also applies to anyone we have dealings with.



The Code sets out the following commitments:

- Compliance with the law.
- Infrastructure safety.
- Correct use of public resources.
- Professionalism and integrity.
- Prevention of fraud.
- Correct use of information.
- Decency and respect.
- Equal treatment of customers and suppliers.
- Health and safety safeguards.
- Respect for the environment and cultural heritage.
- Protection of Adif AV's reputation.

The **Ethics and Compliance Committee** is tasked with overseeing and, ultimately, enforcing, the Code of Ethics and Conduct.

WHISTLEBLOWER CHANNEL

Potential breaches of the Code of Ethics and Conduct can and should be reported through the Whistleblower Channel. The Whistleblower Channel fields claims from Adif AV employees, via the intranet, and from third parties, via the website. Complaints and claims can be reported anonymously so long as they are accompanied by proof or evidence sufficient to justify initiating an investigation. The following commitments are ensured throughout the process of reporting and handling claims via the Whistleblower Channel:

- Keeping the personal data and information received through the Whistle-Blowing Channel confident
- Ensuring that there is no retaliation against any person reporting an incident in good faith
- Protecting the privacy and presumption of innocence for all employees placed under investigation.

In 2022, Adif AV's external whistleblower channel drew 425 unique visitors (1,872 in 2021), and received five reports (three in 2021) of alleged breaches of the Code of Ethics

ANTI-CORRUPTION AND BRIBERY MEASURES ADOPTED

The Corporate Anti-Fraud Policy formulated by Adif AV is framed by its strategic orientation and, specifically, its commitment to creating value for society. Its ultimate aim is to develop a governance and management model that reinforces Adif AV as a state-owned enterprise that is well-managed and governed by stringent ethics and transparency principles. The policy applies to the Board of Directors, senior management, and in general, without exception and no matter their positions, responsibilities, areas of expertise or physical locations, all Adif AV employees.

Furthermore, Adif AV's pledge of a zero-tolerance attitude towards fraud has translated into certain specific obligations:

- A commitment to report any indication of fraud via the channels put in place to that end.
- Fostering of a culture that strongly dissuades against any form of fraudulent conduct.



- Transmission of reliable information in order to create a true and fair view of Adif AV's activities, strategy and economic, social and economic performance.
- Repudiation of misleading, fraudulent or malicious conduct that could lead to unfair or improper advantages for Adif AV.

The Company has the following **policies and procedures in place in order to help prevent instances of corruption and bribery:**

- Code of Ethics and Conduct.
- Ethics Code Management Model.
- Regulations of the Ethics and Compliance Committee.
- Whistleblower Channel Management Procedure.
- Policy on Conflicts of Interest.
- Procedure for Dealing with Conflicts of Interest.
- Corporate Anti-Fraud Policy.
- Fraud Prevention, Detection and Management Procedure.
- European Fund Fraud Risk Management Procedure.
- Policy on Business Courtesies and Gifts.
- Policy on the Use of Technological Resources.
- Whistleblower Protection Policy.
- Anti-fraud measures.
- Various courses delivered by Adif against fraud, bribery and conflicts of interest.

CORPORATE POLICIES



The Compliance Model was reviewed and updated in 2022, involving the updating of two existing procedures and the approval of a new policy, while the Code of Ethics and Conduct remains in force. The Company also updated the European Funds Fraud Risk Management procedure in order to comply with the anti-fraud plan and RRF regulations.

ANTI-CORRUPTION AND BRIBERY MEASURES DEPLOYED

	2020	2021	2022
Reports via Whistleblower Channel	2	3	5
Declarations of no conflict of interest	1,050 ¹	136	166
Employees receiving ethics training	439 ¹	84	50
Queries regarding conflicts of interest	30 ¹	0	5
Queries regarding policy on business courtesies and gifts ¹	N/D	1	4

ANTI-FRAUD MEASURES PUT IN PLACE

The effort to combat fraud is one of the cornerstones of Adif AV's compliance model.

To exemplify its zero-tolerance stance on fraud and corruption, the Company has established a series of measures for preventing and detecting, to the extent possible, any form of fraudulent conduct and remedying the consequences as required. That control system is set out in the **Fraud Prevention, Detection and Management Procedure** which establishes Adif AV's objectives, duties and measures in the fraud prevention arena.

¹ Adif + Adif AV

That commitment translates into a series of measures and obligations that are binding upon employees in performing their professional duties:

- Not using Company funds or resources for their own benefit.
- Not accepting preferential treatment or privileges deriving from their positions or jobs.
- Refusing any gift, favour, service or financial benefit that goes beyond common courtesy or hospitality, whether from suppliers, contractors or any other party.
- Not making payments or extending gifts or any other type of offering to public or private sector employees that could sway their decision-making.
- Reporting any conflicts of interest to which they may be party.
- Abstaining from intervening in or influencing decision-making, participating in meetings or accessing confidential information in manners in which they may be conflicted.
- Rejecting favouritism on the grounds of kinship, friendship or any other circumstances, in procurement and employee promotion processes.
- Avoiding practices that might be construed as unethical.

Everything that the Company does must be aligned with the public interest and the values enshrined in our Code of Ethics and Conduct. Therefore, everything we do and each decision we make must be:

- Legal.
- Ethical.

- In the interests of the Company and of society.
- Each one of us must be willing to be accountable for our actions facing our colleagues, family members and the public.

Moreover, in line with **Law 19/2013 on transparency**, Adif AV remains strongly committed to reinforcing transparency with respect to its activities, in keeping with best practices in Spain and internationally. That is why it has set up a **Citizen's Portal** where any interested party can easily access the Company's public documentation.

In addition, Adif AV participates in the **Transparency Portal of the Ministry of Transport, Mobility and the Urban Agenda**, which provides information about public bodies, state-owned enterprises and foundations.

Corporate policies and KPI system

Given Adif's legal status as a state-owned enterprise, it is unable to have specific internal policies governing ties with political parties or lobbying activities as it is subject to public law and regulations.

This circumstance is explicitly set out in its Charter, as approved by Royal Decree 1044/2013, of 27 December, which justifies the Company's status as a state-owned enterprise and states that it cannot have links with political parties or engage in lobbying activities. The charter regulates the Company's activities, purpose and control mechanisms, expressly stating that it may not partake in any such activities. Moreover, all the Company's activity is audited by the Comptroller General of the State (Intervención

General del Estado, or IGAE for short), as Adif it is a state-owned enterprise. More precisely, its specific budget comes from the general state budget, which is subject to strict economic and financial control.

It is also subject to Law 19/2013 of 9 December 2013, on transparency, access to public information and good governance.

<https://www.adif.es/sobre-adif/transparencia/informacion-economica>



2.8.2.2. Human rights pledge

Adif AV's commitment to treating people respectfully and decently is set down in its Code of Ethics and Conduct. It therefore ratifies the principles enshrined in the Universal Declaration of Human Rights and in the Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy of the International Labour Organization, as well as the 10 Principles of the UN Global Compact in the realms of Human Rights, Labour, Environment and Anti-corruption. All Adif AV employees must respect all of the people the Company engages with, both within and outside the organisation. The prevention of discrimination, provision of equal opportunities and decent treatment of all are essential to nurturing a stimulating and productive work climate at Adif AV that translates into positive relationships and credibility vis-a-vis all of our stakeholders.

Adif AV is a state-owned enterprise, so due diligence is not the same as in the private sector. Human rights risk is very low, as the business is carried out in Spain, where there are strict regulations to ensure absolute respect for human rights.

Precisely because it is a **state-owned enterprise, due diligence** in all procurement processes means applying the provisions of the **Public Sector Contracts Law**, which sets out all the requirements in relation to the tax aspects, social or environmental conditions and other safeguards that bidders must comply with.

In relation to the audit of the fraud risk management system, the public nature of Adif AV and the provisions of the Contract Law is a form of due diligence in itself. Moreover, public regulations serve as a further layer of due diligence when arranging the services of suppliers and ensure compliance with labour, tax and criminal law and regulations, thus ultimately helping to uphold human rights.

The entire **Ethics Management Model** is essentially a system for preventing, detecting and correcting any activity considered irregular or contrary to ethical principles, including respect for human rights. It also includes an whistleblower channel for reporting possible breaches.

PRIORITIES IN RELATION TO HUMAN RIGHTS

RESPECT FOR PEOPLE

DEFENDING RIGHTS

REGULATORY COMPLIANCE

Adif AV did not receive any complaints of human rights abuses in 2022
(no complaints in 2021)

2.8.3. Risk management



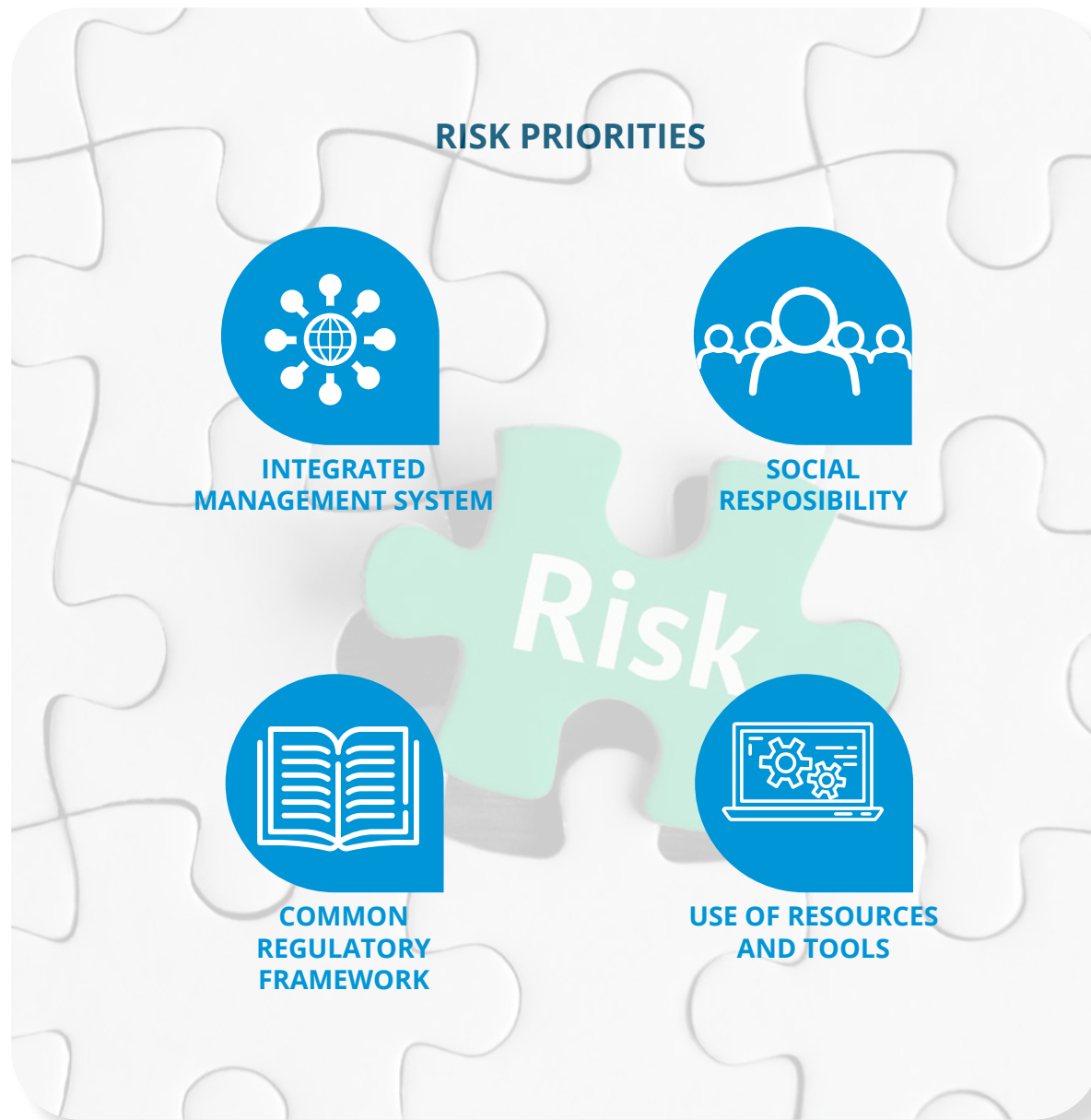
MILESTONES

- In relation to ESG, promoting and helping to **develop procedures and methods** for managing the risks to which the Company is exposed, taking into account the human factor and how people interact with this activity.
- Collaborating on activities related to the **SIGMA project**.
- **Integrating the ICFR (Internal Control over Financial Reporting)** system and evidencing compliance with the relevant principles of the COSO Framework.
- Continuously improving the Good Governance component but affecting all three ESG pillars through the **integration and systematisation of information** in relation to risk management.
- **Deploying the enterprise risk management model** to other areas of activity and specific plans (Recovery, Transformation and Resilience Plan), with the aim of increasing the scope, usefulness and effectiveness of the information provided.
- Making quantifying elements part of the **enterprise risk management model**.
- **Diving deeper into ESG risks.**



COMMITMENTS

- Improve and update **documentation related to risk management and safe design**.
- Make **human and organisational factors part of risk management**.
- Make continuous improvement to the **enterprise risk management model** to incorporate relevant ESG aspects.
- Add **new elements to the model** to ensure an objective risk assessment process.



2.8.3.1. Enterprise Risk Management System

Adif AV has specific risk management systems in place for the main ESG matters relevant to the Bank's activity and characteristics, notably environment, comprehensive safety and regulatory compliance. Each of these sub-systems is subject to prevailing law and regulations with regard to the identification, assessment and management of specific risks.

The Company ensures a transversal and integrated vision of risks from a business standpoint, targeting those that could pose a threat to its continuity and strategy. The **ERM (Enterprise Risk Management)** model follows a methodology adapted from COSO ERM and ISO 31000, involving the different areas of the Company's activity, all of which play an active role throughout the entire process (risk identification, analysis, assessment, monitoring and follow-up).

More precisely, critical and strategic risks are identified annually in the form of a survey, although risks may be reviewed during the year if any event or incident comes to light. For risk assessment, a scale-based model is applied and enhanced by the business vision delivered by the **Risk Committee**.

Throughout the entire cycle, the Risk Committee is the key piece in channelling all information relating to critical and strategic risks to aspects linked to good governance and transparency that pose a threat to the Company. All of this is achieved by raising awareness among all agents involved in the ERM model and fostering communication and engagement across the Company's various areas and departments, thus ensuring an end-to-end vision that increases the effectiveness of the decisions reached by the Company's management bodies.

Meanwhile, monitoring is carried out on the basis of key risk indicators to determine whether the values reported fall within the admissible thresholds. The model has also been strengthened through the inclusion and monitoring of measures and action plans to respond to negative risk scenarios.

In accordance with the main recommendations, regular reviews are now being carried out to ensure that the risks associated with ESG components have been taken into account and are duly represented, thus ensuring a complete risk map once it has been verified that they have been included in the risk identification process.

The Critical and Strategic Risk Map shows the main components of **the ESG model**: risks associated with environmental aspects, climate change, corporate reputation, fraud and those related to the safety, health and development of people

Highlights in 2022 included the implementation and use of the ERM model in **overseeing the management and execution of the EU RRF / Spanish PRTR (Recovery, Transformation and Resilience Plan) funds**. The Plan is rooted in the main ESG components (economic, social and territorial cohesion, resilience, support for ecological transition, among other aspects), so non-compliance with the Plan has a direct impact on ESG performance. The scale and importance of the ESG investments envisioned in this Plan make it a strategic opportunity and a priority for Adif.

Thus, the management components of the Plan include a specific risk map that shows the main threats to the effective achievement of the Plan's objectives and those that could threaten the ordinary course of the Company's business.

The map also represents risks on different time horizons (short, medium and long term), according to the nature of the infrastructure managed by the Company and the types of activities it performs.

The main impacts common to all the risks identified above, albeit with different orders of magnitude, are threefold: economic (fines and other consequences related to operations),

reputational (loss of confidence among stakeholders, business reputation) and operational (impact on the operation of rail traffic and services provided and running of the business).

2.8.3.2. Principles emanating from the enterprise risk management policy

The Risk Committee is the main body entrusted with the Company's Enterprise Risk Management function.

Four meetings were held in 2022, at which the previous cycle underwent an overall assessment, a risk map was drawn up for the financial year addressed in terms of impact and probability, and the quarterly monitoring of these risks and the action plans developed for their management were discussed and shared.

In 2022, the Risk Committee comprised
25 people,
24% of whom
were women

On this point, the **ERM Policy** establishes the basic pillars underpinning the risk management model. This core structure must be resilient, stable and flexible as the model and prevailing circumstances and trends evolve. The ERM Policy is designed to respond to both business-as-usual scenarios and scenarios of uncertainty and instability such as the one we are now witnessing.

The ERM System envisions the possibility of occasional updates being made to the risk map in the event of one-off events or significant background changes. Therefore, the system may be applied either by reviewing and updating the existing risks, including new risks in the map, or drawing up specific maps allowing us to temporarily switch our focus to certain aspects and provide specific input for one-off decisions as and when needed. Under these premises, the Enterprise Risk Management Policy remains in effect under the same conditions and content that were established since it was signed in 2017.

Meanwhile, the Company's map of **critical and strategic risks**, which is periodically updated as established in the ERM Policy, shows the main threats and uncertainties to which the Company is exposed, revealing a close degree of alignment with changes in the global landscape and within the local environment in which the Company runs its business. These risks fall into the one or other of the following broad categories:

- **Safety:** risks relating to incidents, accidents or malicious acts that could affect the continuity of the Company's operations, the state of its assets, customers or the environment.
- **Operations:** events that might compromise service quality.
- **People:** possible difficulties in staffing and talent management in the running the business. The category also embraces risks to which employees are exposed.
- **Reputational and compliance:** issues surrounding corporate governance, transparency and accountability in accordance with the role of a state-owned enterprise. This category includes risks arising from breach of applicable laws and regulations and/or voluntarily adopted codes of good practice.
- **Financial:** risks relating to the availability of funds and the financial sustainability of the Company.
- **Other projects:** events arising from the Company's involvement in further projects.

In particular, from an **ESG perspective**, it shows risks associated with the environmental impacts of carrying on a business activity, climate change, reputation, fraud and those related to the safety, health and development of the people who form part of the Company.

This information and data resulting from its management (measures and action plans, etc.) is a key component of the periodic monitoring of the Company's Plan, as is the information relating to the management of the Company's **critical and strategic risks** (and vice-versa).

Opportunities are addressed in the different components of the Company's strategy.



2.8.3.3. Operational risk management

The Company identifies **risks related to operational safety or traffic safety in projects, when making organisational changes or in the general running of the business.**

It typically flags a significant number of technical, organisational and operational risks, which may have an impact on environmental, social or governance issues, although the aim of detecting them is more to solve problems related to railway operation than anything else.

- The most commonly detected governance risks relate to changes in the functions assigned to Adif employees and other agents. Training, probation and monitoring programmes are put in place to monitor these risks.
- When drawing up projects, potential environmental risks are flagged and controlled through concrete measures included in the project specifications, typically insisting on compliance with applicable law and regulations.

The main objectives fall within the common framework of the SP2030 objectives. For example, within the safety pillar, one of the aims is to make infrastructure safer and more resilient. The following actions are now being pursued to achieve this, with target dates scheduled throughout 2023:

- Improving and updating documentation related to risk management and safe design:
 - + All procedures are under review, including the General Procedure for the Safe Design of Railway Infrastructure. The aim is to make these documents more operationally effective by resolving inconsistent methods, thus making them genuinely useful guides on how to draft projects and manage the associated risks.
 - + New working documents have been created to allow for better risk management. Specifically, the proposal is to make the *Guide on how to draft the Preliminary Safety Study* part of the existing set of regulations.
- Making human and organisational factors part of risk management:
 - + Taking part in roundtables and working groups to identify risks associated with the human factor and proposing mitigation action so that it can be included in the General Hazard Register.

In 2022, significant efforts were made to **identify possible needs to improve processes and a review of existing procedures was also launched.** Updating the procedures to be strengthened in 2023 will ultimately benefit the company when it comes to risk management and safe design. This improvement process will indirectly support the responsible management of the company, as it will lead to a more efficient, yet also more human-oriented, use of resources.

The Company also sees to it that **Common Safety Method** is properly applied in relation to projects. The main aim is to identify and assess risks, including the deployment of risk mitigation or control measures. In carrying out these actions, the Company draws up, reviews and ensures compliance with procedures and other documents, notably Adif and Adif AV procedures regulating the drafting of projects (or the management of contracts for project drafting purposes) and processes related to functional studies and organisational changes for staff.

The Company is heading up or otherwise taking part in the updates to be made to the following documents in 2023:

- Safe Design of Railway Infrastructure.
- Management of service contracts for the drafting of high-speed infrastructure, energy and station projects.
- Drafting of functional study documents.
- Management of the drafting of projects to modify conventional network infrastructure.
- Drafting of safe studies and projects (earmarked for erasure).
- Catalogue of risks for contractors and suppliers.

Some of the updates are there to clarify the scope of the actions to be carried out, to adapt them to regulatory documents or to come up with guides/catalogues that will allow for more structured completion of the formats or forms of these procedures.

When it comes to organisational changes, work is carried out to analyse any risks that may result from such changes, while also naming those responsible for implementing and monitoring the relevant requirements for the change.



2.8.3.4. Internal Control over Financial Reporting (ICFR))

ICFR is a cornerstone of any good corporate good governance system. Companies must describe their system and explain how it works in their annual corporate governance report.

The ICFR process was successfully integrated into the Company’s management system in 2022. The IT general controls (ITGC) of the ICFR were also implemented and run for the first time, and compliance with the relevant principles of the COSO Framework for ICFR was evidenced. The system remained up and running throughout the entire year, with ongoing development and improvement of the system.

The ICFR system is there to initiate the structural and functional analysis of the various inputs provided as support for the controls defined in the system in order to update and improve them if necessary

The ICFR system, as a set of processes embedded in the Company’s internal control, enables compliance with the good governance criteria to be followed at Adif AV in order to apply best corporate governance practices, thus extending its benefits in terms of transparency and independent management to the maximum possible number of stakeholders affected by possible business decisions.

INTERNAL CONTROL OVER FINANCIAL REPORTING (ICFR) COSO III

Adif AV has built an internal control over financial reporting (ICFR) system into its internal control environment. The system is made up of a compendium of processes which the Company and all of the professionals involved undertake in order to provide reasonable assurance as to the reliability of our financial information.

The ICFR system seeks to ensure the reliability of the Company's financial information through the following five objectives:

- **Existence and occurrence:** the transactions, events and other developments mirrored in the financial information exist and were recorded at the right time.
- **Completeness:** the information reflects all the transactions, events and other developments affecting the Company.
- **Valuation:** the transactions, events and other developments are recognised and measured in keeping with applicable regulations.
- **Presentation, disclosure and comparability:** transactions, facts and other events are recognised and measured in accordance with applicable standards.
- **Rights and obligations:** the financial information reflects, as of the relevant date, the Company's rights and obligations by means of the relevant assets and liabilities.

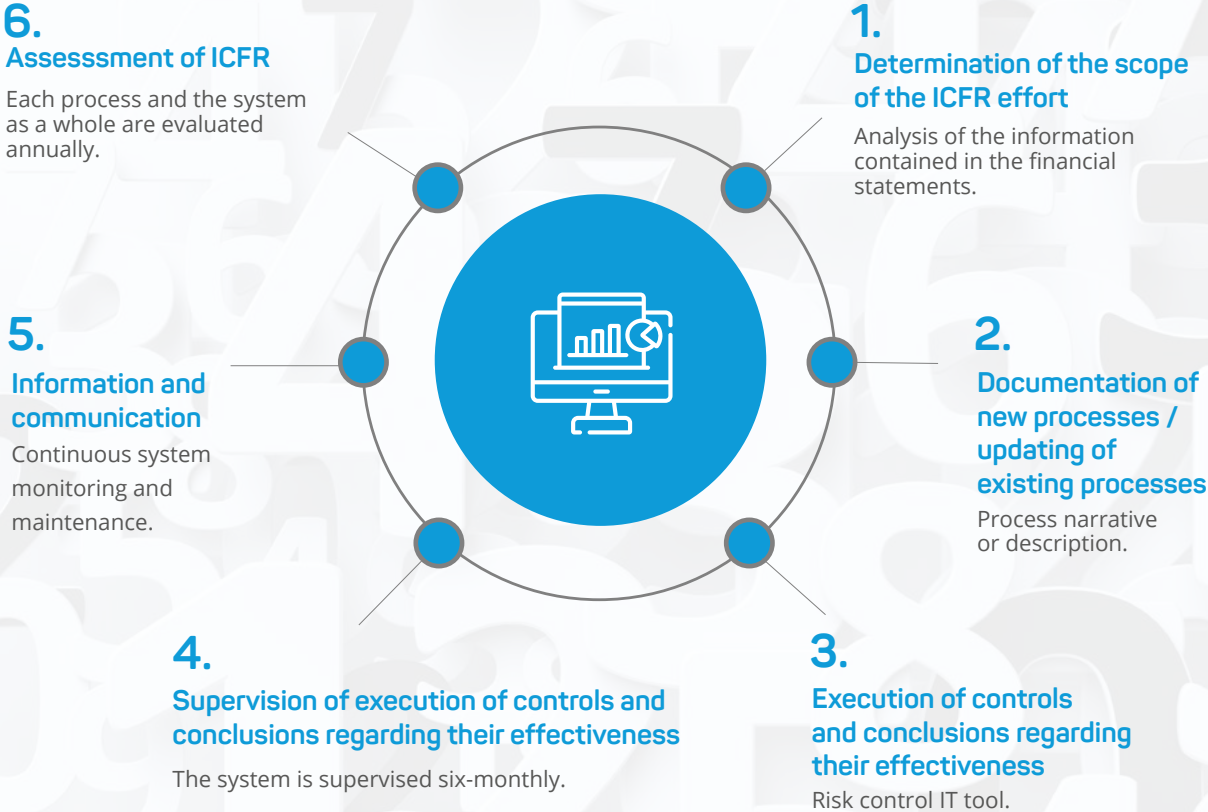


Adif AV's ICFR system is inspired by COSO III, an internationally recognised integrated internal control framework, and is underpinned by three core elements: **documentation of the controls performed and evidence gathered; continuous assessment over the course of the annual cycle; and the established pyramid of roles and responsibilities**

The Company has a Board-approved **ICFR policy** that sets out the methodology, responsibilities and principles when it comes to ICFR at Adif AV.

Moreover, the system is structured as a cycle that works continuously, thanks to which the system remains permanently updated and valid. The annual cycle is divided into six phases:

**PHASES OF THE
INTERNAL CONTROL
OVER FINANCIAL
REPORTING (ICFR)
PROCESS**



The ICFR at Adif AV helps ensure observance of best corporate governance practices across all key processes of the Company with an impact on financial reporting. The system provides a description of each process and the control activities in place to mitigate the financial reporting risks relating to that process.

Key processes at the Company with an impact on financial reporting in 2022 were as follows:

- 
- 0. **IT General Controls (ITGC)**
 - 1. **Property, plant and equipment, intangible assets, and management of government grants and assistance**
 - 2. **Revenue: Tariffs**
 - 3. **Financial instruments and cash management**
 - 4. **Taxes**
 - 5. **Electricity**
 - 6. **Accounting and financial reporting**
 - 7. **Recognition of contracts**
 - 8. **Revenue: Leases**
 - 9. **Revenue: Fibre-optic leases**

Activities or controls related to financial reporting that evidence compliance with the COSO principles are also part of the ICFR.

During the 2022 cycle at Adif AV, **256 control activities** were defined, including controls, half-yearly supervision and annual assessment. Running these control activities at the established frequency throughout the year resulted in **1,100 executions** by the end of 2022. A total of **117 employees** were involved in running these control activities throughout 2022.

When it comes to system updates and maintenance, a total of **157 changes were made to the control activities** in 2022, whether in the form of new activities or adjustments to existing activities as a result of organisational changes, process reviews or developments in the ICFR system.

INTERNAL CONTROL OVER FINANCIAL REPORTING COMMITTEE

This committee was set up on 7 July 2017 and is chaired by the CFO and is made up of the professionals responsible for each ICFR process, the heads of the Internal Audit, Economic Management and Financing, Planning and Budgeting and the Enterprise Risk Management officers.



In **2022**, the **ICFR Committee** comprised 15 members, **40% of whom were women**

For the 2022 cycle, the ICFR Committee **met twice** on a remote basis in June and December. At those meetings, the Committee reviewed the previous year's ICFR effort, approved the scope of the effort for 2022, and monitored and oversaw the 2022 cycle, related developments and the status of action plans, both those that remain active and those closed during the year.



2.8.3.5. ESG Risks. ESG Risk Rating



MILESTONES

- **Renewal of the Adif AV Green Financing Framework.**
- Publication of the **annual Green Bond Report**, containing information for investors on the eligible projects that received funds from the green bond issue placed in 2021.



COMMITMENTS

- **Adaptation to the EU Green Bond Standard**, as published by the European Commission in July 2021 but yet to enter into force as the European institutions hammer out the final draft.

ESG rating agencies are entities that carry out in-depth assessments of companies and organisations and then award a rating based on their compliance with and monitoring of ESG factors.

Broadly speaking, these entities carry out two types of analysis: solicited and unsolicited. In the first case, an organisation engages them to issue an ESG rating on its internal activity and processes. In the latter case, the agencies run an analysis on the basis of publicly available information on the company or organisation in question, doing so either on their own initiative due to the relevance of the company within the financial markets, or at the request of investors who are clients of the rating agencies.

While in principle these unsolicited analyses are usually based only on publicly available information, the rating agencies typically contact the company being analysed to send it a preliminary version of the analysis and give it the opportunity to collaborate in the assessment in case the information the rating agency needs access to is unavailable or otherwise obsolete or incomplete, or can be usefully expanded with further information in order to improve the indicators used for the analysis.

In 2022, two rating agencies contacted Adif AV to let it know that they were in the process of assessing its ESG profile: Sustainalytics and ISS ESG. Based on the preliminary version of the ESG rating awarded by the two agencies, the relevant departments of Adif AV were contacted in order to gather further information on their activities that might prove useful in supplementing the information available to the rating agencies and improve the rating ultimately issued.

In 2022, Adif AV received certification from Sustainable Fitch on its updated green finance framework, **which granted it a rating of “excellent”**

After receiving and evaluating the responses, **Sustainalytics** updated Adif AV’s rating at the end of October, **classifying it as 6.3 (“Negligible Risk”)**. Notably, the Company **ranks second** within the specific **transport infrastructure** sector (among the 178 companies analysed), and 23rd within the global universe (among the 15,635 companies analysed).



Adif AV was also awarded a “Prime” rating from ISS ESG, meaning that it “meets the stringent requirements of ISS ESG when it comes to sustainability within its sector”. **Adif AV was assigned an overall rating of B+,** placing it firmly among the top 10% of companies in its sector.

3

WHAT WE DO

3) WHAT WE DO

3.1. MAIN ACTIVITIES CARRIED OUT

- 3.1.1. Construction. Actions targeting the high-speed network and at stations
- 3.1.2. Infrastructure maintenance (services entrusted to Adif)
- 3.1.3. Infrastructure operation (services entrusted to Adif)

3.2. OTHER AREAS OF ACTIVITY

- 3.2.1. Telecommunications and Energy
- 3.2.2. International consultancy engagements and partnerships
- 3.2.3. Property management and urban integration
- 3.2.4. Integration and Group entities

3.3. STAKEHOLDER ENGAGEMENT

- 3.3.1. Government and public institutions
- 3.3.2. Society
- 3.3.3. People
- 3.3.4. Suppliers, partners and allies
- 3.3.5. Our People
- 3.3.6. Channels in place with stakeholders
- 3.3.7. Agreements and arrangements with industry and business organisations and associations

3.1. Main activities carried out*

CONSTRUCTION

Construction is a core activity at Adif AV. One of the priorities here is to preserve the natural environment and protected species, while also ensuring the restoration and recovery of degraded environments. Adif AV continues to make progress on the works and projects commissioned by the Spanish government, connecting the regions up via a high-performance network.

OPERATION AND MAINTENANCE

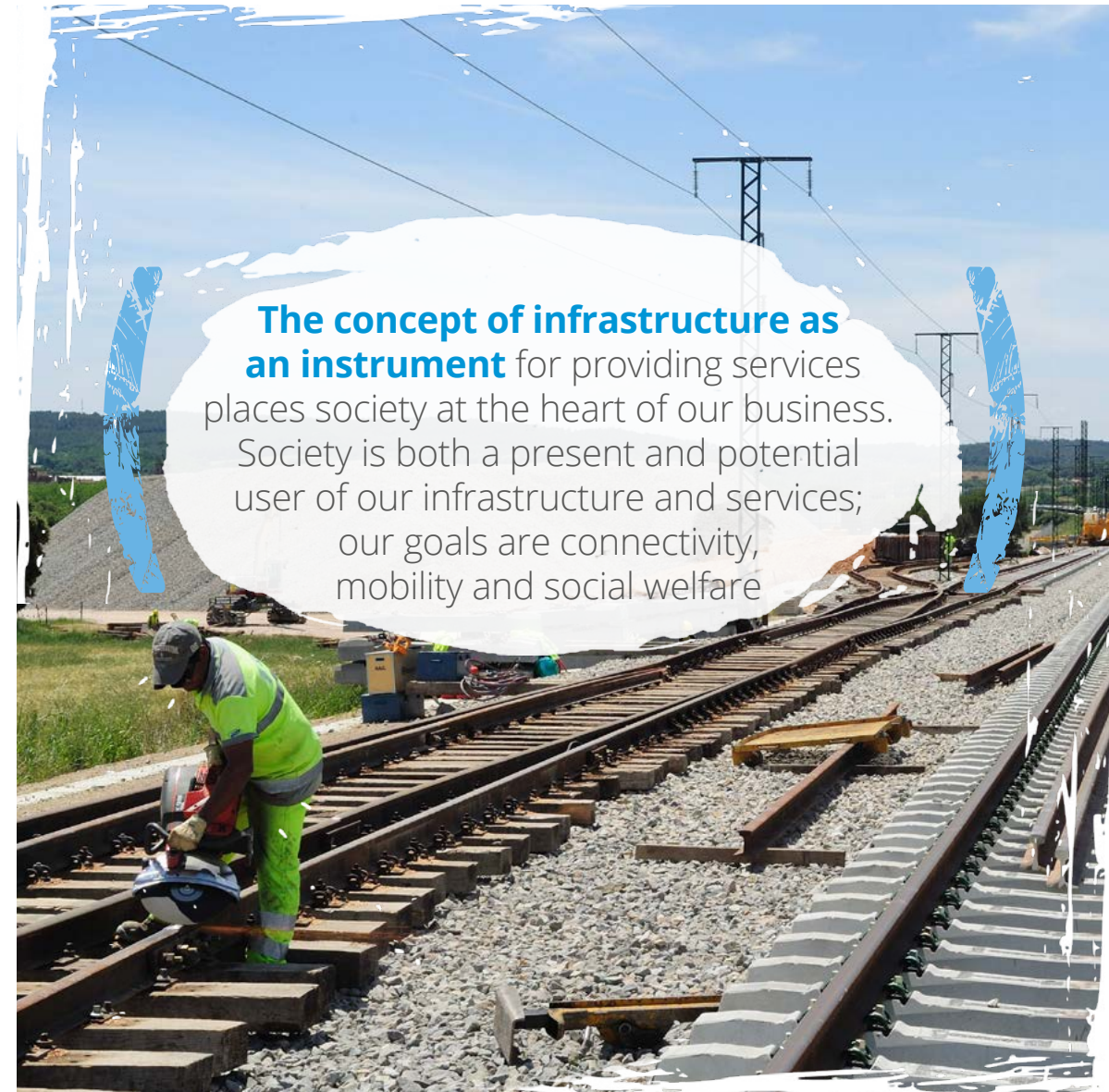
The operation and maintenance of the infrastructure owned by Adif AV has been entrusted to Adif, via the corresponding addenda to the services agreement entered into between the two entities.

The main actions carried out at Adif AV are as follows:

- **Operation:** management of rail traffic; calculation of charges applicable for the use of rail infrastructure, stations and other rail facilities; and operation of passenger stations.
- **Maintenance:** conservation, repair, replacement and upgrading of the various elements making up the network.

Adif AV is committed to providing safe services that ensure social cohesion while supporting reliable and high-quality connectivity and mobility and enhancing social welfare through inclusive and sustainable socio-economic development of the country.

* Content related to **GRI 2-6:** Activities, value chain and other business relationships



The concept of infrastructure as an instrument for providing services places society at the heart of our business. Society is both a present and potential user of our infrastructure and services; our goals are connectivity, mobility and social welfare

3.1.1. Construction*. Actions targeting the high-speed network and at stations



MILESTONES

- **Eastern High-Speed Line. Madrid–Castile La Mancha–Valencian Community–Region of Murcia.** Beniel–Murcia section. Commissioning of the track between Beniel and Murcia del Carmen, covering a total length of 15.176 km, including 16 new km of ERTMS Level 2; completion of the underground work on the northern part of the station, with tracks 2 and 4 set up for underground siding to start providing high-speed services.
- **Sagrera (Barcelona):** commissioning of the new Sant Andreu station which, together with the commissioning of the final route of the Barcelona–Granollers conventional gauge line, marks the effective culmination of one of the key phases of the Sagrera–Sant Andreu project (entailing an investment of over €100 million).
- **Pajares Rail Bypass:** final completion of four level crossings on the route between León and La Robla, on the Venta de Baños–Gijón line; commissioning of the Pola de Lena station extension.
- **Valladolid–Venta de Baños–Burgos–Vitoria high-speed line, Venta de Baños–Burgos** section: 90 kilometres of single-track ERTMS Level 2 put into service.
- **Vitoria–Bilbao–San Sebastián:** platform works along the various branch lines and station renovation.
- **Chamartín–Torrejón de Velasco:** commissioning of the section.



COMMITMENTS

- Protect **species at risk of extinction**.
- Comply with **investment planning, paying close attention to RRF-funded contracts**.
- Honour **contract bidding terms**.
- Ensure an **equitable distribution of workload**.
- Modernise the **data management process**.
- Further **streamline the extraordinary price review process**.
- Conduct a **critical self-assessment of existing procedures**.
- **Reduce handling times for contractual issues**.
- **Help cushion the social and environmental impact** of the Pajares Bypass.
- Strengthen and improve areas in which **bottlenecks** occur.

* Service Pillar, Strategic Objective 7 (PSEV-SO7). Increase the performance and quality of the network (SP 2030)

Adif AV continues to make progress on the works and projects commissioned by the Spanish government, connecting the regions up via a high-performance network. It has also developed the European Traffic Management System (ERTMS), the train control and command system designed to ensure Europe-wide compatibility of signalling and communication between track and train.

Construction is a core activity at Adif AV. One of the priorities here is to preserve the natural environment and protected species, while also ensuring the restoration and recovery of degraded environments.

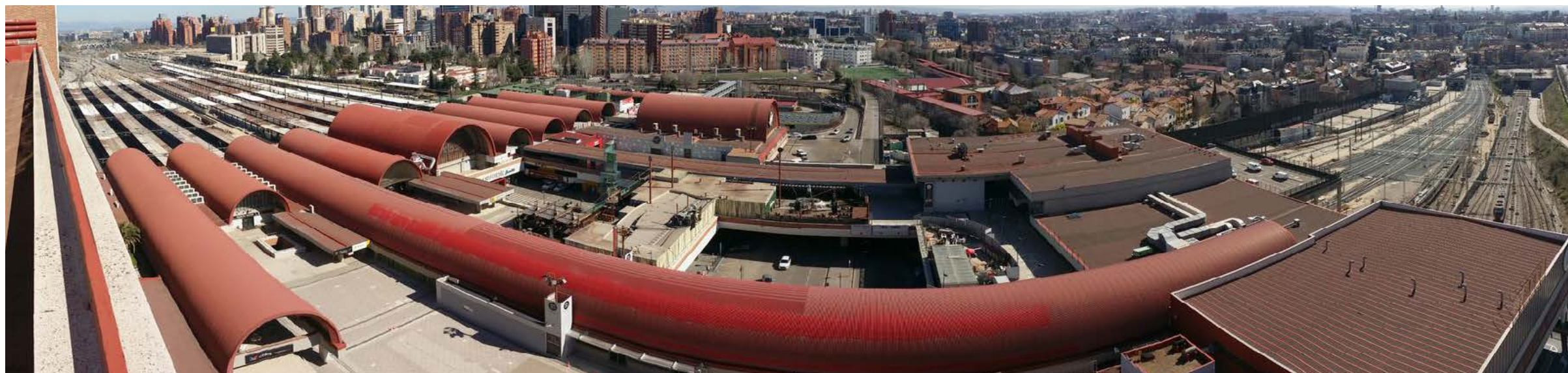
As we mentioned earlier, Adif AV is primarily engaged in construction, renovation and improvement work. **Key activities** carried out during the year in the realm of construction are as follows:

MADRID CHAMARTÍN-CLARA CAMPOAMOR STATION

In March 2022, work began on the extension of the Madrid Chamartín-Clara Campoamor station. The aim is to adapt the station to the expected increase in traffic once the new sections of the high-speed network have been commissioned, such as the standard gauge tunnel that connects the station to Madrid Puerta de Atocha station, and following the deregulation of passenger transport.

Further progress was made in converting the current Iberian gauge tracks 14 and 15 to the standard UIC gauge, and in making the new tracks part of the high-speed sector of the station, as a preliminary step ahead of future expansions at the station to meet the growth in traffic that has occurred following the entry into service of new sections of the Spanish high-speed network. In order for the work to remain on schedule and to achieve the targets set by the Company, the south head of tracks 14 and 15 is scheduled to be put into service by the end of January 2023.

The refurbishment and renovation work was completed on the old suburban train (Cercanías) lobby under the rail tracks, which now takes the form of a large area on a single level, including the recovery of the pre-existing vertical circulation cores between the platforms and the lower lobby through the installation of escalators and fixed stairwells. Accessibility is further strengthened through the inclusion of elevators throughout the passenger circulation area.



CENTRAL SPAIN

Connection between the Madrid–Levante and Madrid–Barcelona high-speed lines: In July 2022, platforming work got under way to connect the Madrid–Levante and Madrid–Barcelona lines in both directions. Once this connection is complete, trains from Barcelona will be able to arrive at Chamartín station via the UIC gauge tunnel, without having to change gauge, and connect with the lines heading north (and vice versa).

The bidding process for the expansion of two tracks and a platform at Puerta de Atocha station is now in progress. As the construction process for the planned through station affects tracks 14 and 15, it would not appear to be possible to keep the 15 current tracks in service during the works, despite this being an essential requirement of Adif. Therefore, the project has been designed such that Puerta de Atocha maintains 15 tracks in service throughout all phases of the project, although during certain phases several tracks will be shortened to 200 metres for train parking and siding, rather than having their regular 400 metres.



MEDITERRANEAN CORRIDOR

The aim is to improve rail freight transport along the Mediterranean Corridor by enhancing and adapting ETI connections to the corridor to include the multimodal platform at La Llagosta, which will become one of the main strategic nodes in Spain for international freight traffic.

Meanwhile, the contract to build the platform of the new southern access to the Port of Castellón has been put out to tender, with the aim of making freight transport more efficient and competitive by reducing access and transit times.

- Start of work on the standard gauge connection to the Mediterranean Corridor of the La Llagosta multimodal platform (platform, track and electrification).
- Award of the contract to build the platform of the new southern railway access to the port of Castellón (section 0+000 – 4+698).

(MURCIA-ALMERÍA HIGH-SPEED LINE

All the platform sections are currently under construction, except for the Lorca Integration (in its final planning phase) and Almería Integration Phase 2, which are in the process of being put out to tender.

- In the area of Barriomar and Nonduermas (Murcia), 47.26% of the scheduled actions have been completed. Work is now focusing on the central part of the underground station and on the railway corridor. The next milestone will be the start of construction on the final station building above ground.
- Completion is at 51.8% between Nonduermas and Sangonera, with work ongoing on several fronts, such as the undergrounding in Alcantarilla.
- The Sangonera-Totana section has a completion rate of 43.03%, while the Totana-Lorca section is at 41.16%.
- Turning to the rest of the connection with Almería, work began during the year on the Totana-Totana and Lorca-Pulpí sections, and further progress was made on the Pulpí-Vera (24.80% completion), Los Arejos-Níjar (33.99% completion) and Níjar-Rio Andarax (26.38% completion) sections.



(CONNECTION BETWEEN THE MONFORTE DEL CID-MURCIA HIGH-SPEED LINE AND THE CHINCHILLA-CARTAGENA LINE

In July 2022, contracts were awarded for the construction of the platform of this direct bypass, which will take place in and around El Reguerón, with a single standard gauge track and a train speed of 160 km/h. The work will also involve the replacement of easements and affected services, environmental integration of the infrastructure and ancillary work.

It includes the necessary railway repositioning work under the provisional scenarios in order to keep all traffic in service while the work continues. The hydraulic and other engineering structures have also been defined.



(MURCIA-CARTAGENA HIGH-SPEED LINE

The contract for the construction of the Riquelme-Torre Pacheco section was put out to tender. The contract is worth €155.6 million and will run for an estimated 36 months. The section to be executed runs through the municipalities of Murcia and Torre Pacheco, in the province of Murcia, along a total length of 17.7 km, and includes a new high-speed double-track platform in standard gauge (1,435 mm) running parallel to the current Chinchilla-Cartagena line, in conventional gauge (1,668 mm).

(SAGRERA (BARCELONA)

The commissioning of the new Sant Andreu station and the final section of the Barcelona–Granollers conventional gauge line marks the effective culmination of one of the key phases of the wider Sagrera–Sant Andreu project.

The contract was also awarded for the architectural and facility drawings of the Technical Train Treatment Area (ZTTT) at La Sagrera. The main aim is to create a technical work area close to the future intermodal station of La Sagrera, where technical work relating to the operation and management of the railway can be carried out. The project aims to separate the space used exclusively by passengers from the space required for train-related work, so while it will be located next to the future Sagrera high-speed station, it will operate independently.

In addition, the Sagrera high-speed station track assembly construction project was awarded, although the contract for the Sagrera station overhead high-speed contact line has yet to be awarded.

Meanwhile, one of the tracks of the Madrid–Zaragoza–Barcelona–French Border high-speed line was taken up ahead of its final positioning to run through the future station, which will be carried out in 2023. The station roof was also completed during the period, among others milestones.



(OTHER PROJECTS IN CATALONIA

Work was completed on the urban zoning of Plaza España in Girona, which has been affected by the construction of the high-speed tunnel and the new Girona station for high-speed services. Fencing work along the conventional line was also completed. Mas Gri sector, involving the installation of an enclosure along the Barcelona–Portbou conventional line as it enters Girona from the south, due to the impacts caused by the construction of the high-speed railway line.

Work is under way to improve singular points in the provinces of Barcelona and Girona due to the work ongoing in relation to the Madrid–Zaragoza–Barcelona–French Border high-speed line, which includes permeability improvements, remediation of specific drainage problems, improvements in the zoning of public roads lying in the vicinity of the high-speed line, and conditioning work on the beds of certain streams and rivers that cross the line. Actions are envisaged in the municipalities of Barcelona, Santa Coloma de Gramanet, Montcada i Reixac, Vilanova del Vallés, La Roca del Vallés, Llinars del Vallés, Gualba and Sant Celoni in Barcelona, and Riells i Viabrea, Sant Feliu de Buixalleu and Sant Julià de Ramis-Sarria de Ter in Girona.

Work is also under way to take up the existing single track lying between Vandellós and Port Aventura, and further progress is being made towards the construction of the new Salou–Port Aventura station.

(MADRID–GALICIA HIGH-SPEED LINE

Highlights here include the start of work on the two sections that make up the Ourense bypass.

- Start of construction work on the urban integration and improvement of the Ourense railway network between Taboadela and the Seixalbo connection.
- Technical approval of the plans and drawings for the construction of a new intermodal station in Ourense and the covering of the marshalling yard.
- Tender for the contract to construct the maintenance depot located at A Mezquita for the Pedralba de la Pradería–Taboadela section.
- Provisional continuation of modified project no. 2 relating to the overhead contact line and related systems of the Pedralba de la Pradería–Taboadela–Ourense section.



(ATLANTIC CORRIDOR

We would certainly highlight the ongoing construction of railway stations in the cities of Galicia, as well as the start of construction on the railway access to the outer port of A Coruña, which is part of the Strategic Plan for the Promotion of Freight Transport by Rail.

- Start of work on the railway access to the outer port of A Coruña at Punta Langosteira.
- Commencement of work on the acoustic protection of the Vigo–Padrón section, and contract awarded for the Padrón–A Coruña section.

Start of work on the Las Portas traction substation and the high voltage power line from the REE Conso substation to the Las Portas traction substation.

(MADRID-VALLADOLID HIGH-SPEED LINE

Efforts here are focusing on the Valladolid railway bypass, which will accommodate all freight traffic passing through Valladolid, following on from the Madrid–Hendaye line through the new railway complex. The complex will ultimately centralise all railway activities currently carried out at other centres within the city (with the exception of those activities relating to the passenger station), the new Renfe workshop, and a logistics services terminal.

- Start of work on the eastern substation of the Valladolid railway bypass and rehabilitation of the Pinar de Antequera and Cabezón de Pisuegra substations.
- Start of work on the freight yard of the railway complex and its connection with the Valladolid arterial railway network.
- Tender for the track and electrification works for Valladolid's eastern railway bypass.



(PAJARES BYPASS

Bidding, award and commencement of further actions in the area of Pantalla 1 on the Sotillo–Campomanes section and the project to adapt access and evacuation points and protection and safety installations in tunnels along the Pajares Bypass of the León–Asturias high-speed line.

The tender for the construction of the platform on the Palencia–Aguilar de Campoo high-speed line, more precisely along the Palencia–Palencia Norte section, will give a major boost to the development of railway connections between Cantabria and the Meseta Central plateau of Spain.



VITORIA-BILBAO-SAN SEBASTIÁN AND BASQUE COUNTRY HIGH-SPEED LINE

Work is continuing on the platform of the Vitoria-Bilbao branch line comprising 19 sections, 12 of which have already been completed. Of the 17 sections that make up the Bergara-Astigarraga branch line, 16 have now been completed. Work also began on the Astigarraga-Irún section during the year and remodelling work continues on the Atocha station in San Sebastián.

Elsewhere, work was completed on the first section of the Burgos-Vitoria high-speed railway connection with rail integration in Vitoria (Phase I) and work on the second section (Phase II) was initiated. Work is being carried out on drafting superstructure, energy and installation projects, along with the development of the informative studies for the integration of high-speed lines in cities (Bilbao and Vitoria). The preliminary drawings for rail integration in Vitoria-Gasteiz are currently being drafted. Once complete, the drawings for the various sections will be drawn up accordingly.



The problems surrounding the Astigarraga-Irún section are beginning to unravel following the technical and economic approval of Amendment No. 1 to the construction project for the implementation of standard gauge on that section, while amendment No. 2 is currently in the study and drafting proposal phase.

Meanwhile, the renovation of Hernani station was successfully completed, thus improving accessibility and easier transit for users, with particular attention paid to the needs of people with reduced mobility.

CASTEJÓN-PAMPLONA SECTION OF THE CANTABRIAN-MEDITERRANEAN HIGH-SPEED CORRIDOR

Platform work continued on the Villafranca-Peralta, Olite-Tafalla (South) and Tafalla (South)-Tafalla sections. Further highlights in the period include the ongoing bidding process for the Viaduct over the Ebro River.



3.1.2. Infrastructure maintenance* (services entrusted to Adif)



MILESTONES

- Start of work to **renew all signalling infrastructure and deployment of ERTMS** on the Madrid–Seville high-speed line.
- Start of work to **install safety infrastructure** along the Nudo de La Encina–Xàtiva–Valencia section of the high-speed line.
- Review of the **general criteria for preventive maintenance of safety infrastructure**.
- **ERTMS dynamic testing** for the commissioning of the various installations.
- Preparation of **ERTMS reliability walkthrough reports** prior to the commissioning of various installations.



COMMITMENTS

- **ERTMS readiness** for entry into service on the **Atlantic Corridor and Madrid–Lérida** line.




* Developed under **Service Pillar, Strategic Objective 7 (PSEV-SO7)** Increase the performance and quality of the network (SP 2030)

The maintenance of the infrastructure owned by Adif AV has been entrusted to Adif, via the corresponding addenda to the services agreement entered into between the two entities. The main activities here include the upkeep, repair, replacement and technological updating of the various elements that make up the network.

One of Adif AV's main activities, both economically and environmentally is infrastructure maintenance. The aim here is to ensure maximise safety, reliability and availability to optimise preventive maintenance and efficiently manage inspection activities with the ultimate aim of reducing incidents. Key maintenance activities include:

- Helping to ensure more environmentally friendly preventive and corrective maintenance through compliance with Adif AV's Environmental Policy.
- Efficient management of expenditure on maintenance actions and rigorous monitoring and control of the Operating and Investment Budget.
- Leadership and development of sustainable strategic initiatives.
- Analysis of the internal action procedure and optimisation of monitoring activity.

MAINTENANCE AND OPERATING EXPENSES¹

		2020	2021	2022
Maintenance*	 Total expenditure incurred on high-speed network maintenance (€M)	301.7	336.1	368.1
	Total expenditure incurred on maintenance work on the high-speed network per km (€ thousand/km track)	84.6	90.2	92.8
Operations*	Total expenditure on operating the high-speed network (relating to rail traffic management) (€M)	27.2	29.0	31.5
	Total expenditure incurred on operating the high-speed network per km (€ thousand/ km track)	7.6	7.8	7.9

¹ This information is updated to include the method for calculating the PRIME indicators

* Data available at March 1, 2023

3.1.3. Infrastructure operation (services entrusted to Adif)

As with maintenance activities, operating activities have been entrusted to Adif through the corresponding addenda to the agreement signed between both entities.

Activities here include managing rail traffic, calculating the charges payable for use of rail infrastructure, stations and other rail facilities, and running the passenger stations owned by Adif AV.

3.1.3.1. Integrated safety of the railway system (all safety activities)*

We view safety as a cross-cutting concern that affects all facets of railway infrastructure and is crucially shaped by the implementation of the new safety and interoperability directives of the European Union Agency for Railways (ERA). End-to-end safety involves an awareness that every one of our activities entails ongoing improvement of safety procedures and the introduction of new methods and technologies. Adif AV's safety culture is underpinned by a risk assessment that leads to preventive, corrective and improvement measures towards risk mitigation. We continue to roll out end-to-end safety improvements in the domains of operations, environment, rescue services, occupational health and safety and cybersecurity.

When it comes to safety, one of the most telling contributions was the completion of the signalling works, involving the deployment of more efficient and safer technologies that help to improve and increase rail traffic to the detriment of other more polluting and less efficient and safe modes of transport.

* Developed under **Safety Pillar, Strategic Objective 1 (PSAF-SO1)**: Maintain high levels of traffic safety. Traffic Safety; **(PSAF-SO2)**. Ensure high levels of cyber resilience. Information security – Cybersecurity; **(PSAF-SO3)** Improve infrastructure resilience and step up security in the event of deliberate attempts to intrude or interfere with the railway system and emergency situations. Safety and self-protection; **(PSAF-SO4)** Ensure a safe and healthy work environment. Occupational risk prevention; **(PSAF-SO6)** Improve environmental protection. Environmental safety



ERTMS was implemented along the following stretches of the high-speed network during the year:

- ERTMS Madrid–Seville.
- ERTMS Nudo de La Encina–Valencia.
- ERTMS Entry to Valencia (adaptation).

3.2. Other areas of activity



MILESTONES

TELECOMMUNICATIONS¹

- Deployment of **5G mobile communications networks** in logistics terminals and high-speed lines.
- Deployment of new **telecommunications systems and networks**.
- Steps taken to **improve the maintenance** of the telecommunications area.

INTERNATIONAL CONSULTANCY ENGAGEMENTS AND PARTNERSHIPS³

- **Development of international activity** in the field of regulation and standardisation.
- Promotion of the **Adif and Adif AV railway industry** in the European Atlantic and Mediterranean freight corridors.

INTEGRATION AND GROUP ENTITIES⁴

- **Collaboration with other areas of the state-owned enterprise** in connection with the urban integration projects.

ENERGY²

- Project to **refurbish the electric traction substations** on the Madrid-Seville line.
- Project to refurbish and expand the **El Hornillo traction substation**.
- Project to build a **mobile substation for use along the high-speed network**.

PROPERTY MANAGEMENT AND URBAN INTEGRATION⁴

- Performance of the **Madrid Nuevo Norte** project.
- Drafting of **reports on assets – urban planning**.
- Drafting of **land reversion reports**.

¹ Developed under **Service Pillar, Strategic Objective 3 (PSEV-SE3)**. Maximise network digitalisation and connectivity

² Developed under **Sustainability Pillar, Strategic Objective 1 (PSUS-SO1)**. Lead the way in bringing about the energy transition Develop an energy community

³ Developed under Results-driven **Pillar, Strategic Objective 5 (PRED-SO5)**. Consolidate the Company's international exposure/export know-how

⁴ Developed under Results-driven **Pillar, Strategic Objective 6 (PRED-SO6)**. Build winning alliances (Adif AV membership of entities and organisations)



COMMITMENTS

TELECOMMUNICATIONS

- Draw up a **plan to renew the centralised traffic control centres** on the high-speed network.

ENERGY

- **Establish internal governance procedures** by taking part in the specific teams and taskforces on energy standards.
- **Incorporate** the on-board measurement billing model.

INTERNATIONAL CONSULTANCY ENGAGEMENTS AND PARTNERSHIPS

- **Maintain progress of work already under way** and double down on efforts to ensure that outstanding projects remain on schedule.

PROPERTY MANAGEMENT AND URBAN INTEGRATION

- Implement the **Madrid Nuevo Norte** project.

INTEGRATION AND GROUP ENTITIES

- Draw up a timeline for holding **technical committee meetings at the urban integration companies**.
- Establish **specifications and technical conditions for the activities to be carried out by third parties**.
- Implement the **economic commitments made under the urban integration plans** for Alicante, Murcia and Valladolid.
- Adjust the **maturities of the participating loans** granted to Valencia, Logroño and Gijón.

- **Standardise the economic commitments** assumed under the urban integration plans for Barcelona, Murcia, Valencia and Valladolid.
- Sign the **protocol for railway integration in Cartagena**.
- Sign the **agreement for the integration of Phase 2 – Almería**.

3.2.1. Telecommunications and Energy

TELECOMMUNICATIONS¹

Adif AV manages telecommunications infrastructure in the form of a fibre-optic network that overlays the railway network. The system supports operation of the railways themselves; moreover, capacity is optimised by offering any excess to outside operators.

Also in 2022, the Company was able to tender the 5G network deployment actions in logistics terminals and high-speed lines and provided significant support in relation to the initiative to set up a vehicle to commercially exploit surplus telecommunications assets.

ENERGY²

The Company manages the supply of electricity to Adif and Adif AV itself, and, by means of an ancillary traction electricity supply service, of traction electricity to railway operators that use electric rolling stock.



The main advantage of telecommunication systems lies in their ability **to digitalise railway operation processes**, in pursuit of continuous improvement

¹ Developed under **Service Pillar, Strategic Objective 3 (PSEV-SO3)**. Maximise network digitalisation and connectivity (SP 2030)

² Developed under **Sustainability Pillar, Strategic Objective 1 (PSUS-SO1)**. Lead the way in bringing about the energy transition Develop an energy community (PE2030)



3.2.2. International consultancy engagements and partnerships¹

Outside Spain, Adif AV seeks to generate a return on its wide-ranging expertise by attracting consultancy engagements and other contracts in foreign markets. The Company takes part in international projects and in the development and implementation of international safety and interoperability rules.

3.2.3. Property management and urban integration²

Adif AV manages the property under its ownership. Following the policies put in place by the relevant government bodies, Adif AV supports the sustainable development of the railways system and its integration with urban planning, sometimes through railway "Integration JVs".

3.2.4. Integration and Group Entities²

Adif AV oversees all investees and other entities within its Group (companies, foundations, groupings, associations, and so forth). This includes coordination and follow-up of railway integration efforts within cities, which are sometimes managed through *Sociedades de Integración del Ferrocarril* (railway integration corporations).



¹ Developed under **Results-driven Pillar, Strategic Objective 5 (PRED-SO5)**. Consolidate the Company's international exposure/export know-how (SP2030).

² Developed under the **Results-driven Pillar, Strategic Objective 6 (PRED-SO6)** Build winning alliances – Adif AV membership of entities and organisations (SP2030).

PRIORITIES IN STAKEHOLDER RELATIONS



COMMUNICATION



INVESTMENT



TRANSPARENCY

3.3. Stakeholder engagement¹

Adif AV strives to predicate its management on its responsibility towards society. As a result, it is crucial to listen to its various stakeholders, with whom it has set up different communication channels. The Company defines its stakeholders as any group that is or could be affected by the Company's activities, now or in the future, and/or legitimately affects or could affect the Company's activities and, by extension, its results. Its stakeholders accordingly include the rail operators, rail passengers, citizens, public authorities, employees, governments of other countries, suppliers, business partners and allies and the third sector (NGOs, charitable associations, etc.).

Adif AV is aware of the importance of maintaining close, accessible and transparent relations with all of its stakeholders, which is why it ascribes great importance to the active management of its communication channels and the ability to gather feedback about what its stakeholders think about and want from the Company. Adif AV seeks to encourage employee engagement and segment stakeholders so as to offer them information tailored to their needs and circumstances. Adif AV is working hard to become an organisation close to its stakeholders; one that anticipates and responds to their expectations with innovative and effective solutions, thus contributing to social and economic growth within the regions by creating jobs and nurturing talent, developing the value chain and creating prosperity for society (citizens and businesses alike), and promoting the leadership of the sustainable, intelligent, competitive and structuring mobility model.



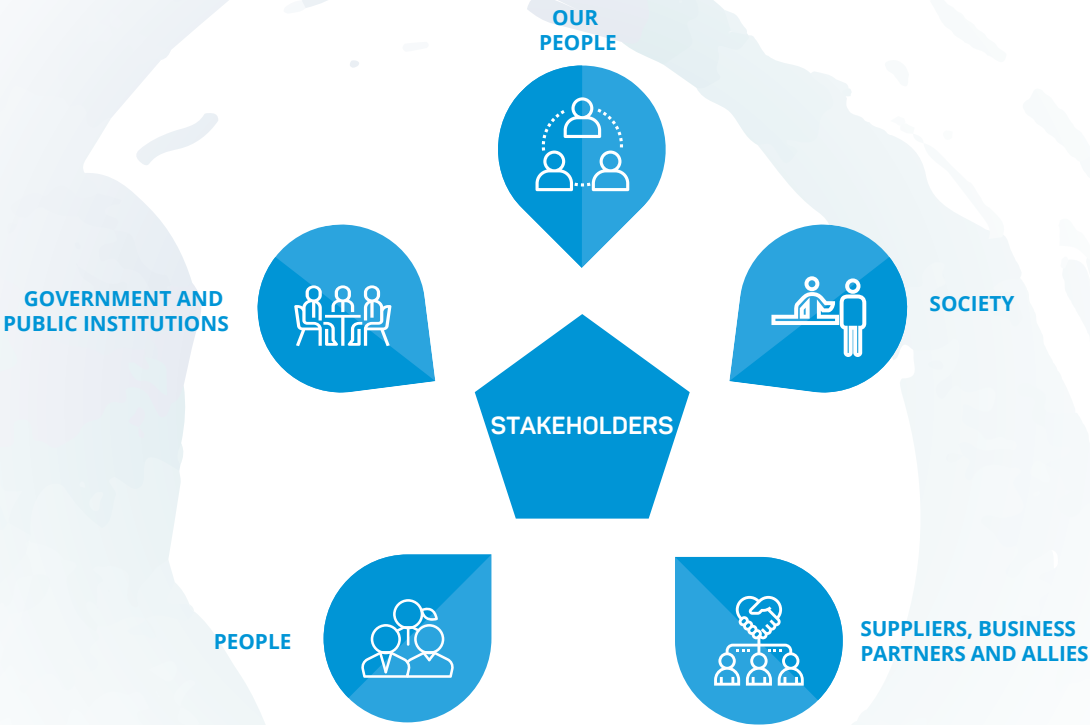
¹ Content related to **GRI 2-29**: Approach to stakeholder engagement

Key figures in 2022 for Adif AV in relation to stakeholder engagement are as follows, as we seek to find aspects that unite stakeholder expectations with the Company's leadership:

	2020	2021	2022
No. of social media initiatives*	5,708	6,704	7,056
Total percentage of requests answered through website mailboxes with respect to the total number of mails handled	3.2%	4.6%	10.4%
Events managed by Adif AV*	80%	100%	100%
No. of initiatives carried out and media coverage under the Strategic Communication Plan*	547	853	982
Percentage of requests for information from the press and media answered on time or within seven days*	95%	95%	96.1%
Percentage of transparency-related claims admitted for processing by the Transparency and Governance Board*	1.28%	3.30%	5.10%

* Adif + Adif AV

For the 2030 Strategic Plan, the Company grouped the segments into, **five priority stakeholder categories**¹.



¹ Developed under **Service Pillar, Strategic Objective 4 (PSEV-SO4)**. Increase the value of assets by engaging with stakeholders. Relations and partnerships with stakeholders to promote rail activity (SP2030)

3.3.1. Government and public institutions

Stakeholders here include the government and national and European institutions, public administrative bodies, especially the Ministry of Transport, Mobility and Urban Agenda (MITMA) and the Ministry for Ecological Transition and the Demographic Challenge, along with financial organisations and investors.

Adif AV falls under the Ministry of Transport, Mobility and Urban Agenda, which plays a dual role as regulator and investor. Accordingly, the Company is committed to maintaining an ongoing relationship based on transparency, framed by the effective and sustainable management of its activities. The relationship between Adif AV and the Ministry is channelled mainly through the Secretary of State for Transport, Mobility and Urban Agenda. However, it is also in continual contact with other entities that similarly fall under the Ministry, including the state-owned rail service provider, Renfe Operadora, and other ministries, such as the Ministry for Labour, Migrations and Social Security and the Ministry of Finance.



Adif AV also engages with regulatory bodies such as the Spanish National Commission of Markets and Competition (CNMC), which oversees and ensures that the rail sector operates properly and that there is fair competition in the rail services market, especially

the high-speed passenger travel market; the Court of Audit and the General State Controller, with whom its dealings are governed by prevailing legislation; and with other public bodies such as the State Ombudsman, the state attorney's office, certification bodies, the Spanish National Statistics Office (INE), universities and other public education centres with which Adif AV has collaboration agreements.

Adif AV is also in contact with, and a member of, various regulatory and supervisory bodies, both domestic and international:

- **RNE (RailNet Europe):** an umbrella organisation for European railway infrastructure managers and allocation bodies (IMs/ABs) set up for collaboration on the planning and management of rail capacity in international corridors and on quality and efficiency improvements.

Sitio Web: <https://rne.eu/organisation/rne-approach-structure/>

There is a network of One Stop Shops (OSS), which represents the infrastructure managers (IMs) in international traffic and constitute a single point of contact for the entire international route of a rail service, from initial questions related to network access to international path requests and performance review after a train run.

Website: <http://rne.eu/organisation/oss-c-oss/>



- **ERA (European Union Agency for Railways):** agency for the development of technical specifications aimed at interoperability and safety, in which Adif AV participates through EIM.

Website: <https://www.era.europa.eu/>



- **PRIME:** a platform of European railway managers for the development of the Fourth Railway Package, established between DG MOVE and the IMs with a view to improving international cooperation among railway undertakings, supporting the implementation of a European railway policy, and exchanging best practices through performance benchmarking. Adif AV is participating in the elaboration of a universe of indicators that will enable oversight of the main activities and improved management.



3.3.2. Society

Society as a whole is also a key stakeholder, comprising not only the users and regular customers of railway operators and stations, but also because of the impact Adif AV has on society.

Adif AV takes part in various international organisations:

- **EIM (European Infrastructure Managers):** this association encompasses the most important European rail infrastructure managers and represents the sector before the European Union's policy-making and legislative bodies; it also conducts studies in support of the modernisation of the rail sector.
Website: <https://eimrail.org/>
- **UIC (International Union of Railways):** worldwide association promoting rail transport through technical projects, railway research and standardised solutions.
Website: <https://uic.org/>
- **European Economic Interest Groups (EEIGs):** for the development of cross-border projects related with international rail corridors and the Trans-European Transport Network (TEN-T).

European Rail
Infrastructure
Managers **EIM**

UIC

3.3.3. People

People comprise not only the rail operators —both passenger and freight— and the end users of trains who directly receive and perceive the quality of the service.



3.3.4. Suppliers, partners and allies

Suppliers and partners are essentially the companies or institutions that work alongside Adif AV to achieve common goals. From construction companies, consulting firms, engineering firms, service providers, maintenance, facilities, or other institutions as allies, they allow for the continuous improvement of the services we provide.

Supplier relations are based on guaranteeing transparent tendering and legal certainty. The contracting procedure is framed by applicable procurement legislation, which includes stringent selection criteria and articulates all procurement procedures around transparency-based management, factoring in all processes and possible incidents. Each time it puts a tender out to call, Adif AV selects suppliers after they have certified their business and technical expertise and solvency, as well as certain social and environmental criteria, which are determined on a case-by-case basis. Adif AV now largely uses electronic tendering as an essential tool in its contracting procedures.

3.3.5. Our People

All the people who make up Adif AV are the driving force behind SP2030 as a key stakeholder.

Figures and other data regarding satisfaction with internal communication actions are compiled through: Work Climate Survey (every two years), surveys on participation in all activities carried out: conferences, events, raffles, cultural and sports activities, etc.



3.3.6. Channels in place with stakeholders

To ensure better and more regular communication with stakeholders, the Company has stepped up its relations with the media and created a **Transparency Portal**. It also has an **Investors' Portal** on its website to provide investors —especially socially responsible investors— with information of interest. As in the previous year, Adif AV continued to prioritise social media in its stakeholder engagement efforts.

Investors can find all the latest news and information on **Adif AV's website** (<https://www.adifaltavelocidad.es/inversores>)

The portal includes links to all the **investor newsletters** to have been published to date and to other sections of the Adif AV website, where investors can find the most recent financial statements and management and environmental impact reports.

The **main channels used to engage with stakeholders** are the corporate website, its social media presence, podcast, the media relations effort, the 24H Network Management Centre, the Transparency Portal, webinars and regular corporate events.

Internal communication channels commonly used at the Company include :

- The INICIA Intranet portal, through which employees have access to all the information they need on business milestones, company structure, current news and sustainability, training opportunities, organisational changes, employee portal and, in general, all manner of corporate communications. It is also a channel for communicating with the company through the use of mailboxes: ethical mailbox, suggestions mailbox, ideas for improvement mailbox. In 2022, 124 cards were sent out via Microsoft Teams, a tool available to all Adif employees. A total of 32 new spaces were also re created.
- Figures and other data regarding satisfaction with internal communication actions are compiled through: Work Climate Survey (every two years), surveys on participation in all activities carried out: conferences, events, raffles, cultural and sports activities, etc.
- Internal Communication Days, meetings with management and support structure, telegrams, newsletters, etc.

- Communication or awareness-raising campaigns on specific topics that are published on the intranet, covering all areas of the company: preventive medicine campaigns, management reports, occupational risk prevention, traffic safety, quality and environment, and training, among others.



STAKEHOLDERS	ESTABLISHED CHANNEL
GOVERNMENT AND PUBLIC INSTITUTIONS Ministry of Transport, Mobility and Urban Agenda, other public administrative bodies, financial organisations, regulatory and supervisory bodies and investors	Ongoing communication via the competent authorities (Under-Secretary of State, Secretary of State for Infrastructure, etc.) Follow-up meetings Collaboration agreements Investors' Portal on the corporate website.
PEOPLE External users and customers of the railway system (stations and railway operators), railway operators (passenger and freight)	Customer Service Offices at Adif AV stations (personalised customer service, grievance and suggestions management, etc.). Annual satisfaction surveys: passengers and the tenants who lease commercial premises located in Adif AV stations. Information phone line and e-mail address Agreements. Grievance and suggestions management mechanism (IT application <i>RECLAMA</i> , claims book, etc.). Meetings with representatives of groups of citizens with a vested interest in rail infrastructure management in their towns Website communication inbox. Social media. Adif AV app (real-time information about the status of the network and timetables).
SUPPLIERS, BUSINESS PARTNERS AND ALLIES Companies and business associations (competitors); research centres; training centres	Communication via e-mail and phone. Collaboration agreements. Electronic tender portal. Sector-specific agreements and collaborations. General and European assemblies, international delegations. Expert events and forums.
SOCIETY Citizens, associations, NGOs, European and international organisations	Adif AV's annual reports and other publications Ongoing provision of information to the public via the media: Website communication. Social media. Transparency Portal.
OUR PEOPLE Employees, internal customers	Corporate employee portal. Committees on which Adif AV workers are represented. Surveys of workplace climate and engagement with Adif AV. Internal communication. Information about training courses. Suggestion box. Inbox for gathering suggestions about how to do things better.

3.3.7. Agreements and arrangements with industry and business organisations and associations

To better achieve its objectives, in 2022 Adif AV compared the **number of agreements and arrangements it has entered into with industry and business organisations and trade associations and those still in force.**

In 2022 Adif AV had **140 agreements in effect** with organisations and sectoral and trade associations

NUMBER OF AGREEMENTS AND ARRANGEMENTS WITH INDUSTRY AND BUSINESS ORGANISATIONS AND ASSOCIATIONS

		2020	2021	2022
In effect	Adif AV + Others	33	35	42
	Adif + Adif AV + Others	42	56	79
	Adif + Adif AV	13	19	19
Signed	Adif AV + Others	2	7	11
	Adif + Adif AV + Others	8	14	25
	Adif + Adif AV	3	0	0



4

BUSINESS STRATEGY

4) BUSINESS STRATEGY

4.1. 2030 STRATEGIC PLAN

4.2. 2030 AGENDA

- 4.2.1. Challenges and main goals of the SP2030
- 4.2.2. Global challenges and the 2030 Agenda
- 4.2.3. Sustainable Development Progress Report – 2022
- 4.2.4. SDG dashboards and trends in Spain

4.3. SDGS AT ADIF AV

4. BUSINESS STRATEGY



MILESTONES

- Participation in the **working group on the follow-up of the 2030 Agenda**.
- Implementation of the **2030 Strategic Plan** and its alignment with the SDGs.
- Data governance (**DATA 4.0 project**).
- Participation in UIC's international working group, **SDG Rail Index**, to monitor and compare KPIs and SDGs relevant to the railway industry.
- Participation in the international **SDG Ambition Accelerator** programme of the UN Global Compact.



COMMITMENTS

- Lead the way in **driving the energy transition** – Building an energy community (SO.1).
- Combat the **effects of climate change** (achieving zero net emissions by 2050) (SO.2).
- **Reclaim nature and biodiversity** (SO.3).
- Foster a **culture of awareness of the need to address climate change** (SO.4).
- Generate a **positive social impact** in pursuit of social cohesion and inclusion (SO.5).
- Achieve new **revenue streams** through the opportunities of the energy transition – contributing to the development of sustainable finance (SO.6).

(4.1. 2030 Strategic Plan

Adif AV's 2030 Strategic Plan is the reference guide and key to the future that provides all the planning and tools needed to overcome both external challenges and those arising within the company.

This plan is aligned with existing government initiatives with the main objective of being coherent and maximising results by participating in a common strategy. The aim is for the plan to be suitably aligned with European Funds, Spain's Recovery and Resilience Plan, the Spain 2050 National Long-Term Strategy, España 2050, the Safe, Sustainable and Connected Mobility Strategy of the Spanish Ministry of Transport, Mobility and Urban Agenda (MITMA) and the UN Sustainable Development Goals of the 2030 Agenda*.

The strategic formulation is a product **of internal and external analysis, understanding the challenges ahead and aligning it with national, European and international institutional strategies**

Adif AV updates its 2030 Strategic Plan through its commitments, which are based on regulatory compliance (international standards and material SDGs). While safety comes first, the plan also aims to move towards more sustainable, competitive and intermodal mobility by pursuing the stability of public investment and maximising the impact of rail infrastructure on economic growth.

* Content related to disclosure **GRI 2-22**: Statement on sustainable development strategy

Communication as a lever for the dissemination, understanding and internalisation **of the 2030 Strategic Plan**

The architecture of the 2030 Strategic Plan therefore maintains the following structure of people, pillars and levers. People are the engine driving the design, development, deployment and coming together of all the pieces of the Strategic Plan. They underpin the key values of the organisation (safety, service, sustainability and results-driven performance) and work the levers to enable change through:

- **Communication**, to convey the Company's culture and values to all stakeholders.
- **Innovation** is present across all aspects of the Company's business, extending to physical elements, processes, procedures and ideas. The aim is to make our work easier, doable in less time and with fewer resources, thus creating more free time and yielding better results for society.
- **Digital transformation** as a strategic process that enables the change of processes, culture and organisation based on the use of technology.

Adif AV frames its strategy while reflecting deeply on what its purpose and role within society is and what commitments the organisation should embrace to defend its role and contribution to the country's economic, social and environmental development.

The 2030 Strategic Plan comes with a balanced scorecard, including strategic initiatives and related indicators

Vision

“ To be a benchmark organisation focused on the management of resilient, sustainable, safe and smart infrastructure that contributes to the new model of ecological transition ”

Mission

“ To operate, manage and build a smart rail network geared towards the new technological, competitive and sustainable ecosystem, thus contributing to the SDGs ”

Ambition

To offer resilient infrastructure to all of society.

Purpose

To operate a rail network committed to the Sustainable Development Goals.

Within each pillar, work is being carried out on various initiatives, such as the plan to update and improve traffic safety or the critical infrastructure protection plan within the wider **Safety Pillar**; the 4G deployment project or the new maintenance model project in the **Service Pillar**; and the project to review and update the Management System, among many other initiatives. Looking at the **Digital Transformation Lever**, we would highlight our comprehensive people management plan and job transformation plan.

PEOPLE



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evento colaborador



SAFETY

SERVICE

SUSTAINABILITY

**RESULTS
DRIVEN**

COMMUNICATION

INNOVATION

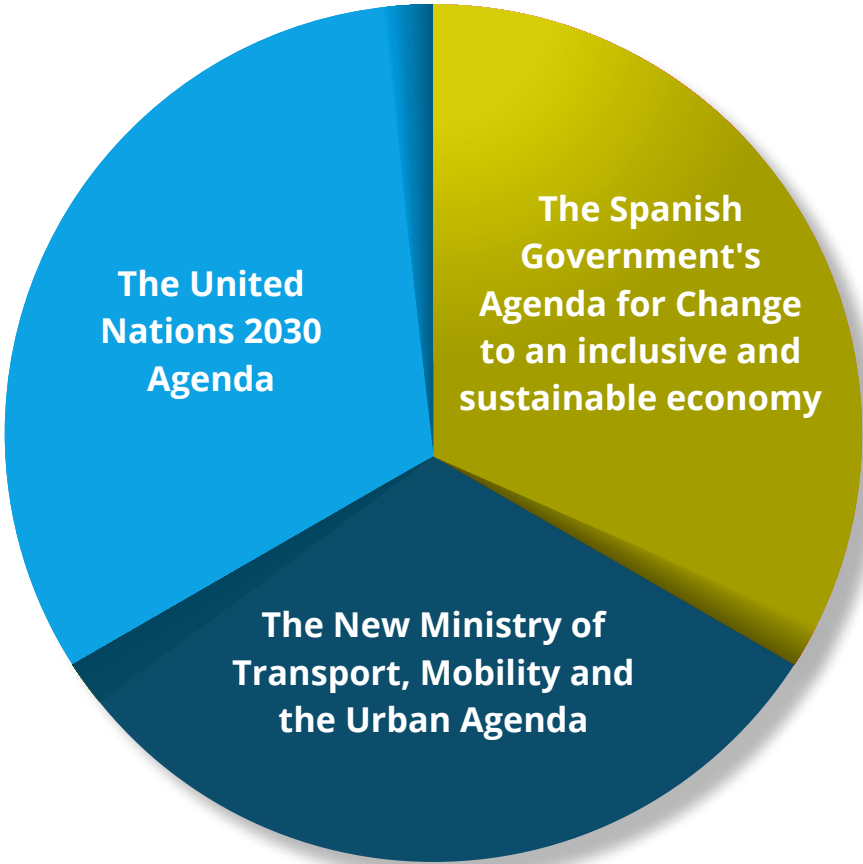
DIGITAL TRANSFORMATION

The strategic policy envisioned in the 2030 Strategic Plan is being pursued through:

- Initiatives that contribute to the SDGs.
- Building resilient, inclusive and sustainable infrastructure.
- Promoting innovation and intrapreneurship.
- Creating joint initiatives with companies in the sector through “responsible public procurement” projects.
- Carrying out actions to mitigate the effects of climate change, sustainable innovation and the path towards a circular economy model.
- Implementing the Transport and Infrastructure Internationalisation Plan.
- Entering into partnerships with agents in the third sector by championing value co-creation initiatives with associations, foundations and NGOs.



As a result of our role in society, our Strategic Plan is aligned with:



Due to the implementation of the Strategic Plan 2030, the Company has set different strategic objectives (SOs) linked to the four pillars that make up the Plan. Therefore, throughout this document you will find various references to these objectives, which will follow the following nomenclature:
















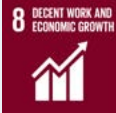

Pillars that make up the Strategic Plan

Pillar	Code
Safety	PSAF
Service	PSER
Sustainability	PSUS
Results-driven	PRED

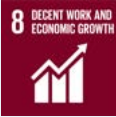

















Each of these pillars contains the **following Strategic Objectives (27 SOs)**.



Strategic objectives (SO) – Safety pillar (PSAF)








Objective	Description	SDGs	Code
1. Maintain high levels of traffic safety.	Continue to manage traffic safely by fostering a culture of safety across the organisation through new processes, systems and technologies, in which a proactive approach and continuous improvement prevail, in order to eliminate accidents and their precursors.	  	PSAF-SO1
2. Ensure high levels of cyber resilience.	Further improve the integrity, availability and confidentiality of Adif's information systems, thus protecting them from possible cyber-attacks.	 	PSAF-SO2
3. Improve infrastructure resilience and step up security in the event of deliberate attempts to intrude or interfere with the railway system and emergency situations.	Configure and develop resilient infrastructures against possible acts of deliberate intrusion or interference in the railway system, as well as threats and emergency situations (terrorist attacks, climatic threats, etc.), to ensure the integrity of people and continuity of operations.	   	PSAF-SO3
4. Ensure a safe and healthy work environment.	Ensure the health and safety of workers by enhancing preventive measures and improving working processes and conditions, including for remote working, thus minimising, or completely preventing, occupational accident rates.	  	PSAF-SO4
5. Adapt operations in response to pandemics and emergencies.	Transform and redesign Adif and Adif AV operations to cope with pandemics and health crises in the medium and long term, including not only direct structural effects, but also changes in the habits and requirements of stakeholders, thus avoiding the possibility of interruptions in operation and activity.	 	PSAF-SO5
6. Reform environmental protection.	Continue to conduct an activity that ensures end-to-end environmental protection, including preventive action to mitigate threats and reduce the environmental risks and impacts arising from our presence within the environment.	  	PSAF-SO6

Strategic objectives (SO) – Service Pillar (PSER)*











Objective	Description	SDGs	Code
1. Promote multimodal transport.	Develop and manage infrastructure that enables the integration of different modes of transport for both passengers and freight, focusing on alternative and sustainable modes.	    	PSER-SO1
2. Focus services on people and data-driven services.	Ensure the alignment of services with the needs and expectations of users and stakeholders by adapting them to new mobility trends and adopting a data-driven perspective; improve the quality of service perceived by society.	  	PSER-SO2
3. Maximise network digitalisation and connectivity.	Set up and develop a digital and connected infrastructure capable of delivering digital services and providing a smart and secure network; a necessity for the deployment of new technologies such as automatic train automation (ATO), among others.	  	PSER-SO3
4. Increase the value of assets by engaging with stakeholders.	Pursue successful partnerships with stakeholders and increase the value of Adif and Adif AV assets by forging alliances with public institutions and key private players, thus promoting the development and execution of projects alongside other agents to promote railway activity.	  	PSER-SO4
6. Harness the opportunities to be had from the deregulation of the railway industry.	Design and implement actions to harness the opportunities arising from a successful deregulation process to ensure a more efficient, better quality, and more inclusive service offering for stakeholders.	   	PSER-SO6

* SO5 of the Service Pillar does not apply given the activity carried out at Adif AV

Strategic objectives (SO) – Service Pillar (PSER)*

















Objective	Description	SDGs	Code
7. Improve the performance and quality of the network.	Increase the performance and quality of the network to facilitate operators' business plans and promote a wide range of quality services tailored to the needs and expectations of stakeholders, thus making the railway and passenger and freight traffic more competitive.	  	PSER-SO7
8. Develop stations as mobility hubs and living environments that promote the integration of the station itself with the city.	Make Adif and Adif AV stations integrated sustainable mobility hubs as part of a community and there to serve people. Stations as living environments for society.	   	PSER-SO8

Strategic objectives (SO) – Sustainability Pillar (PSUS)











Objective	Description	SDGs	Code
1. Lead the way in bringing about the energy transition. Develop an energy community.	Make a leading contribution to environmental protection through the electrification of transport, more efficient energy management, renewable energy sourcing and the use of other sustainable and recycled materials.	    	PSUS-SO1
2. Fight the effects of climate change.	Strengthen the commitment of Adif and Adif AV in the fight against climate change by taking decisive action to achieve climate neutrality by 2050 in line with the European Strategy.	    	PSUS-SO2

* SO5 of the Service Pillar does not apply given the activity carried out at Adif AV

Strategic objectives (SO) – Sustainability Pillar (PSUS)

Objective	Description	SDGs	Code
3. Recover biodiversity and nature.	Ensure the protection of nature and take action that helps to reverse the degradation of ecosystems, thus reducing pressure on biodiversity.	  	PSUS-SO3
4. Foster a culture of awareness of the need to address climate change.	Raise awareness among internal and external stakeholders of the need to combat climate change by building and nurturing a culture that promotes rail as a more sustainable mode of transport, champions energy efficiency and works to reduce the carbon footprint. In tandem, encourage the use of an economic and social system that is committed to optimising resources through alternatives that promote circular economy models.	   	PSUS-SO4
5. Generate a positive social impact in pursuit of social cohesion and inclusion.	Make a tangible contribution to the achievement of the United Nations SDGs and the 2030 Agenda, as a way of channelling the positive social impact of Adif and Adif AV and supporting social cohesion and inclusion. Special focus on people's well-being (SDG3), inclusive and sustainable socio-economic development (SDG8), connectivity (SDG11), combating climate change (SDG13), gender equality (SDG5), technological innovation and modernisation (SDG9) and partnerships for the SDGs (SDG17).	      	PSUS-SO5
6. Achieve new revenue streams through the opportunities of the energy transition – contributing to the development of sustainable finance.	Pursue new lines of business arising from investment opportunities in self-consumption systems that will enable Adif and Adif AV to achieve greater energy independence.	 	PSUS-SO6

Strategic objectives (SO) – Results-driven pillar (PRED)*

Objective	Description	SDGs	Code
1. Achieve business viability for the Company.	Obtain a balanced operating result for each of the Company's lines of business, by increasing income and raising the necessary funds in an efficient manner.		PRED-SO1
2. Optimise the financing of projects and activities through the European Recovery Fund.	Obtain funding from the European Recovery Fund set up in response to the COVID-19 crisis, for the development of projects aligned with the EU objective of achieving a green, digital and inclusive Europe.	   	PRED-SO2
5. Consolidate the Company's international exposure.	Export Adif and Adif AV's know-how in railway network management, especially in relation to high-speed railways, thus allowing them both to take part in new projects on a global scale and making them international benchmarks within the industry.	 	PRED-SO5
6. Ensure that the presence of Adif and Adif AV in the entities and bodies of which they form part generates synergies.	Optimise the involvement and presence of Adif and Adif AV in the various entities in which they participate, so that synergies and benefits can be obtained in the management for these state-owned companies.	 	PRED-SO6
7. Transform the organisation in response to the new technological and market landscape.	Shape and adapt the roles and skills of people in the organisation to the new market context: deregulation, technological disruption, importance of innovation and caring for the environment; facilitating and optimising work performance.		PRED-SO7

*The Company has decided not to refer to SO 3 and 4 of the Results-driven Pillar

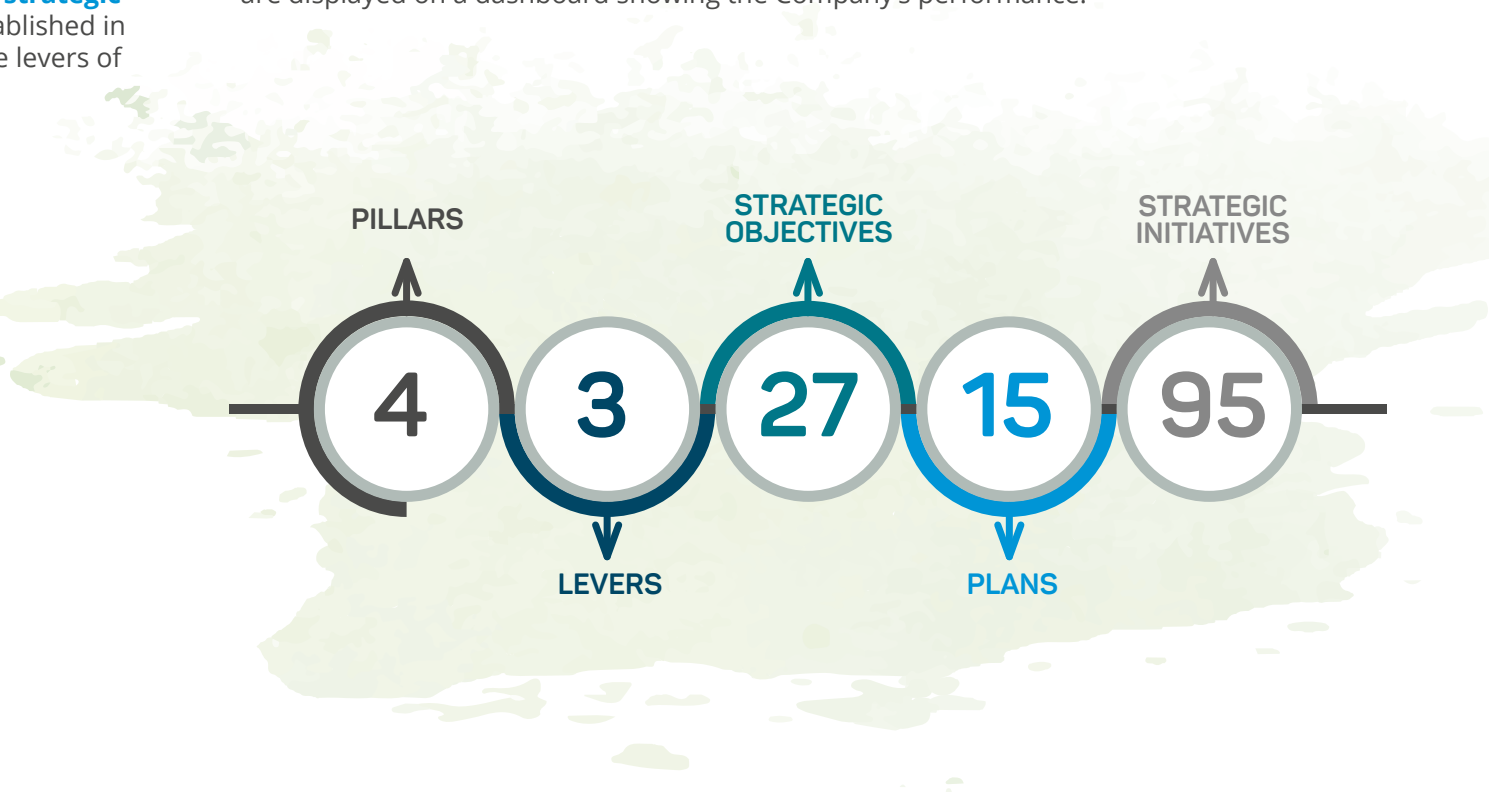
To achieve the Strategic Objectives set out in the 2030 Strategic Plan, Adif AV has defined a series of strategic initiatives (SIs) related to and impacting the activities to be carried out by the various areas of Adif AV. These strategic initiatives may be grouped together in plans to help achieve a set of common objectives, or they may depend solely on one or more of the pillars and operate independently.

The strategic initiatives (SIs) have been designed under the same premises or formats and seek both to align with existing Adif AV balanced scorecards and to demonstrate their contribution to the SDGs and other national and supranational policies that make up the wider context for this plan. The initiatives have focused on stakeholder expectations, on internal company challenges and on global challenges related to sustainable development, as a response to challenges affecting the entire organisation. At year-end 2022, 95 strategic initiatives had been set out, each responding to a specific objective and pillar established in the Plan's architecture (Safety, Service, Sustainability and Results-driven) and to the levers of Communication, People-driven, Innovation and Digital Transformation.

In a nutshell, SP 2030 is a living and eminently practical plan geared towards strategic initiatives and seeking the involvement and complicity of the entire organisation. For each initiative proposed, the actions to be carried out are defined and planned accordingly, with indicators that are reported on a quarterly basis.

As the strategic initiatives are cross-cutting or horizontal in nature, the involvement of all areas of the Company is needed to ensure their success. Therefore, each initiative has a named leader, who is assigned specific functions and who coordinates and steers each initiative. Moreover, each initiative is aligned with the strategic and tactical objectives, as well as the related management indicators, both those that apply company-wide, and those that apply to a given area or department, which act as individual incentives. The data obtained are displayed on a dashboard showing the Company's performance.

One of the main objectives of the safety pillar of the 2030 Strategic Plan is to make infrastructure safer and more resilient



As regards challenges, the main challenges faced by the Company are as follows:

- **Generational handover¹**

Adif AV faces the significant challenge, today and in the years to come, of rejuvenating its workforce and cascading downwards the know-how built up in key positions. We have accordingly set in motion a range of initiatives, such as partial retirement, with the aim of accelerating the generational handover without losing knowledge and experience in the process, these being essential for the smooth running and efficient management of the Company.

Along these lines, the Partial Retirement Circular 2022 was posted on Adif AV's intranet in February 2022.

Key actions/milestones here include:

- + In the last two years, the percentage of employees under 35 has increased from 5.04% to 15.95%.
- + Partial retirement: five partially-retired individuals at 31 December 2022.
- + New employees (*public sector job offerings*): in 2022, 12 new employees joined Adif AV under the corresponding Public Employment Tenders.

- **Deregulation of passenger transport²**

In 2022, the deadlines set out in the various framework agreements signed with the railway companies for the allocation of network capacity were duly observed. Spain is the first European country to have three railway companies providing high-speed services. At 31 December 2022, Renfe and Ouigo were operating on the Barcelona and Levante rail corridors, while Iryo was running on the Barcelona rail corridor.

¹ More information on this subject can be found in the "Our People" section of this report.

² The information on this subject can be found in the "Aid provided" section of this report.

The main changes during the year include:



- + Rail operator Ouigo, which was already operating on the Madrid-Barcelona line (May 2021), began operating on the Madrid-Valencia line (October 2022).
- + Rail operator Ilsa-Iryo started operating on the Madrid-Barcelona line (November 2022) and on the Madrid-Valencia line (December 2022).
- + Rail operator inOui (SNCF) began service on the Barcelona-Paris line (December 2022).
- + Rail operator Renfe stopped running on the Madrid-Marseille and Barcelona-Lyon lines in December 2022.

- **Recovery and Resilience Funds (RRF funds)³**

The aim is to achieve sustainable financing by directing the following main EU funds and financial aid towards investment projects in the realm of trans-European rail transport networks: European Regional Development Fund (ERDF), Connecting Europe Facility (CEF) and the Resilience and Recovery Facility (RRF). This task involves:

- + Drawing up and approving, inter alia, the operations to be financed, the applications for aid and eventual repayment, and the follow-up reports for each co-financed action.
- + Overseeing, in particular, proposals on which case dossiers are to be co-financed, as well as all related environmental, technical and legal implications; and replying to questions fielded by parliament.

In relation to CEF financing, a key milestone in 2022 was the aid of €145.4 million secured by Adif AV for the Bergara-San Sebastián-Bayonne rail construction work, within the Atlantic corridor⁴.

³ The various actions being carried out are described in the section "Information on RRF funds" applicable to sustainable projects.

⁴ Includes only investment in direct execution and other sources of RRF financing that Adif / Adif AV could tap.

4.2. 2030 Agenda

4.2.1. Challenges and main goals of the SP2030

The SP2030 is aligned with existing government initiatives, with the main objective of being coherent and maximising results by participating in a common strategy. Alignment has been sought with:

- European funds.
- Spain's own Recovery and Resilience Plan, including:
 - + *España Verde* (Green Spain), *España Digital* (Digital Spain), *España sin brechas de Género* (Spain with no Gender Gaps) and *España Cohesionada e Inclusiva* (Cohesive and Inclusive Spain).
- National long-term strategy España 2050, in which the biggest challenge is:
 - + Making the Company carbon neutral, sustainable and climate change-resilient.
- The Safe, Sustainable and Connected Mobility Strategy of the MITMA through the following actions:
 1. Alignment with European and international commitments (Sustainable Development Goals, decarbonisation, etc.).
 2. Economic policy tool and social rights.
 3. Reframing investment priorities (sustainability, digitalisation).
 4. Integrating approach Governance.
 5. Engagement, to give maximum legitimacy to the strategy.
 6. Addressing the mobility of people and goods.
 7. Just transition with no groups, territories or economic sectors left behind.

4.2.2. Global challenges and the 2030 Agenda

The **National Action Plan** for the implementation of the 2030 Agenda is a document that sets out the actions to be carried out by all agents involved, including immediate action, an enhanced and well-orchestrated governance structure at the highest level of government, and a strong commitment to draw up an ambitious sustainable development strategy with the participation of and consensus among all actors and levels of government in Spain.

Adif AV's 2030 Strategic Plan and related initiatives are aligned with the 2030 Agenda, through the Safe, **Sustainable and Connected Mobility Strategy 2030**, which is essentially the roadmap that will steer our actions in transport and mobility over the next ten years, as will the Draft Bill on Sustainable Mobility once it becomes law.

In 2021, the Company signed a **Framework Partnership Agreement with the Secretary of State for the 2030 Agenda**, governing the parties' responsibilities and remits in the following matters:

- Exchanging good practices in the implementation of the SDGs and their targets.
- Alignment of the Government's broad strategy with the business models of state-owned enterprises in relation to the SDGs and the 2030 Agenda.
- Joint projects related to the SDGs, including certification of goods and services.
- Actions to help disseminate and achieve the SDGs, including potential cross-communication channels through the different existing media.
- Training actions on the SDGs.
- Other actions related to the implementation of the 2030 Agenda.

In 2022, Adif and Adif AV served as **Vice-Chairman of the Working Group of the Framework Collaboration Agreement between the Secretary of State for the 2030 Agenda and state-owned companies**. At the meeting of this Working Group held in December 2022 at the headquarters of the Ministry of Social Rights and 2030 Agenda, it was unanimously agreed to appoint María Isabel Gómez, Deputy Director of the Strategic Plan of Adif and Adif AV, and Rocío Beltrán, head of the CSR unit of Ingeniería de Sistemas para la Defensa de España (ISDEFE), as Vice-chairs.

The **Values** enshrined in the Strategic Plan 2030 reflect the Company's commitments, as shown below:



- 1. People's well-being through inclusive and sustainable socio-economic development of the country.
- 2. A safe service that ensures social cohesion while supporting reliable and high-quality connectivity and mobility.
- 3. Integrated and transparent management and uses natural and economic resources responsibly and efficiently.
- 4. Defence of initiatives that reinforce gender equality.
- 5. Comprehensive business risk management.
- 6. Stakeholder engagement.
- 7. Innovation, the circular economy and technological innovation.
- 8. Generating value and trust for society.
- 9. Developing a diverse and global world.
- 10. Well-being and professional development of Adif and Adif AV people.

4.2.3. Sustainable Development Progress Report - 2022

In general terms, based on the latest reports published, Spain is moving in tandem with the progress being made by the European Union towards delivery of the 2030 Agenda. According to the 2022 edition of the **SDG Index and Dashboard Report**, globally **Spain** has climbed from **20th to 16th place in a ranking of 193 countries**, with an **SDG Index score of 79.9 points**. These results point to a general trend of continuous improvement. Some of the scores are even on the verge of reaching 100% and becoming green, which is a testament to the major efforts now being made within Spain in implementing policies that will allow us to continue advancing, albeit slowly, towards the coveted goals set by the 2030 Agenda. Link to report:

<https://www.sustainabledevelopment.report/>

4.2.4. SDG dashboards and trends in Spain

Spain is one of the best performers, ranking among the top 15 countries worldwide, essentially because it has specific structures and strategies for mainstreaming the SDGs through public policies.

DASHBOARD OF SDG PERFORMANCE IN SPAIN

<https://dashboards.sdindex.org/profiles/spain>



Sustainable Development Report 2023

Implementing the SDG Stimulus

Jun 21, 2023

The Sustainable Development Report (SDR) reviews progress made each year on the Sustainable Development Goals since their adoption by the 193 UN Member States in 2015. At the halfway mark to 2030, the Sustainable Development Report 2023 takes stock of progress made and discusses priorities to restore and accelerate SDG progress. Published on the eve of the 2023 Paris Summit for a New Global Financial Pact, this year's edition focuses specifically on the need to scale up development finance and to reform the global financial architecture to support the SDGs.

[Download](#)

Explore the SDR 2023 Dashboards



The interactive SDR 2023 Dashboards provide a visual representation of countries' performance by SDG to identify priorities for action.

Resources

- Rankings
- Executive Summary
- Part 1
- Country Profiles
- About the Authors
- StoryMap Press Release
- Press Release
- Access Data
- Other Downloads

SDG DASHBOARDS AND TRENDS



Dashboards: ● SDG achieved ● Challenges remain ● Significant challenges remain ● Major challenges remain ● Information unavailable

Trends: ↑ On track or maintaining SDG achievement ↗ Moderately improving → Stagnating ↓ Decreasing ● Trend information unavailable

4.3. SDGs at Adif AV

The Company aims to “Operate a rail network committed to the SDGs”. To succeed, the Company strives to provide a **safe, reliable and efficient rail network** for all, with sustainability as one of the cornerstones. The need for a low-emission and more efficient mobility model, to preserve natural resources, to promote socially inclusive economic development, and to improve the safety and health of citizens are just some of the challenges that Adif AV plans to address.

Once we have analysed the contribution that each of the strategic initiatives makes to the SDGs, we can determine which SDGs will benefit the most from the 2030 Strategic Plan. This also applies in relation to the fulfilment of specific targets measured through indicators for Adif AV.

The **SDGs benefitting the most** from the implementation of the strategic initiatives are:



* Adif + Adif AV



Through its daily activities, Adif AV helps to create and manage sustainable, quality infrastructure that is both resilient and safe. To succeed in this task, it undertakes collaborative and open innovation projects (53*) and invests in innovative and relevant ventures.



Adif AV is committed to achieving a reduction in accidents and incidents while modernising its stations. These efforts benefited more than 152.8 million users in 2022. It also includes environmental and social clauses in its contracts with suppliers.



It is therefore helping to combat climate change through its business activities by encouraging the use of a clean and sustainable mode of transport.

Rail transport plays a key role in the transition to a low-carbon economy (cumulative total estimated energy saving of 123.60 GWHeq/year as of 2009). The shift towards a more sustainable and efficient transport model is key in successfully responding to the new international and national regulatory scenarios.

Through these actions, it contributes mainly to the **fulfilment of the following goals of the 2030 Agenda:**

SDG 9, through the implementation of collaborative and open innovation projects.

- 9.1. Sustainable Infrastructure Development: Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.
- 9.4. Upgrading of infrastructure, clean technology: Upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes (...).

SDG 11, by seeking to achieve a reduction in accidents and incidents. The Company also includes environmental and social clauses in its contracts with suppliers.

- 11.2. Provide access to public transport: By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.

SDG 13, since rail transport plays a key role in the transition to a low-carbon economy. The shift towards a more sustainable and efficient transport model is key in successfully responding to the new international and national regulatory scenarios.

- 13.1. Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

- 13.2. Integrate climate change measures into national policies, strategies and planning.

Aligning the strategy with the SDGs generates a competitive advantage for the Company, allowing it to identify future business opportunities, strengthen stakeholder engagement, set up a management model based on efficiency, and generate a positive impact on society in relation to the three key pillars: social, environmental and economic.

It also aims to address the climate and environmental emergency by reducing greenhouse gas reductions, purchasing Guarantee of Origin (GoO) energy and promoting the use of renewable energies through projects such as reversible substations, and decarbonising transportation through the electrification of lines. Adif AV works towards the ecological transition by taking action in energy efficiency, decarbonisation and renewable energies, improving the resilience of railway infrastructure and championing a culture and awareness of climate change in partnership with its stakeholders.

The aim is to align the design of the 2030 Strategic Plan with the aspects and objectives pursued by the United Nations 2030 Agenda, with 169 integrated and indivisible goals covering the economic, social and environmental spheres.

The Company also addresses the **three priority challenges when it comes to sustainability**: climate emergency, corporate governance and social inequality. Along these lines, Adif and Adif AV both pursue ambitious strategic objectives and goals:

- Achieve zero net greenhouse gas emissions by 2050.
- Build strategic initiatives that integrate support for inclusion, equality, diversity and the elimination of all forms of discrimination.



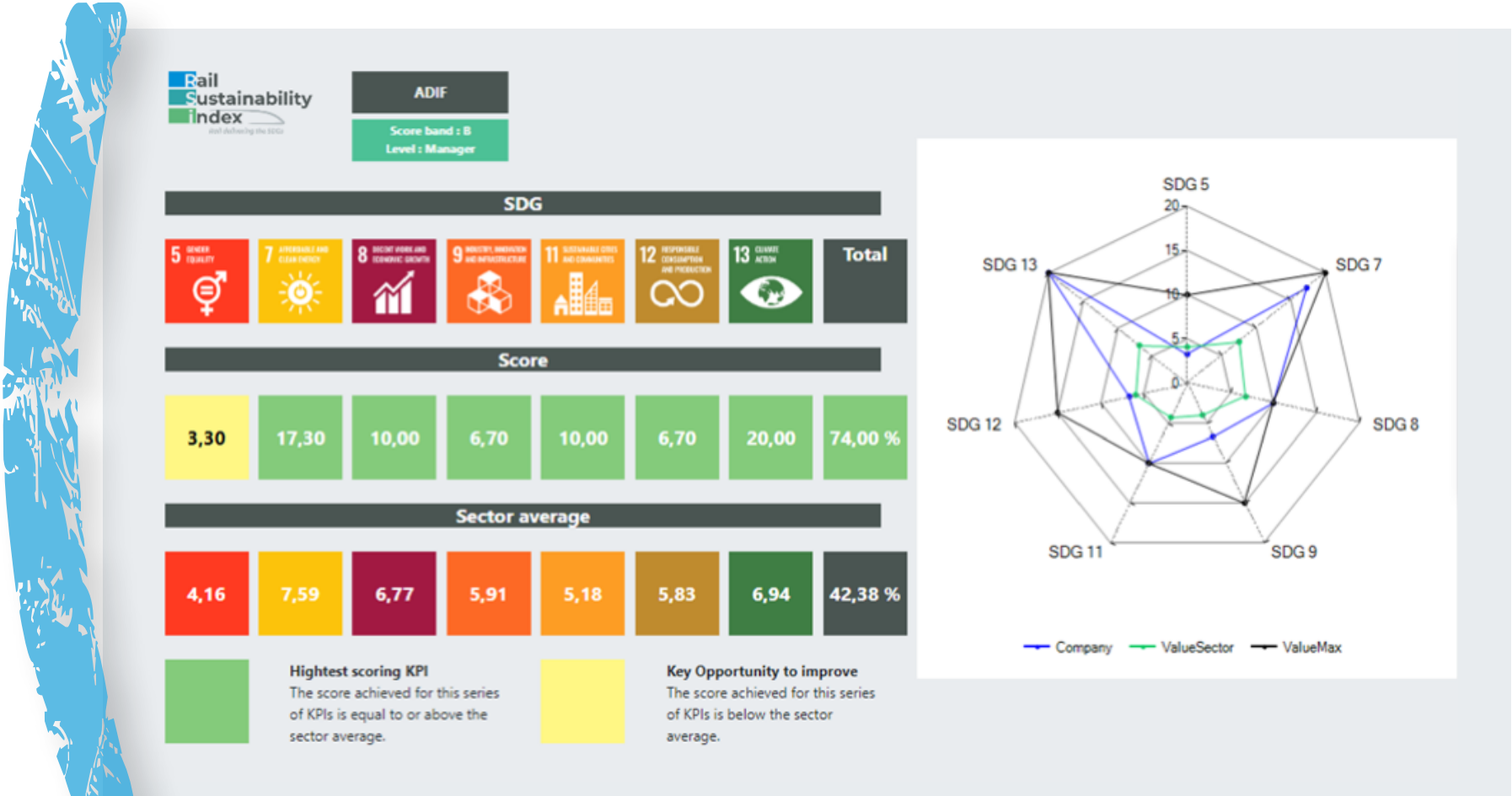
Adif AV and Adif, together with other organisations belonging to the UIC —the international union of railways — have set up the international **SDG Rail Sustainability Index Project**, providing a standardised and internationally approved score that ranks companies in the railway sector and shows the alignment of each organisation with the SDGs and the 2030 Agenda.

A total of **24 KPIs and seven key SDGs** have been established, along with a methodology. In accordance with applicable regulations, this enables the project to draw like-for-like comparisons and obtain a compliance score for each organisation. This is achieved through weightings and benchmarking exercises. The software used is fed by the different KPIs that the organisations deliver to ultimately show the degree of SDG orientation of the international railway sector and of each undertaking or railway sector in particular.

In 2022, for the first time, **the UIC-accredited Rail Sustainability Index score** was obtained, which rates the railway companies' level of achievement in sustainable development (comparability index configured on the basis of the most relevant SDGs within the railway industry).

A maximum score was obtained for three of the seven SDGs scrutinised at the Company (addressed jointly for both Adif and Adif AV): SDG 7, SDG 11 and SDG 13, which are above the sector average. **Adif AV's performance stood at 74.00%, compared to an average sector performance of 42.38%**

The results of the SDG Rail Sustainability Index are shown in the following diagram:







DASHBOARD SHOWING THE SDGS IDENTIFIED BY THE COMPANY:

Positive performance 2022 vs. 2021

Negative performance 2022 vs. 2021

Unchanged or indicators that are not comparable

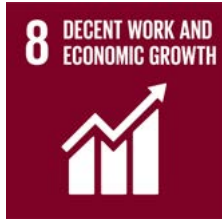
SDG	CONTENT	AT ADIF AV (INITIATIVES/PLANS/PROGRAMMES)
 <p>3 GOOD HEALTH AND WELL-BEING</p> <p>ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES</p>	<p>0 significant accidents caused by the administrator / Mtrain-km - Target 3.6.</p> <p>0 Mtrain-km deaths or serious injuries due to train accidents - Target 3.6.</p>	<ul style="list-style-type: none"> Effectiveness of the Traffic Safety Management System (TSMS) in improving traffic safety. Traffic Safety Action and Upgrade Plan. Systems capable of analysing people's behaviour and detecting suspicious objects. SIGMA project.
 <p>4 QUALITY EDUCATION</p> <p>ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING</p>	<p>91 % transfer level (satisfaction with the training received and its effective application to the job) (Adif + Adif AV) (+2.7% compared to 2021) - Target 4.4.</p> <p>199 hours of training per employee/year - Target 4.3.</p> <p>€7,504 invested in training (Adif + Adif AV) - Target 4.3.</p> <p>23 internship agreements with universities (Adif + Adif AV) - Target 4.3.</p>	<ul style="list-style-type: none"> Strategic Initiative: Training plan. Strategic Initiative: Generational succession plan. Strategic Initiative: Leadership development and talent recognition programme.

SDG	CONTENT	AT ADIF AV (INITIATIVES/PLANS/PROGRAMMES)
<div>  </div> <div> <p>ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS</p> </div>	<p>24.51 % of women on the workforce (-4.66% versus 2021) – Target 5.1.</p> <p>33.33 % of women holding management positions – Target 5.5.</p> <p>45.45% of women on the Board of Directors – Target 5.5.</p>	<ul style="list-style-type: none"> • III Adif Equality Plan and II Adif AV Equality Plan. • LIDERA programme “<i>Mentoring Mujeres Tituladas</i>” (mentoring women graduates) (RAI). • Strategic Initiative: Generational succession plan. • Strategic Initiative: Leadership development and talent recognition programme. • Strategic Initiative: Health and safety of workers: 5th Zero Accident Plan.
<div>  </div> <div> <p>ENSURE ACCESS TO AFFORDABLE, SECURE, SUSTAINABLE AND MODERN ENERGY FOR ALL</p> </div>	<p>91.05 % green energy (GoO) of total energy consumed (+1.25% versus 2021) – Target 7.2.</p> <p>123.6 GWh_{eq}/year saved due to energy efficiency (cumulative since 2009) – Target 7.3.</p> <p>11.54 MJ/train-km in final energy intensity – Target 7.3.</p>	<ul style="list-style-type: none"> • 100% of energy purchased and consumed by Adif AV certified with Guarantees of Origin (GoO). • Strategic Initiative: Adaptation and integration of hydrogen as an energy carrier in the general interest rail network. • Strategic Initiative: Energy efficiency. • Strategic Initiative: Ferrolinera®.

SDG

CONTENT

AT ADIF AV (INITIATIVES/PLANS/PROGRAMMES)



PROMOTE SUSTAINED, INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL

€1,553.19 M invested - **Target 8.1.**

0.03 working hours lost per 1,000 h worked - **Target 8.8.**

82.10% of employees with permanent contracts - **Target 8.5.**

4.54 % dpay gap in executive level jobs favouring men – **Target 8.5.**

54% of ideas and projects developed in intrapreneurship, Adif Talento finalists, with total or partial implementation (Adif + Adif AV) – **Target 8.3.**

- Plan for transition to the 4th Railway Package (liberalisation).
- Strategic Initiative: Actions for the digital transformation of jobs.
- Strategic Initiative: Development of city-network high-speed connections.
- Strategic Initiative: Capacity optimisation project.
- Strategic Initiative: Active participation in urban planning processes.
- Strategic Initiative: Plan to reuse assets for social.
- Strategic Initiative: Digital transformation governance office.



BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION

3,497.4 km of electrified lines in service (+1.94% versus 2021) - **Target 9.4.**



€1,333.47 M (VAT included) invested in developing the high-speed network - **Target 9.1.**

269 km of high-speed lines commissioned - **Target 9.4.**



100 % of innovation output transferred (efficiency in innovation) (Adif + Adif AV - **Target 9.5.**




€5.528 million total investment in innovation projects (Adif + Adif AV) - **Target 9.5.**

- Strategic innovation plan.
- New maintenance model project.
- BIM methodology implementation plan.
- Strategic Initiative: Communications improvement plan.
- Strategic Initiative: Progress in developing and building high-speed sections.
- Adif Talent programme.
- Strategic Initiative: Plan to Promote the Railway Technology Centre (RTC).
- Strategic Initiative: Adaptation and integration of hydrogen as an energy carrier in the general interest rail network.
- Strategic Initiative: E-futura.
- Strategic Initiative: Digital transformation of maintenance.

SDG	CONTENT	AT ADIF AV (INITIATIVES/PLANS/PROGRAMMES)
 <p>REDUCE INEQUALITY WITHIN AND AMONG COUNTRIES</p>	<p>86.88 % of travellers boarding and alighting at accessible stations (Adif + Adif AV) (+0.94% versus 2021) – Target 10.2.</p> <p>€4,86 M (not including VAT) invested in accessibility improvement projects (Adif + Adif AV) – Target 10.2.</p>	<ul style="list-style-type: none"> • Support service for people with reduced mobility (Acerca service). • <i>Dialoga</i> service.
 <p>MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE</p>	<p>€4,555.28 M (not including VAT) invested to date in urban integration (Adif + Adif AV) – Target 10.2.</p> <p>71* urban integration agreements, protocols and addenda signed and managed within the framework of the urban integration JVs in which Adif AV participates – Target 11.3.</p>	<ul style="list-style-type: none"> • End-to-end plan for passenger stations. • Strategic Initiative: E-futura. • Strategic Initiative: Cercanías (Commuter Network) investment programmes. • Strategic Initiative: Quantitative risk assessment model. • Strategic Initiative: Comprehensive Transformation Project: Madrid Chamartín railway station. • Strategic Initiative: Comprehensive Transformation Project Madrid Puerta de Atocha railway station. • Strategic Initiative: Project to extend and improve Barcelona Sants railway station and integrate it into the new city model. • Strategic Initiative: Drafting of urban integration studies. • Strategic Initiative: Development of city-network high-speed connections. • Strategic Initiative: Action Plan to improve coordination and control of urban integration actions.

* Cumulative figures

SDG	CONTENT	AT ADIF AV (INITIATIVES/PLANS/PROGRAMMES)
 <p>ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS</p>	<p>19.73 % reduction in water consumption versus 2021 - Target 12.2.</p> <p>0.081 t/Mtrain-km of hazardous waste generation intensity - Target 12.4.</p> <p>100 % of contracts include social and environmental clauses - Target 12.7.</p>	<ul style="list-style-type: none"> • Hazardous waste management system. • Strategic Initiative: Responsible public purchasing project. • Strategic Initiative: Actions for the digital transformation of jobs. • Strategic Initiative: Station Management Model. • Strategic Initiative: Last-Mile Services.
 <p>TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS</p>	<p>Green bonds worth €500 million issued in 2022. All bonds issued in the last five years - Target 13.2.</p> <p>15,426 tCO_{2EQ} reduction in GHG emissions (cumulative since 2009 - Target 13.2.</p>	<ul style="list-style-type: none"> • 2018–2030 Climate Change Action Plan. • Target to achieve carbon neutrality by 2050. • Strategic Initiative: Ferrolineras®. • Strategic Initiative: Culture of combating and raising awareness of climate change. • Strategic Initiative: Adaptation and integration of hydrogen as an energy carrier in the general interest rail network. • Strategic Initiative: Responsible public purchasing project.

SDG	CONTENT	AT ADIF AV (INITIATIVES/PLANS/PROGRAMMES)
 <p>SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS</p>	<p>No serious or very serious administrative fines or sanctions for environmental infringements – Target 15.1.</p> <p>€47 M in resources earmarked for environmental protection (investment + operation) (at year-end 2021) - Target 15.1.</p> <p>€3.08 M earmarked for fire prevention (latest available data for 2021; 2022 data to be published in the environmental report in May 2023) - Target 15.5.</p>	<ul style="list-style-type: none"> • Environmental policy. • Environmental management systems. • Environmental monitoring of works. • Fire prevention plan.
 <p>PROMOTE JUST, PEACEFUL AND INCLUSIVE SOCIETIES</p>	<p>166 crimes committed by third parties with an impact on the business (criminal charges brought) - Target 16.1.</p> <p>13 deliberate attacks on critical infrastructure - Target 16.1.</p> <p>5 reports of breaches of the Code of Ethics – Target 16.5.</p> <p>5.10% claims upheld by the Transparency and Good Governance Board out of total responses (Adif + Adif AV) - Target 16.6.</p>	<ul style="list-style-type: none"> • Enterprise risk management development and deployment plan. • Transparency and good governance improvement plan. • Corporate anti-fraud policy.
 <p>REVITALISE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT</p>	<p>140 agreements and conventions with industry and business organisations and associations in effect - Target 17.16.</p> <p>36 agreements and conventions with industry and business organisations and associations signed - Target 17.16.</p>	<ul style="list-style-type: none"> • Open Station Programme. • Plan to Promote the Railway Technology Centre (RTC). • Collaboration protocols.

A photograph of three women in high-visibility yellow vests sitting on a construction site. The woman on the left is wearing a purple long-sleeved shirt and is smiling. The woman in the middle is wearing a grey long-sleeved shirt and is holding a clipboard. The woman on the right is wearing a green long-sleeved shirt and is holding a smartphone. They are all smiling and looking towards the camera. The background shows a construction site with a blue sky and some structures.

5

OUR PEOPLE

5) OUR PEOPLE

5.1. EMPLOYEES OF ADIF AV

5.1.1. Organisation of work

5.2. GROWTH OF WORKERS

5.2.1. Talent management

5.2.2. Training

5.2.3. Professional development

5.3. PRIORITIES ON THE HUMAN SIDE

5.3.1. Incentives and other employee benefits

5.3.2. Maternity and paternity leave

5.3.3. Employee relations

5.3.4. Diversity, equality and social action

HR PRIORITIES



**TALENT ATTRACTION AND
RETENTION**



**EQUALITY AND
DIVERSITY**



HEALTH AND SAFETY



LABOUR RELATIONS

People have always been the key to Adif AV's success, as they are the driving force behind the 2030 Strategic Plan, they operate the levers, use the tools at their disposal and strengthen the pillars on which the Company's business model and positioning are based. Efforts are now being made to improve labour productivity and labour competitiveness metrics. Key actions here include the preparation and implementation of a multi-year employment plan, which has now culminated in the strategic plan for people. This plan envisions generational replacement and will pave the way for more than six thousand new employees¹ to join us by 2025.

WORKFORCE FIGURES AT A GLANCE

257

Employees

82.11%

With permanent
contracts

57.98%

Covered by collective
agreement

24.51%

Women

4.54%

Pay gap for
managerial positions
(favouring men)

42,646

Hours
of training

3.23%

Manager churn rate

20.65%

Workforce churn
rate

12

New employees
(Public Sector Job
Openings)

¹ Adif + Adif AV

5.1. Employees of Adif AV¹

At Adif AV, people are the most important asset. With this in mind, the Company strives to offer an inclusive, safe and stable working environment and to provide continuous training and professional development opportunities so as to ensure a highly qualified, engaged and motivated workforce fully capable of accomplishing Adif AV's business objectives. This section provides information on Adif AV's human resources and organisation, including key figures relating to employees, such as the composition of the workforce and remuneration.

The distribution of Adif AV employees is as follows²:

NUMBER OF EMPLOYEES BY GENDER AT YEAR-END



	2020		2021		2022	
	Number	%	Number	%	Number	%
Men	154	70.64	153	70.83	194	75.49
Women	64	29.36	63	29.17	63	24.51
Total	218	100	216	100	257	100

¹ Content related to disclosure **GRI 2-7: Employees**

² All employees are located in Spain

NUMBER OF EMPLOYEES BY AGE AT YEAR-END

	2020		2021		2022	
	Number	%	Number	%	Number	%
Up to 35	11	5.04	13	6.01	41	15.95
Between 36 and 50	130	59.63	119	55.09	128	49.80
Over 50	77	35.32	84	38.88	88	34.24
Total	218	100	216	100	257	100

NUMBER OF EMPLOYEES BY EMPLOYEE CATEGORY AT YEAR-END

	2020		2021		2022	
	Number	%	Number	%	Number	%
Management structure	103	47.24	106	49.07	108	42.02
Support structure	73	33.48	68	31.48	68	26.46
Operational personnel and middle managers	42	19.26	42	19.44	81	31.51
Total	218	100	216	100	257	100

NUMBER OF EMPLOYEES BY CONTRACT TYPE AND WORKING HOURS AT YEAR-END

	2020		2021		2022	
	Number	%	Number	%	Number	%
Permanent contracts	209	95.87	206	95.37	211	82.10
Temporary contracts	9	4.13	10	4.62	46	17.90
Total	218	100	216	100	257	100
Full-time contracts	211	96.78	211	97.68	252	98.05
Part-time contracts	7	3.22	5	2.32	5	1.95
Total	218	100	216	100	257	100

INFORMATION ON EMPLOYEES (LENGTH OF SERVICE)*

	2020	2021	2022
Between 0 and 11 years	32.11%	30.09%	39.30%
Between 12 and 19 years	44.04%	45.37%	38.13%
Between 20 and 27 years	7.34%	10.19%	12.06%
Between 28 and 35 years	4.58%	3.70%	2.72%
Over 35	11.93%	10.55%	7.78%
Total	100%	100%	100%



* Content related to **GRI 401-1** New employee hires and employee turnover

EMPLOYEES TO HAVE TAKEN PARTIAL RETIREMENT BY GENDER

	2020		2021		2022	
	Number	%	Number	%	Number	%
Men	5	83.33	5	100	5	100
Women	1	16.66	0	0	0	0
Total	6	100	5	100	5	100

EMPLOYEES TO HAVE TAKEN PARTIAL RETIREMENT BY AGE

	2020		2021		2022	
	Number	%	Number	%	Number	%
<63	3	50	2	40	0	0
>63	3	50	3	60	5	100
Total	6	100	5	100	5	100

EMPLOYEES TO HAVE TAKEN PARTIAL RETIREMENT BY EMPLOYEE CATEGORY

	2020		2021		2022	
	Number	%	Number	%	Number	%
Management structure	0	0	0	0	2	40
Support structure	4	66.66	2	40	1	20
Operational personnel and middle managers	2	33.33	3	60	2	40
Total	6	100	5	100	5	100



Annual average number of contracts during the reporting period, broken down by contract type and by gender, age and employee category, counting all active contracts at Adif AV in 2022:

AVERAGE NUMBER OF EMPLOYEES BY CONTRACT TYPE AND WORKING HOURS

		2020						2021					
		<51 years		≥51 years		Total		<51 years		≥51 years		Total	
		Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Operational	Permanent	0.08	-	2.00	5.00	2.08	5.00	0.08	-	3.00	5.00	3.08	5.00
	Permanent, part-time	-	-	-	-	-	-	-	-	-	-	-	-
	Temporary	8.00	1.50	1.25	-	9.25	1.50	4.00	0.58	1.08	-	5.08	0.58
Middle managers	Permanent	16.17	2.00	3.25	5.42	19.42	7.42	16.00	1.67	1.75	5.00	17.75	6.67
	Permanent, part-time	-	-	0.33	-	0.33	-	-	-	1.00	-	1.00	-
	Temporary, part-time	1.25	-	-	0.33	1.25	0.33	0.08	-	-	-	0.08	-
Support structure	Permanent	26.33	17.17	18.75	3.00	45.08	20.17	29.42	17.75	17.67	1.50	47.08	19.25
	Permanent, part-time	-	-	0.08	-	0.08	-	-	-	1.08	-	1.08	-
	Temporary	-	-	-	-	-	-	-	-	-	-	-	-
Management structure	Permanent	34.75	18.42	39.67	10.25	72.42	28.67	37.17	20.00	35.42	11.08	72.58	31.08
	Permanent, part-time	-	-	2.42	0.08	2.42	0.08	-	-	1.25	0.92	1.25	0.92
Total		86.58	39.08	67.75	24.08	154.33	63.17	86.75	40.00	62.25	23.50	149.00	63.50

AVERAGE NUMBER OF EMPLOYEES BY CONTRACT TYPE AND WORKING HOURS

		2022					
		<51 years		≥51 years		Total	
		Men	Women	Men	Women	Men	Women
Operational	Permanent	-	-	3.00	3.90	3.00	3.90
	Permanent, part-time	-	-	-	-	-	-
	Temporary	19.10	0.80	2.70	-	21.80	0.80
	Temporary, part-time	-	-	-	-	-	-
Middle management	Permanent	17.40	1.30	0.40	5.00	17.80	6.30
	Permanent, part-time	-	-	1.60	-	1.60	-
	Temporary	-	-	-	-	-	-
	Temporary, part-time	-	-	-	-	-	-
Support structure	Permanent	30.90	13.50	18.30	2.60	49.20	16.10
	Permanent, part-time	-	-	1.20	-	1.20	-
	Temporary	0.10	-	-	-	0.10	-
	Temporary, part-time	-	-	-	-	-	-
Management structure	Permanent	34.60	21.80	36.80	13.30	71.30	35.10
	Permanent, part-time	-	-	2.00	-	2.00	-
	Temporary	-	-	-	-	-	-
	Temporary, part-time	-	-	-	-	-	-
Total		102.10	37.30	65.80	24.70	167.90	62.10

Remuneration broken down by type and by gender, age and employee category, counting all active contracts at Adif AV in 2022:

AVERAGE REMUNERATION BY GENDER

	2020		2021		2022	
Men	50,309.75		55,246.66		47,646.59	
Women	48,863.88		52,512.16		52,686.74	

AVERAGE REMUNERATION BY AGE¹

	2020		2021		2022	
	Men	Women	Men	Women	Men	Women
Up to 35	22,797.71	25,982.58	33,807.51	39,413.12	28,339.25	41,360.73
Between 36 and 50	49,122.14	52,150.21	52,219.88	56,817.23	49,061.57	56,033.46
Over 50	59,138.83	44,852.43	60,368.59	51,183.14	56,428.70	50,305.14

¹ Notably, in the last two years, the percentage of employees aged under 35 has increased from 5.05% to 15.95%

AVERAGE REMUNERATION BY EMPLOYEE CATEGORY

	2020		2021		2022	
	Men	Women	Men	Women	Men	Women
Management structure	63,603.85	58,636.39	59,009.41	57,219.94	64,582.40	61,647.21
Support structure	45,336.78	47,626.28	50,256.91	48,499.55	49,171.60	46,602.28
Middle management	30,556.05	32,138.85	40,365.11	35,887.61	37,420.81	35,666.47
Operational personnel	24,615.12	29,629.22	28,561.88	33,253.71	24,769.20	28,561.88



At Adif AV, pay gap data may vary significantly from one year to the next as its workforce is relatively smaller (257 employees at the end of 2022), making the figure more sensitive to the effect of new hires, promotions and retirements.

The employee category with the largest number of employees is “Management structure”, which includes the groups: Head, Area Head, Area Manager, Deputy Director and Director (there is no Senior Management).

PAY GAP BY EMPLOYEE CATEGORY (%) ^{1,2}

	2020	2021	2022
Management structure	7.81	3.03	4.54
Support structure	-5.05	3.50	5.23
Middle management	-5.18	11.09	4.69
Operational personnel	-20.37	-16.43	-22.14

¹ Pay gap = ((Average remuneration men – Average remuneration women) / Average remuneration men) * 100

² Content related to **GRI 405-2**: Ratio of basic salary and remuneration of women to men



5.1.1. Organisation of work



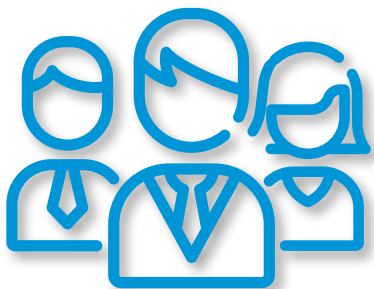
MILESTONES

- Consensual implementation of the **Remote Work Agreement**, with no disputes having arisen (nine meetings of the Remote Work Monitoring Committee held), as well as the creation and implementation of the procedure for overseeing and enforcing remote work arrangements.
- Drafting, negotiation and signing of the Agreement on the “**Voluntary Mobility Framework Standard** for the permanent filling of posts through competitive recruitment processes”.
- Drafting and implementation of the **Partial Retirement Circular 2022**.
- Implementation and running of the 2023 **Trade Union Election process** and its subsequent reflection in the SAP for Trade Union Administration.
- **Negotiation of Trade Union Rights, 2023–2027**.
- Management of **public job postings**.



COMMITMENTS

- Continue **implementation of the Remote Working Agreement** and the Chair's Resolution.
- Continue to draw up the **2nd Collective Bargaining Agreement**.
- Continue to implement the **New Model for Spatial Management and Adaptation to Change**.
- Issue decisions on general calls at national level under the **new model envisaged in the “Framework Agreement on voluntary mobility** for the permanent filling of posts through competitive processes”.



Further progress along these lines has been made under the **2nd Adif Collective Bargaining Agreement**, by setting up various technical committees devoted to issues such as regulations, working hours and work-life balance, while addressing other matters such as annual working hours, which are set at 1,642, distributed across eight-hour days. In balancing working hours thus, agreements were reached with the workers' representatives to reduce the working day by several days per year.

Negotiations are currently under way in relation to working conditions arising from the new production models that will affect the current work organisation.

Work is also allocated in shifts according to the Company's prevailing labour regulations for a considerable number of employee segments. A significant proportion of employees work a weekly regime of five days on and two days off.

**People hold
the key to the
Company's future**

There was a notable increase in death benefits, aid delivered to workers with disabled children, leave of absence to care for dependents, a new regime for granting leave to care for family members up to the 2nd degree of consanguinity or affinity, unpaid leave of absence of up to one month upon the death of certain family members, unpaid leave for assisted reproduction, remote working arrangements, new working hours, extension of leave under the 2nd collective bargaining agreement for death, illness, surgery or childbirth, leave of absence for up to three years to care for family members up to the second degree of consanguinity, leave for assisted reproduction, flexible start times from 7.00 until 9.30 am, end of work at 6.00 pm, among many other measures.

**No complaints
related to work-life balance
issues were reported in 2022**

In January 2022, the procedure on the deployment of remote working arrangements at Adif AV was approved under the **Remote Work Agreement** signed by the Negotiating Committee of the 2nd Collective Bargaining Agreement of Adif and Adif AV on 16 June 2021. The Company has identified the job positions most suited to this way of working.

The SP 2030 envisages the implementation and integration of remote work as a key stepping stone **towards the digital and cultural transformation** of the organisation

Following the effective implementation of this procedure, remote working is now a reality at the Company. As a result, employees now have a mechanism enabling flexible and transparent management of this new form of service, and allowing them to reconcile their personal and professional lives without affecting productivity or business performance. Remote working arrangements also make it easier to reconcile family life and come with the added benefit of caring for the environment as the employees working from home no longer have to commute to work.

POSTS ELIGIBLE FOR REMOTE WORK VS EMPLOYEES UNDER THE REMOTE WORK AGREEMENT AT 31/12/2022

Employee category	Posts eligible for remote work	Men	Women	Total	% Men	% Women	% Total
Operational personnel	6	2	2	4	33.3%	33.3%	66.7%
Middle management	19	10	3	13	52.6%	15.8%	68.4%
Support structure	51	32	17	49	62.7%	33.3%	96.1%
Management structure	65	29	19	48	44.6%	29.2%	73.8%
Total	141	73	41	114	51.4%	28.9%	80.3%



To qualify for remote working, a position must meet certain requirements set by the Company. These posts largely relate to back office/administration and information systems and, to a lesser extent, to the operational tasks of infrastructure maintenance and rail traffic control.



Clause 13 – Digital safeguards of the Collective Bargaining Agreement of Adif and Adif AV enshrines the new digital disconnect rights of employees, as well as their right to privacy and to use digital devices in the workplace only.

PARTIAL RETIREMENT

Partial retirement is a sustainable management tool because the law states that the partially retired worker must be replaced by a new employee, thus helping to reduce unemployment.

The Company's SP 2030
includes **internal mobility**
as one of the strategic
lines of action within **the
generational handover plan**

The Company faces the significant challenge, today and in the years to come, of rejuvenating its workforce and cascading downwards the know-how built up in key positions. We have accordingly set in motion a range of initiatives, such as partial retirement, with the aim of accelerating the generational handover without losing knowledge and experience in the process, these being essential for the smooth running and efficient management of the Company.

Along these lines, the Partial Retirement Circular 2022 was posted on Adif's intranet on 4 February 2022.

5.2. Growth of workers

5.2.1. Talent management



MILESTONES

- Implementation of the **Annual Knowledge Transfer Plan**.
- People trained in **Digital Transformation**.
- Employees **trained in environmental matters**.
- People trained in **Equality and Women's Rights Programmes**.



COMMITMENTS

- **Set up of Skills and Potential Development Centres.** The first skills development centres were set up for young talent and female talent (seven Adif AV employees).
- Develop the **knowledge transfer programme**: key positions/people identified and actions prioritised according to retirement age.
- Draw up **annual knowledge transfer plan**: search and selection of people with development potential for key positions / Continuation of Group-wide annual knowledge transfer programmes (*Dejando huella [Leaving a Mark]*, *Adif en primera persona [Adif in the flesh]*, *Experiencias de éxito [Successful experiences]*, etc.).

FRAMEWORK MOBILITY AGREEMENT

On 27 June 2022, the Negotiating Committee of the 2nd Collective Bargaining Agreement of Adif and Adif AV lent its signature to the “Voluntary mobility framework agreement for the permanent coverage of positions through competitive processes”, as the culmination of the work carried out under clause 10 in making it part of the agreement.

The new mobility framework agreed upon is a much-needed management tool for organisational efficiency and will successfully align the Company's plans and objectives with the career and job-related expectations of its employees.

Geographical and functional mobility is conducive to strong family ties and professional development

The agreement contains new rules when inviting employees to apply for geographical and functional mobility, with the aim of streamlining these processes and optimising the organisational outcomes. This is achieved through a suitable model for developing the intrinsic processes of planning, selection and staff administration, supported by an efficient IT resolution system, in a process that addresses the need to coordinate with external mobility (incoming and outgoing employees) and strike a suitable balance between the Company's functional areas.

Through this process, the Company facilitates the professional development of its employees by allowing them — provided they meet the requirements established in the Mobility Framework Rule that governs the process— to change positions in various ways:



- **Transfers.** Transfers shall be allocated among applicants who are from the same category as the positions to be filled.
- **Promotions.** Available promotions will be allocated, in the first place, to participants who hold a category from which promotion to the category of the places to be allocated is possible and, secondly, from among participants belonging to the same occupational group or sub-group. In order to be eligible for promotion, the candidate must undergo and pass a prior selection process.
- **Retraining.** Under this modality, workers may apply for a post at the same wage level for which a transfer is not available under the current rules. As with promotions, the candidate must undergo and pass a prior selection process.

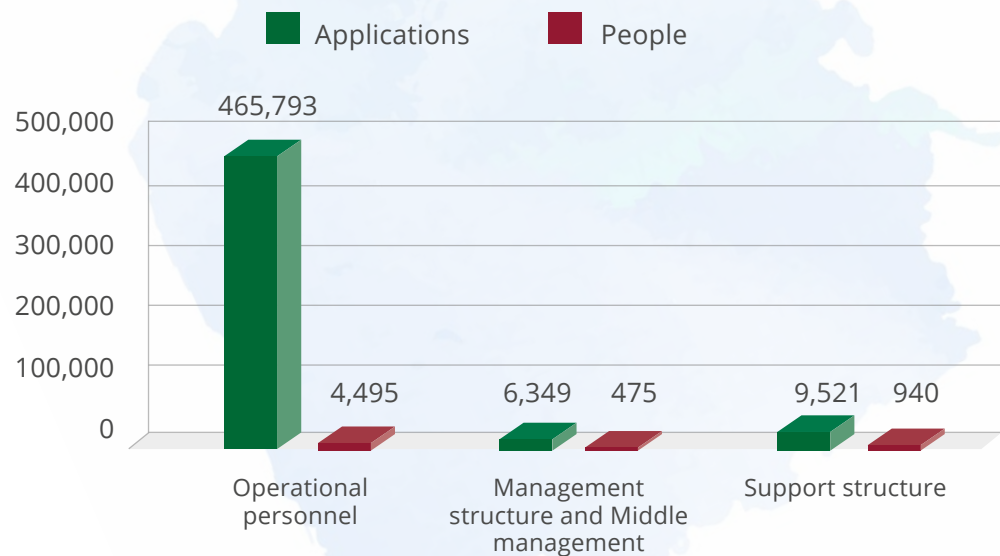
For the categories of Operational personnel and Supervisory personnel (Middle Management and Management), the modalities of transfer, promotion and retraining are available to Adif AV employees.

When it comes to the categories of Technical Personnel (Middle Management and Management) and Technician, Adif AV employees are eligible for transfer, change of post and promotion.

At the current stage of the process, it is not yet possible to determine the number of people who will ultimately change jobs as a result of the Mobility Call 2022.

The following chart shows the total number of participants in the Mobility Call 2022 and the number of applications submitted. The types of post shown— Operator, Supervisor, Technical Staff and Support Structure— correspond to the positions effectively requested by the participants. A participant may apply for several different openings, provided that he or she meets the eligibility requirements:

2022 ADIF AND ADIF AV GLOBAL INTERNAL MOBILITY PROCESS



It can therefore be seen that a total of 5,910 people are participating in the process (as broken down above) and that 481,663 applications were submitted for changes of post at Adif and Adif AV. This Mobility Call is expected to culminate in the course of 2023.

5.2.2. Training

Training actions are aimed at improving, refreshing and updating skills and qualifications. The objectives of the Training Plan include that of fostering company values and culture, promoting positive and innovative attitudes, providing equal opportunities for all employees, helping to increase safety levels in the railway infrastructure, and improving workers' health and the safety of goods and services. Work is carried out to inform and raise awareness among employees through the Adif intranet and the Equality and Diversity website, and regular training on equality, work-life balance, diversity and inclusion is delivered¹.

Adif AV offers a **broad selection of training** courses on various subjects, including corporate **sustainability**, and employees are free to choose the topics that interest them most

¹ Content related to **GRI 404-2**: Programs for employee upskilling and transition assistance programs

On the subject of **ENVIRONMENTAL PROTECTION**, an expert programme covering **sustainability, SDGs and the circular economy** was made available to employees. The training catalogue also features other courses of interest related to environmental matters:

-) Environmental impact assessment and protected areas.
-) Environmental risk – Fuelling.
-) Waste management.
-) Environmental awareness.
-) Atmospheric emissions.
-) Discharges and polluted water.
-) International fight against climate change.
-) Sustainable mobility workshop.
-) How to respond to minor environmental incidents.
-) Expert course in sustainability, SDGs and circular economy.
-) Energy and environmental efficiency.
-) Smart energy in smart cities.

In the **SOCIAL SPHERE**, there are training courses on corporate responsibility and equality:

-) Diversity and inclusion at work.
-) Gender equality.
-) Inclusive leadership.
-) Gender-based violence.
-) Non-sexist communication.
-) Cultural diversity.
-) Sexual harassment and violence at work.
-) Inclusion for all.

In the **REALM OF GOVERNANCE**, the training catalogue includes courses open to all employees of both companies in relation to regulatory compliance and RRF training:

-) Adif AV against bribery and corruption.
-) Adif AV against fraud.
-) Adif AV and conflicts of interest.
-) Compliance and general ethics.
-) Code of ethics and conduct.
-) Organic Law on Data Protection.
-) Sexual harassment and violence at work.
-) Virtual classroom RRF projects and initiatives.

The **Annual Training Plan** addressed strategic objectives related to diversity, inclusion and non-discrimination, together with indicators that contribute to the fulfilment of the Sustainable Development Goals. This contribution involves monitoring the number of people who receive training in:

- Well-being and human factor programmes.
- Digital transformation programmes.
- Equality and women's advancement programmes.
- Environmental programmes.

The following programmes included in the Plan are **Group-wide** and therefore available to all employees:

- The power of diversity: How to work well with everyone.
- Inclusive leadership: Welcome to diversity.

One of the key features of the Plan is **the Strategic Training Plan**, which covers many of the actions that will continue to support the Company as it responds to the critical challenges and needs of society.



All of the following agents are involved in detecting and flagging needs, headed up by the Training Sub-Department:

- **Training Centres:** they review and complete the training catalogue together with the training officers for each business area and also oversee the process in relation to their respective subjects or fields of expertise.
- **Heads of Training – DGs:** they assign training to people according to the company’s plans and also oversee the process in relation to their respective subjects or fields of expertise.
- **Worker/s:** they request training from the catalogue within the MyTraining app.
- **Heads and Supervisors:** they validate requests and see to it that all needs are satisfied.
- **Training Advisory Council:** reviews the process, provides input for the Plan and then validates it. A total of 1,372 applications were accepted in 2022.


The Training Catalogue is a tool made available to all employees where each employee is an active participant in their own training, alongside their direct managers and supervisors. Depending on the group, each person can see their required training, recommended training and the further training made available for their own personal and professional development.



¹ Adif + Adif AV

The **average number of training hours** per employee at Adif AV in 2022 was 199 (59.3 hours in 2021), with the following breakdown by gender: 259.45 hours for men and 55.06 hours for women, with the following breakdown of total hours by employee category:

TRAINING HOURS BY EMPLOYEE CATEGORY²

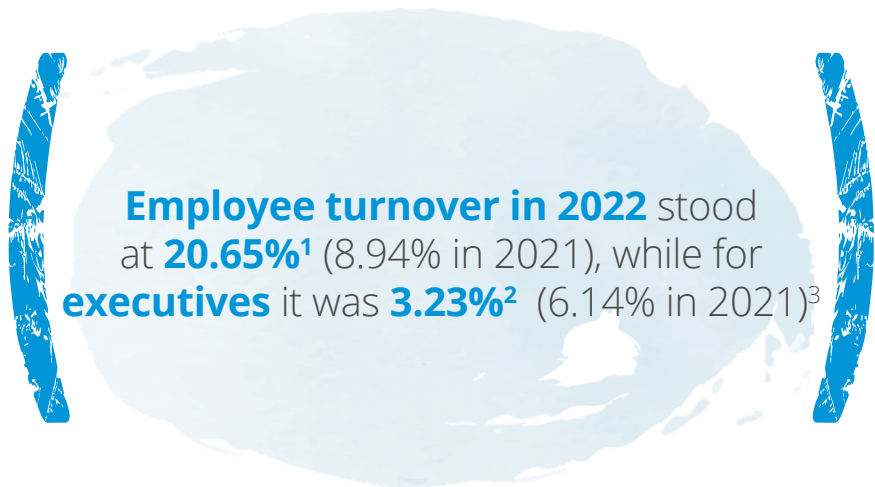


	2020	2021	2022	
	Total	Total	Men	Women
Management structure	4,951	6,418	1,480	4,112
Support structure	4,583	5,006	783.5	8,141
Middle management	3,724	1,935	249	2,932
Operational personnel	6,855	631	956	27,461
Total	20,113	13,990	3,469	42,646

² Content related to **GRI 404-3:** Percentage of employees receiving regular performance and career development reviews

5.2.3. Professional development*

Adif AV's staff selection processes are regulated in labour legislation for the employees covered by the collective bargaining agreement. In 2022, it hired 12 new employees pursuant to the corresponding Public Employment Tenders (four in 2021).



Adif AV's business success depends mainly on its employees' performance, which in turn depends directly on their satisfaction and motivation. To achieve employee satisfaction and motivation, the role played by the organisation's leaders is extremely important: **3C Executive Management** is the methodology that articulates and develops Adif's Leadership Model; it is framed by the criteria of transparency, reasonableness and efficiency.

* Content related to **GRI 404-2**: Employee upskilling programmes

¹ Breakdown by gender: 25.31% men and 8.05% women

² Breakdown by gender: 3.41% men and 2.85% women

³ Content related to **GRI 401-1**: New employee hires and employee turnover. Formula: ((Incoming + outgoing employees) X 100 / 2) / Average no. of employees)

The Company is currently undergoing a major cultural change project amid the ongoing implementation of the 2030 Strategic Plan and the generational handover. The premise on which the **Cultural Change Project** is based will enable Adif AV to face the challenges of its present and future.

The aim of this project is to transform the culture at Adif and Adif AV through a sweeping behavioural change of its workers, with the **"viral change" methodology** applied to social media platforms in order to support the ongoing implementation of the Strategic Plan 2030. It will be implemented in several phases, with phases 1, 2 and 3 (year 1 of the Programme) already implemented in 2022, as follows:

Year 1	Phases 1, 2 and 3. Elements of the new Adif culture will begin to emerge across certain parts of the organisation.
Year 2	Phase 4. The new culture, observed through behaviours, will scale up to more areas of the organisation.
Year 3	Phase 5. The culture will be not only be present in the day-to-day life of the majority of workers, but also embedded within organisational projects and processes; in the DNA of the organisation. The capacity for change will be an integral part of the organisational fabric and will support us as we tackle future challenges.

Programmes and resources will also be in place to help us bring about this change from all angles:

(PREPARING NEW PROFESSIONALS

Involving a series of training initiatives for new hires.

(COMPETENCY-BASED MANAGEMENT MODEL

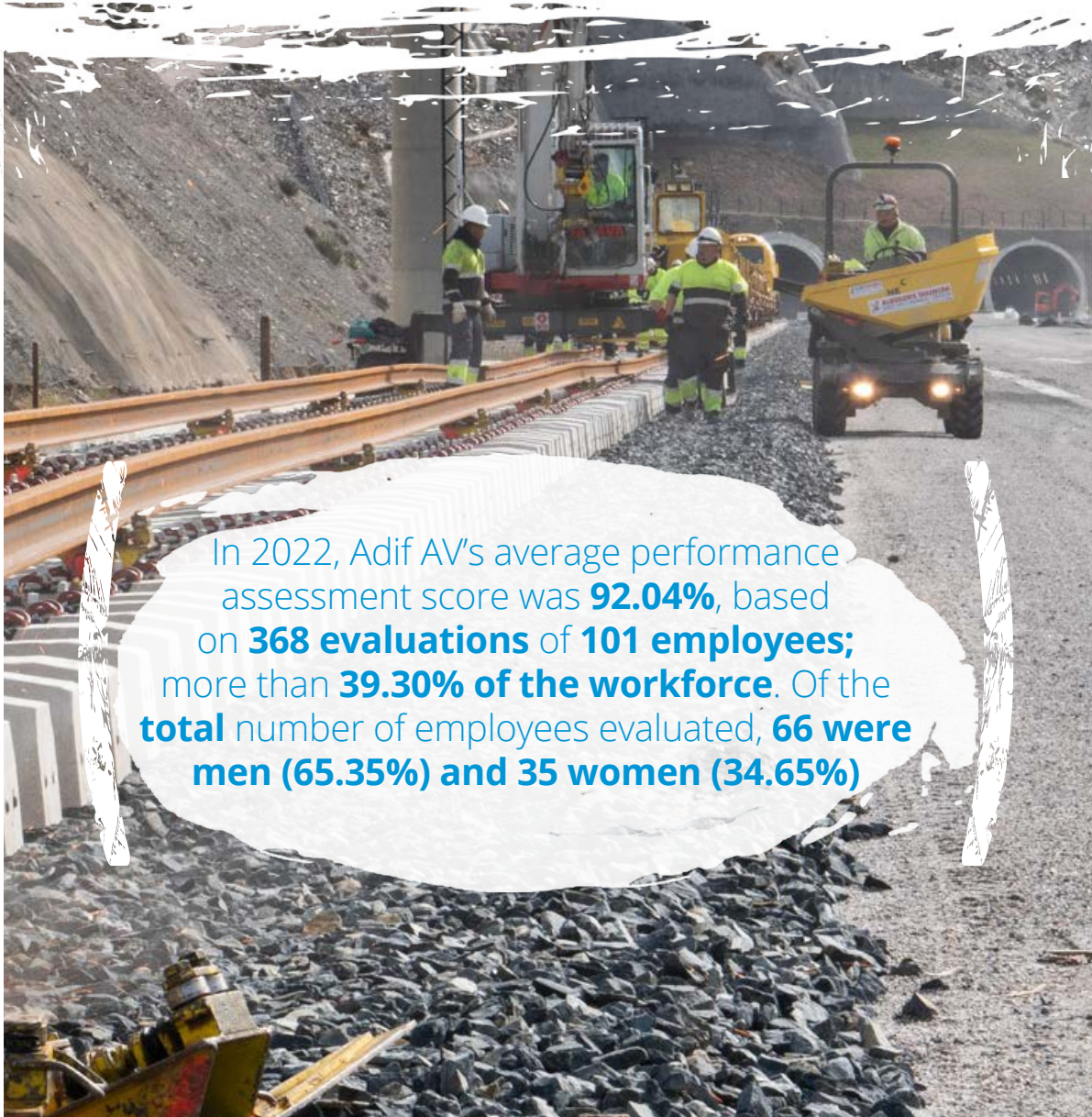
The model systematically manages the capabilities, behaviours and growth of the organisation’s leaders rooted in the concepts of commitment, collaboration and creativity (3Cs).

The Leadership Model:
3C Executive Management
drives the performance of
the organisation’s leaders

Adif AV carries out numerous projects and activities within this framework to strengthen the spirit underlying the model and to give it added momentum.

(COMPETENCY CATALOGUE – DIGITAL TRANSFORMATION 360° PERFORMANCE ASSESSMENT

In 2022, we continued to deploy the Competency Management Model – Digital Transformation, to align the competencies in its catalogue with those demanded in the new era of digital transformation.



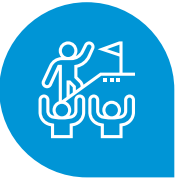
In 2022, Adif AV's average performance assessment score was **92.04%**, based on **368 evaluations** of **101 employees**; more than **39.30% of the workforce**. Of the **total** number of employees evaluated, **66 were men (65.35%)** and **35 women (34.65%)**

As in the previous year, the 360° performance assessment exercise was based on the Competency Catalogue – Digital Transformation. This model offers a range of perspectives (one's own, one's boss's and that of colleagues and partners) on the performance of those being evaluated, thus allowing them to take stock of their strengths and opportunities, while uncovering aspects which with their own insight alone they might not have been able to pinpoint, facilitating continuous improvement and a culture of talent development. Concepts associated with digital transformation: agility, flexibility, collaboration and cooperation, efficiency, transparency, participation, speed, etc.

The catalogue in effect in 2022 is built around **four dimensions**:



Knowledge: acquiring and maintaining it is not enough; it is also necessary to generate and share it by leveraging the opportunities afforded by today's information and communication technologies (ICTs).



Results: competitiveness and sustainability underpin this dimension.

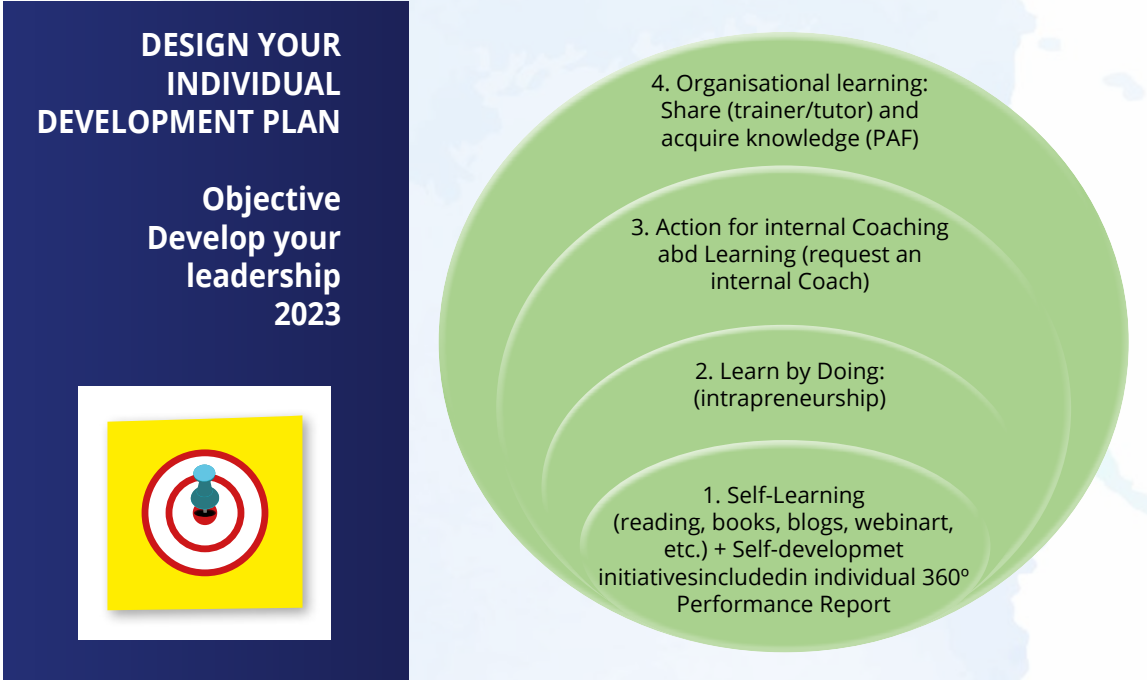


People: the ability to manage diversity, which is increasingly broad, and talent, which is increasingly complex.



Culture: Commitment to embrace and transmit the paradigm of permanent and ever faster transformation we are witnessing.

Following the performance assessments, we continue to implement Individual Development Plans in order to enhance people's talent and boost their leadership by making various development programmes and actions available to them.



(INTEGRATED MANAGEMENT BY OBJECTIVES (MBO) MODEL

The Company also continued to apply the Integrated Management by Objectives Model (MBO) in 2022. This model is based on three pillars (transparency, coherence and ease) to enable the development and deployment of company-wide and area-specific objectives to all staff subject to the Objectives System, thus improving levels of engagement among employees with the Company's key objectives. The senior management team is directly involved in formulating the Company's objectives, which are handled with full transparency for both the evaluator and the subject evaluated

In 2021 the degree of achievement of Adif AV objectives was **98.95%***, with a total of **194 individual** appraised, accounting for **89.81% of the workforce**

(TV TRAINING PORTAL

The Training Portal comprises numerous tools and services made available by Adif to learn and communicate through images and digital technologies.

* Latest available datae

(COACHING PROGRAMMES

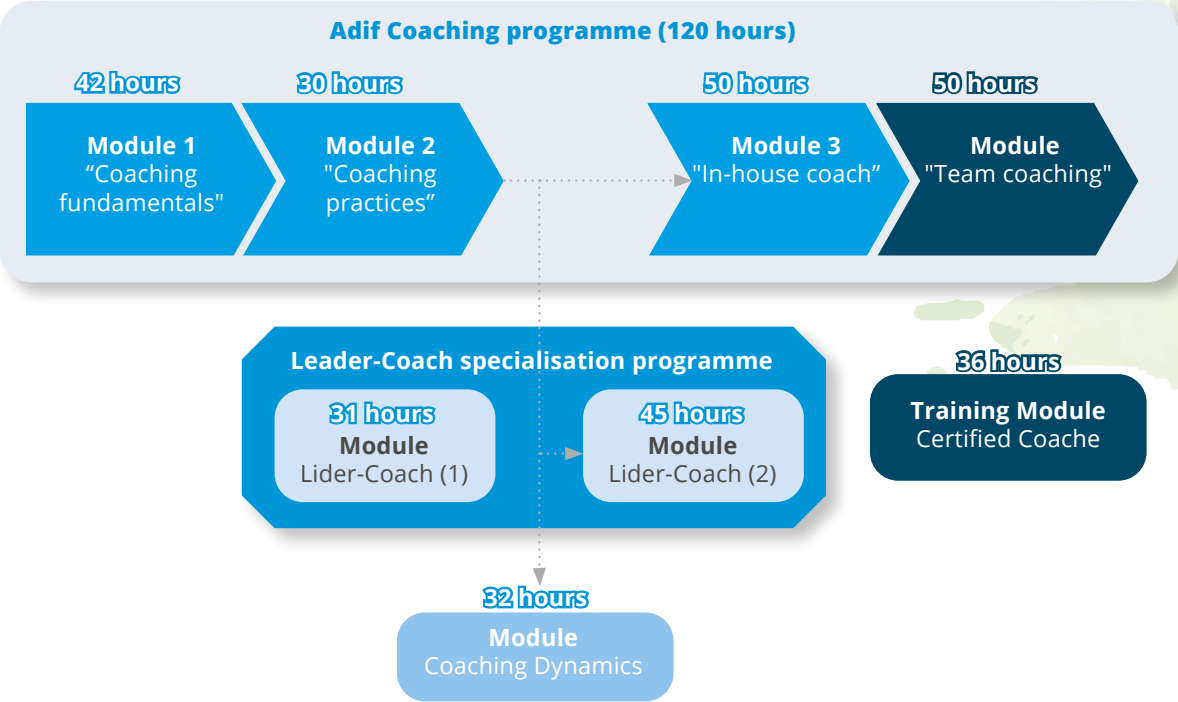
This initiative has showcased the true power of the coaching methodology as a form of conversation between people and as a lever for transforming human relationships. This initiative has evolved to become a key part of the 3C Management Leadership Model, fostering a sense of proactivity, responsibility and commitment to oneself and to the organisation.

The programme meets all pertinent quality standards and has been AECOP® Certified since 2018. It is used to observe both the training of internal coaches, which is carried out entirely in-house, and to oversee processes. In 2019, Adif AV received the Honorary Award for "Coaching Culture in Business" and the first "Aecop – Business Partner" seal in recognition of its work in disseminating executive coaching within the business environment.



The coaching programme is also aligned with the 2030 Strategic Plan, as part of the Plan to Promote Leadership and Recognise Talent at Adif and Adif AV, thus helping to bring about a change in habits and processes within the Company that will ultimately lead to a cultural transformation. Around **200 people** have completed the programme so far. A total of **61 individual** executive coaching processes and **15 self-entrepreneurship initiatives** have been carried out to date. There were **14 certified internal coaches** in 2022 and training in Team Coaching was initiated in order to attend to team needs as well.

The structure of the full programme is as follows:



(HORIZONTE 2030 PROGRAMME

This programme continued to run throughout 2022. It aims to assess leadership potential, improve conduct and unlock executive potential, thus enabling managers to develop and disseminate an effective management culture to successfully meet the challenges of the 2020–2030 decade.

(DEJANDO HUELLA PROGRAMME

Dejando Huella (Leaving a Mark) is a development programme aimed at systematising organisational learning and contributing to knowledge management by preventing it from being lost as the workforce ages. It continued to run throughout the year.



(TRAINING IN EQUALITY

The Company has various handbooks and training actions on the subject of equality and sexual harassment, along with several gender-based harassment protocols, to transmit the culture and values of Adif and, by extension, Adif AV in this regard. The Company also runs two programmes to promote female talent and leadership:

- *Lidera* mentoring programme to promote female leadership.
- *Talento Joven, Talento Mujer* (Young Talent, Female Talent) programme.

5.3. Priorities on the human side

5.3.1. Incentives and other employee benefits



MILESTONES

- Promoting of a **coordinated and flexible organisation** where talent can be leveraged and leadership boosted.
- Consensual implementation of **the Remote Work Agreement**, with no disputes having arisen: nine meetings of the Remote Work Monitoring Committee held in 2022.
- Drafting and implementation of the **Partial Retirement Circular 2022**.



COMMITMENTS

- Continue to implement the **Remote Working Agreement** and the Chair's Resolution.



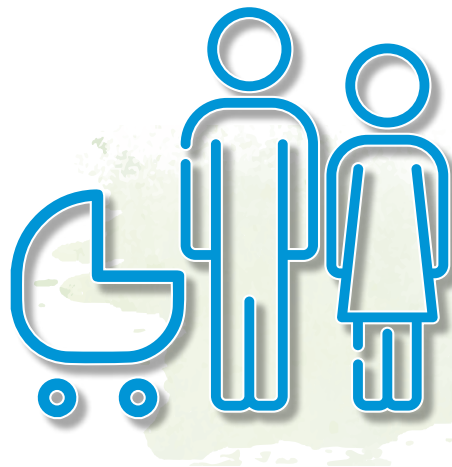
In addition to variable remuneration based on the attainment by employees of certain targets (personal, group-wide, contribution to the team, and skill set), Adif AV offers the employees covered by the collective bargaining agreement **a broad spectrum of in-kind benefits** designed to improve their personal and work lives, such as:

- **Health promotion:** medical check-ups, preventive medicine campaigns, financial aid towards extraordinary medical expenses, vaccination campaigns, further remuneration for temporary incapacity from work to complement minimum Social Security payments, support for drug and alcohol addiction, etc.
- **Life insurance.**
- **Free fares** on local and regional trains, and special fares on main lines and AVE high-speed links.
- **Aid for children** with disabilities.
- **Ex-gratia aid and assistance for temporary disability.**
- **Death benefits.**
- **Legal protection:** in the event of rail accidents in which criminal liability could be determined.
- **Transfers to new jobs** upon loss of function.
- **Job mobility** so as to reunite with spouse or life partner.
- **Benefits and/or discounts on services:** banking, leisure, travel, housing, etc.

Full-time employees have the same rights and benefits as part-time employees¹.

¹ Content related to **GRI 401-2:** Benefits provided to full-time employees that are not provided to temporary or part-time employees

5.3.2. Maternity and paternity leave



Notably, all employees availing themselves of maternity or paternity leave decided to return to their jobs upon reaching the end of their leave. The number of employees entitled to parental leave by gender was 257, of whom six took leave.

MATERNITY/PATERNITY LEAVE²

	2020		2021		2022	
	Men	Women	Men	Women	Men	Women
Employees availing of maternity leave	0	4	0	1	0	2
Employees availing of paternity leave	2	0	3	0	4	0
Total	6		4		6	

² Content related to **GRI 401-3:** Parental leave

5.3.3. Employee relations

Adif AV remains in constant contact with staff representatives in order to ensure a working environment that is conducive to the attainment of the Company's objectives while avoiding conflicts that could lead to loss of productivity and reputation.

Clause 13 – Digital safeguards of the Collective Bargaining Agreement of Adif AV enshrines the new digital disconnect rights of employees, as well as their right to privacy and to use digital devices in the workplace only. These issues are set out and regulated in the Remote Working Agreement, which was implemented in 2022 under the watchful eye of the Monitoring Committee, comprising representatives from the company and the trade unions, as stipulated in the agreement itself.



Adif AV engages with its employees by means of regular meetings between management and the various committees and other worker representation bodies vested with decision-making powers:

Negotiating Committee of the 2nd Collective Bargaining Agreement of Adif and Adif Alta Velocidad

Composed of the Management and signatory trade unions. It is tasked with negotiating and ratifying the agreements reached, among other duties.

Staff Delegates

There are staff delegates in Barcelona, León and Seville.

General Works Council

Liaising and negotiating body tasked with general and collective bargaining matters.

General Health and Safety Committee

Most senior management-employee body in the health and safety arena; it is the source of the guidelines that are binding upon the lower-level health and safety committees.

Provincial Health and Safety Committees

Management has three members on the Provincial Health and Safety Committee of Adif AV in Madrid. Management has one person sitting on each of the provincial Health and Safety Committees in Barcelona and Seville.

Training Advisory Committee and Joint Board Committee

Responsible for drawing up and monitoring Adif AV's Training Plan.

Employee Policy and Equality Committee

Handles requests and grants employee benefits, aid for children with disabilities, temporary disability benefits and death benefits. It also proposes measures on how best to implement the 2nd Equality Plan, while also monitoring equal opportunities and non-discrimination indicators.

Equality Plan Negotiating Committee

In accordance with Royal Decree 901/2020, this committee is responsible for drawing up status reports, identifying the measures needed to improve levels of equality and determining the material and human resources needed for their effective implementation, as well as the people responsible and the timeline of events. Composed of the Management and signatory trade unions. It is tasked with negotiating and ratifying the agreements reached, among other duties.

Labour Disputes Committee

This particular body resolves disputes relating to the interpretation or application of collective bargaining agreements and labour regulations in general, or following the announcement of a strike



No changes have been made to the committees with respect to the 2nd Collective Bargaining Agreement of Adif and Adif AV, which remains in force.

(COLLECTIVE BARGAINING AGREEMENTS¹

Adif AV engages with its employees by means of regular meetings between management and the various committees and other worker representation bodies vested with decision-making powers.

Labour rights, whether in the form of regulations, collective bargaining agreements, or other arrangements, are communicated to the workforce through internal channels. They are disseminated externally out through social networks and awareness-raising events for vulnerable groups at passenger stations.

For the most part, communications are usually given at least two weeks prior to any significant operational change, except for agreements with trade union representation, which explicitly state when the changes will take effect.

¹ Content related to disclosure **GRI 2-28: Membership of associations**

5.3.4. Diversity, equality and social action



MILESTONES

- Launch of new initiatives related to **diversity**.
- Development of the **equality and diversity website**, with a suggestions mailbox enabled on the intranet.
- Analysis and development of a pilot project for the Adif AV **women's network**.
- Constitution of the **Negotiating Committee of the II Equality Plan** for Adif AV.
- Advanced level of equality for Adif AV according to the **gender gap** measurement tool of **Target Gender Equality**, the international accelerator programme of the UN Global Compact in which Adif AV is involved.
- Signing of **new collaboration protocols** (Junior Achievement and University of Salamanca) and sponsorship (Global Mobility Call – GMC).



COMMITMENTS

- Undertake **new initiatives on gender equality, work-life balance and inclusion**.
- Negotiate and draw up the **2nd Equality Plan** (adapted to the new legislation).
- Pursue initiatives to **attract female talent** and provide mentoring and support for STEM careers among women.
- Carry out **activities with associations devoted to gender equality, diversity and inclusion**.
- Design **awareness-raising actions on diversity** (functional, LGTBI group, etc.).



Since Adif AV was founded, equality has been one of the hallmarks of the Company and a constant presence in its collective bargaining agreements, plans and regulations and in its relations with society and stakeholders. Adif AV continues to communicate regularly with employees and negotiates and reaches agreements with the elected trade union representatives and on the other committees set up under the terms of the 2nd Collective Bargaining Agreement.

In 2022, the **Negotiating Committee of the 2nd Equality Plan of Adif AV** was set up and the 1st Equality Plan —adapted to new law and regulations— remained in effect, as did two protocols: one against workplace harassment and the other against sexual and gender-based harassment; plus a further two arranged by the Negotiating Committee of the 2nd Collective Bargaining Agreement of Adif and Adif AV.

In recent months, the Negotiating Committee has compiled a large volume of qualitative and quantitative information that can be used to draw up a status report in relation to the 2nd Equality Plan of Adif AV.

Adif AV has always worked tirelessly to break down barriers and carries out actions to raise awareness and ensure the respectful treatment of disability, targeting not only all of its workers but also specific segments within society, with the aim of achieving their full integration into the labour market. In 2022, a virtual event was delivered to the entire workforce titled **“Inclusion Talks”**, with the aim of making further progress in fully integrating this segment of society, which is becoming increasingly numerous at both Adif and Adif AV.



We want to become more and more inclusive by incorporating diverse talent. We therefore work closely with organisations, such as the Plena Inclusión association, which helps to integrate people with disabilities into the company (Eurofirms Foundation). The Company also protects the employment rights of people with HIV (*Trabajando en Positivo initiative*) and promotes full inclusion and a respectful working environment for the LGTBI collective (REDI programme).

In 2022, a commitment to gender equality and diversity was added to the new corporate websites of Adif and Adif AV. We also joined the Network of Companies for a society free of gender-based violence.

When it comes to equal opportunities, it is certainly worth noting that the number of complaints of discrimination in the workplace and the percentage of women to have received training continue to be included in our **corporate responsibility** scorecard

A further highlight during the year was the **third edition of the Lidera** programme, developed by Adif AV alongside the Spanish Royal Academy of Engineering, for the third straight year. The programme is framed within the Women and Engineering project, which aims to promote female leadership and incorporate female STEM talent into management by mentoring female employees of the Company in order to foster and make female talent more visible. The initiative began in February and ended in October.



Under the title *Ellas hacen Adif*, six videos were produced and posted on the intranet, featuring Adif and Adif AV women employees working in professions as diverse as train driver, electrical safety installation fitter, traffic or station supervisor, specialist nurse and infrastructure manager. It is a new channel that aims to raise awareness of the key role played by women within the Company.

With all these actions, the aim is to continue to promote actions and behaviours that champion **non-discrimination between the sexes** in employment, thanks to initiatives included in the 1st Equality Plan and adapted to the new law and regulations or addressed by the **Committee for Social Policy and Equality**

Many of these measures are included in the Programme of Equality Initiatives, with the aim of taking action in the short run to eradicate any evidence of gender discrimination in the workplace. The measures are promoted through a new space on the internal website there to raise awareness and inform all employees about equal opportunities, work-life balance, diversity, inclusion and shared responsibility between mother and father.

The **2030 Strategic Plan** includes commitments to gender **equality** and diversity, in line with the UN Sustainable Development Goals

In addition, the various internal communication channels (Inicia, mails, newsletters or Microsoft Teams cards) have been used to gather relevant information on events, courses and other initiatives related to equality at Adif AV and within the wider national and international railway sector. The information intended for employees remains permanently updated in the Laboralia section of the Inicia Portal.

Adif AV also took part, for the third straight year, in the international **Target Gender Equality** (TGE) programme of the UN Global Compact, achieving a 13 percentage-point improvement with respect to the result obtained in the first edition using the WEPS gender gap analysis tool, and achieving also the advanced level in equality for the first time.



**No instances of discrimination
were detected or reported
at the Company in 2022**
(none detected in 2021)*



The Company aims to prevent potential situations of discrimination not only based on gender, but also targeting social minorities who may be at risk of exclusion from employment (people of any sexual orientation, people with disabilities, people with HIV, transgender people, etc.). Anti-discrimination training, information and awareness-raising are carried out through the Company's intranet and the new equality and diversity website, which also features a suggestion box.

Meanwhile, Adif AV joined the **STEAM Alliance**, together with the Ministry of Transport, Mobility and Urban Agenda (MITMA), to promote careers in science and technology among girls and young women. The ultimate goal is to reduce the gender gap in science and technology careers and to attract female talent to the Company.

The Company also signed a protocol with MITMA and the Ministry of Equality to **promote the Purple Points campaign at stations**, as an instrument in the fight against gender-based

violence, and joined the Responsible Companies campaign of the Trabajando en Positivo network, which works to spread information in a bid to reduce the stigma surrounding people with HIV. It was also involved in drawing up the Manual of Good Practices associated with HIV at state-owned enterprises.

The MITMA and Adif AV are also members of the **Business Network for LGBTI Diversity and Inclusion (REDI)**, which takes action to promote and raise awareness of these causes.

Meanwhile, numerous exhibitions were held under the Adif AV **Estación Abierta** (Open Station) programme, whereby associations and foundations are granted space at Adif stations to promote their causes, free of charge. Many of these organisations fight to defend women and their rights or combat violence against women, in relation to which the Company deepened its support for victims of gender-based violence.



* Content related to **GRI 406-1**: Incidents of discrimination and corrective actions taken

Last but not least, **the Chairwoman of Adif and Adif AV**, María Luisa Domínguez, received **two major accolades** in 2022: STEM woman benchmark in the public sector, awarded by Asociación Multisectorial de Mujeres Directivas y Empresarias (AMMDE), in recognition of her track record, dedication and achievements; and the Railway Awards of international magazine Railway Journal, which in its first edition singled her out for inspiring and bringing about more diverse and inclusive business environments.



Winners in first edition of the AMMDE STEM Awards. Photography: AMMDE

No instances of workplace harassment* were detected or reported at the Company in 2022
(none detected in 2021)

The **Workplace Harassment Protocol** was unanimously agreed upon between the Company and the workers' representatives. Since the last modification in 2021, the investigation unit comprises the head of HR, the corporate trainer and the OHS officer. The Equality Desk may also be involved in the process by requesting reviews of the decisions taken by the investigation unit.



* Content related to **GRI 406-1**: Incidents of discrimination and corrective actions taken



6

SAFETY PILLAR

6. SAFETY PILLAR

6.1. RAIL TRAFFIC SAFETY

6.2. INFORMATION SECURITY (CYBER SECURITY)

6.3. SAFETY AND SELF-PROTECTION

6.4. SECURITY IN WORKING ENVIRONMENT

6.4.1. Occupational risk prevention

6.5. ENVIRONMENTAL SAFETY

The **Safety Pillar** focuses on providing end-to-end safety by improving procedures and deploying new methods and technologies.

Adif works towards “Zero serious train accidents”, “Zero serious occupational accidents among employees” and “Ensuring coordinated and efficient action in the event of an emergency”. Among the actions taken for this purpose and which have been developed are the Annual Traffic Safety Plan, the Workplace Health and Safety Plan/Zero Accident Plan and the Self-Protection and Emergency Action Plan. All this to be achieved by implementing **the Zero Accident Plan, Horizon 2030**.

The main related indicators when it comes to operations are as follows

PILLAR: SAFETY

	2020	2021	2022
Significant accidents caused by the infrastructure manager (No. per million train-km)	0.052	0.021	0
Rail accidents for which infrastructure manager is liable (No. per million train-km)	0.078	0.021	0
Crimes with an impact on activities (No.)	42	118	166
Accident precursors for which infrastructure manager is liable (No. per million train-km)	0.68	0.47	0.55
Deliberate attacks on critical infrastructure (No.)	17	13	12
Occupational accident rate (accidents with lost time/1,000 workers)	0	4.72	4.35
Accident severity rate (days lost/1,000 hours worked)	0	0.01	0.11
Accident frequency rate = ((No. of accidents / hours worked) x 1,000,000)	0	2.80	2.58

6.1. Rail traffic safety¹



MILESTONES

- **Approval of equipment** of new entrant railway operators.
- Identification and control of **operational safety risks**.
- Development and implementation of **safety governance systems**.



COMMITMENTS

- Develop the **5th Zero Accident Plan: Horizonte 2030**.
- Draw up Annual Planning of Preventive Activity – **Annual Programming of the Prevention Service**.
- Automate the **Prevention-based operating procedure for monitoring and control** of OHS.
- Improve **traffic circulation management tools**.
- **Plan RRF work to comply with financing obligations**.

¹ Content linked to Strategic Plan 2030, **Safety Pillar, Objective 1 (PSAF-SO1)**

All risks inherent in rail traffic arising from the operations of Adif AV and other rail operators are suitably controlled, thus fostering user trust in the network. **Adif AV's rail traffic safety is handled by Adif.**

Adif AV relies on leadership, vigilance and risk management when it comes to existing safety and rolling stock documentation. Along these lines, a wide range of monitoring actions are deployed alongside the business areas, thus allowing for continuous improvement and the early detection of deviations.

Royal Decree 929/2020 of 27 October, on railway safety and interoperability, repealed Royal Decree 810/2007 of 22 June, on traffic safety in the general interest rail network, and transposed into national law Directive (EU) 2016/798 of 11 May on railway safety and Directive (EU) 2016/797 of 11 May on the interoperability of the rail system within the European Union.

In accordance with Article 15 of Royal Decree 929/2020, in order to perform infrastructure management functions on the general interest rail network, infrastructure managers must obtain the requisite safety authorisation from the State Railway Safety Agency (Agencia Estatal de Seguridad Ferroviaria). This safety authorisation effectively confirms that the infrastructure manager has established and approved its own safety management system in accordance with Article 13 of Royal Decree 929/2020. It also contains the procedures and provisions set out in that article to ensure that the requirements for the safe design, maintenance and operation of the railway infrastructure are duly met, including, as the case may be, the sound maintenance and

operation of the traffic control and signalling system. On 26 November 2020, Adif successfully renewed the safety authorisation for a five-year period, further to the resolution issued the State Railway Safety Agency, in accordance with Article 18 of the Royal Decree 929/2020.

Accordingly, Adif's **Traffic Safety Management System (TSMS)** is an essential part of the safety management system, providing, inter alia, procedures for managing safety, the distribution of responsibilities, risk assessment and management, aspects related to human factors, promoting a safety culture of mutual confidence and learning, and mechanisms to disseminate information.

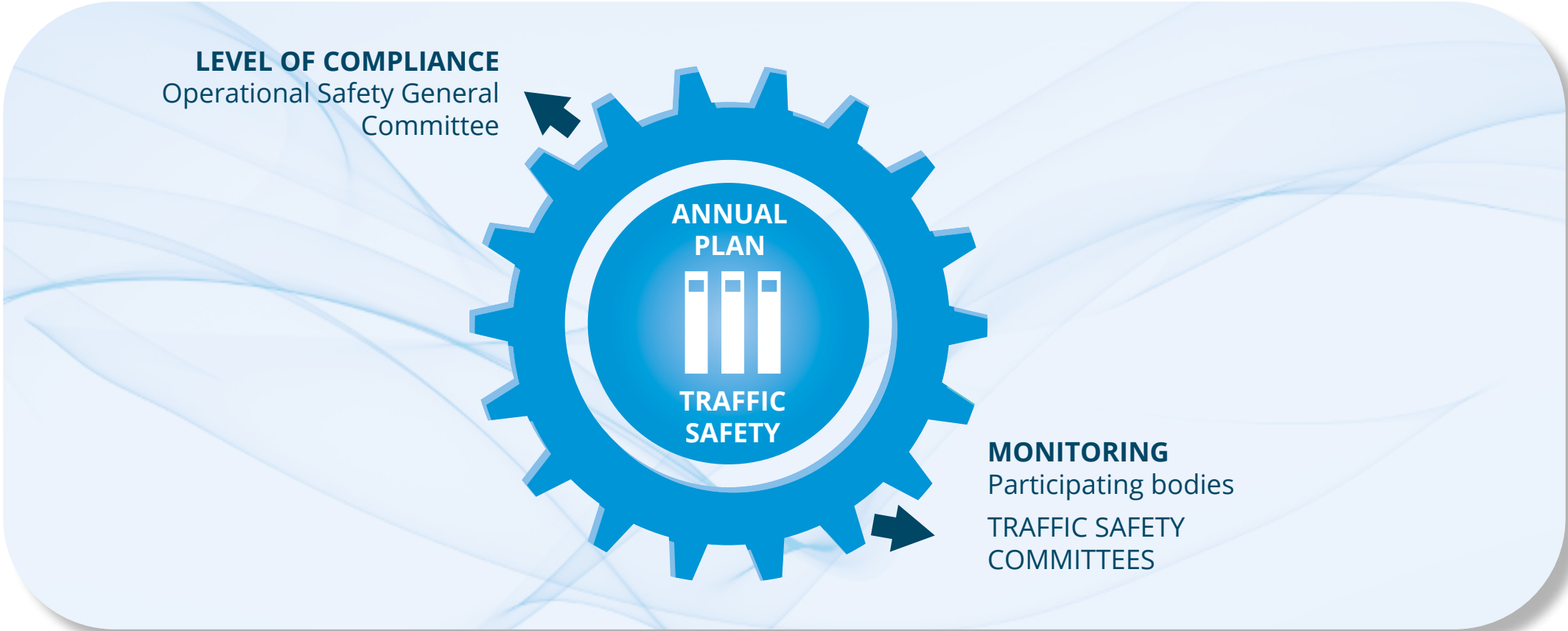
Traffic safety management should be viewed as a cross-cutting function touching all Company departments and an essential need that can only be ensured if everyone individually and collectively gives their best in their day-to-day work, and by promoting initiatives aimed at achieving this single objective. The Company has shown its unflinching support for the national and European regulatory framework by publishing and subsequent updating its **Guideline for the Policy on and Management of Rail Traffic Safety**. This guideline sets out the relevant criteria and organisational standards governing traffic safety management, taking as a reference the criteria contained in Annex II of the Commission Delegated Regulation (EU) 2018/762 of 8 March 2018 establishing common safety methods on safety management system requirements pursuant to Directive (EU) 2016/798 of the European Parliament and of the Council and repealing Commission Regulations (EU) No 1158/2010 and (EU) No 1169/2010.



Following the renewal of the security authorisation granted in November 2020, **further training, information, awareness-raising, supervision and auditing activities** were carried out in 2022 to ensure the effective implementation of TSMS processes and procedures.

To help implement the criteria set out in the Safety Policy, the **Annual Traffic Safety Plan (ATSP)** was approved by the General Operation Safety Committee, where Adif AV Safety Objectives are established, along with programmes and actions to enable their fulfilment.

Follow-up indicators are used to track these objectives throughout the year by the organisational and participatory bodies that make up the governance of their respective TSMS, thus allowing us to detect deviations, draw up action plans and, ultimately, ensure the process of continuous improvement of safety levels at both companies.



Key actions in the domain of rail traffic safety:

SAFETY OVERSIGHT ACTIONS	<p>Adif carries out oversight initiatives to verify the application of, and compliance with, the regulations applicable to its activities and operations, and ensure safety in traffic on the General Interest Rail Network (RFIG) managed by Adif and Adif AV.</p> <p>These oversight actions are part of the 2nd level of traffic safety governance, in order to ensure the effectiveness of, and compliance with, TSMS criteria, especially those included in the regulatory standards for traffic safety in rail traffic in the General Interest Rail Network managed by Adif and Adif AV. A total of 299 such actions were carried out at Adif AV in 2022.</p>
RAIL TRANSPORT CONTROL ACTIONS	<p>In relation to the General Interest Rail Network managed by Adif and Adif AV, a total of 27,323 wagons were weighed by Adif and Adif AV in 2022.</p> <p>Under the scope of the Traffic Safety Plan, 4,765 visual inspections were scheduled for trains running on the RFIG managed by Adif and Adif AV in 2022, with 6,682 actions ultimately carried out.</p> <p>To ensure the safety of train circulation and check compliance with the rules laid down for train composition (towed material), loads and train documentation, systematic and proactive safety-building actions are carried out to detect risk situations before the trains depart from the station and thereafter at the stops they make along the route to their final destination.</p>

OPERATIONAL CONTROL ACTIONS	<p>These control actions are part of the 1st level of traffic safety governance and are there to ensure the effectiveness of, and compliance with, TSMS requirements related to Adif and Adif AV operation and maintenance operations. These operational control actions include safety visits (service/joint/mixed), listening in on conversations in the interests of safety/security and operational audits.</p> <p>Safety visits are used to monitor, among other matters, compliance with regulatory standards, the proper condition of documentation and service-related equipment, the sound running of the facilities and the proper upkeep and repair of the approved rolling stock. In 2022, a total of 351 safety visits were made across the General Interest Rail Network of Adif AV.</p> <p>Meanwhile, voice recordings at command posts and traffic and energy remote control points fitted with voice recorders enable Adif AV to check compliance with traffic safety rules, detect any non-compliance with operating rules and adopt corrective and preventive measures as and when required. In 2022, at total of 567 safety-related voice recordings were made across Adif AV's General Interest Rail Network.</p>
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DEVELOPMENT AND IMPLEMENTATION OF THE TSMS

In line with the TSMS improvement actions set out in requirement 7 of Commission Delegated Regulation 2018/762, the following actions were carried out in 2022:

- **Development and implementation of the TSMS**

Adif continues to develop and implement its Traffic Safety Management System, for which a total of **29 TSMS documents** were approved or updated in 2022. Group-wide multidisciplinary working groups set up.

As part of this system development process, various internal, transversal and multidisciplinary working groups were set up in 2022 to draw up and implement the necessary documentation. These groups include: Group tasked with the management of the General Hazard Register; Group tasked with transposing the risk matrix to the General Hazard Register; Group tasked with drawing up the catalogue of contract-related risks; and Group tasked with the management of the risks of organisational changes due to geographical/functional mobility, including the delegation of powers and remits relating to safety.

- **Traffic safety improvements**

Monitoring actions are carried out to generate valuable input for the continuous improvement cycle in place (Internal audit of the TSMS, AESF audits, evaluation of TSMS maturity, etc.).

- + **Internal audit of the TSMS**, in which 4 non-conformities (NC) and 4 observations (OB) identified in previous audits were closed by the auditor. Meanwhile, 3 NCs remained open and 5 NCs related to the TSMS were identified.
- + **Three safety audits** in traffic and maintenance procedures, with satisfactory results showing that all such procedures had been properly applied and including various recommendations on how to further improve them.
- + **Six meetings of the TSMS Monitoring Subcommittee** were held, involving all areas of Adif and Adif AV. At these meetings, the sound operation of the TSMS was verified and new documentation was reviewed and approved.



TRAFFIC SAFETY GOVERNANCE

Adif AV has an extensive safety governance system in place, which is built into its governance bodies. These governance bodies hold regular meetings to monitor and develop the tasks that fall within their remit, as detailed below:

Joint governance bodies between Adif and Adif AV:

- + Operational Safety General Committee (5 meetings in 2022).
- + Central Technical Committee (8 meetings).
- + Sectoral Committee for Maintenance and Operations (5 meetings).
- + TSMS Monitoring Subcommittee at Adif (6 meetings).

Own governance bodies at Adif AV:

- + TSMS Monitoring Subcommittee at Adif AV (3 meetings).
- + Security Indicators Monitoring Committee (5 meetings).
- + Management and Planning Subcommittee DG Construction and DG Adif AV (2 meetings).

TRAFFIC SAFETY IMPROVEMENTS

Aside from operational control and safety oversight actions, the Company runs numerous surveillance actions to provide valuable input for the continuous improvement cycle in place. Notable **improvement actions** in 2022 included the following: Management Review Report (9 improvement proposals); internal audit of the TSMS (1 Non-conformity and no Observations); AESF audits (4 audits with Adif AV functional coordination); safety authorisation renewal (10 residual problems); accident and incident recommendations (1 CIAF report containing 6 recommendations); AESF technical recommendations (6 recommendations); AESF Circular Resolutions (8 Circular Resolutions); other legislative/regulatory documents/recommendations (103 documents reviewed).

TRAINING ACTIONS

One of the most important thrusts of safety efforts is the training provided, along with the efforts to award, expand, maintain and renew specific qualifications. In 2022, **637 driving licences** of Adif and Adif AV employees were maintained and **13,033 qualifications** were awarded to staff involved in safety activities at Adif, Adif AV and external firms, in keeping with prevailing regulatory requirements.

In addition, **1,511 candidates of external firms seeking qualifications were tested for their theoretical knowledge and 1,414 for their practical knowledge** during the year.

SAFETY-FIRST CULTURE

In 2022, work was carried out on various lines of action envisaged in the **“SIGMA” safety-first culture transformation project**, which is carried out in cooperation with the ERA (European Union Agency for Railways), including a diagnosis of, and training on, human and organisational factors, leadership and fair culture.

LINES OF INITIATIVE SIGMA



LINE 2 HUMAN AND ORGANISATIONAL FACTORS (HOF)

Assessment of all processes that require embedding HOF to reinforce traffic safety.

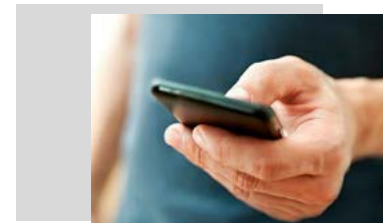


LINE 3 LEADERSHIP

Start-up of the Safety Leadership Plan, reaching all Adif and Adif AV employees.



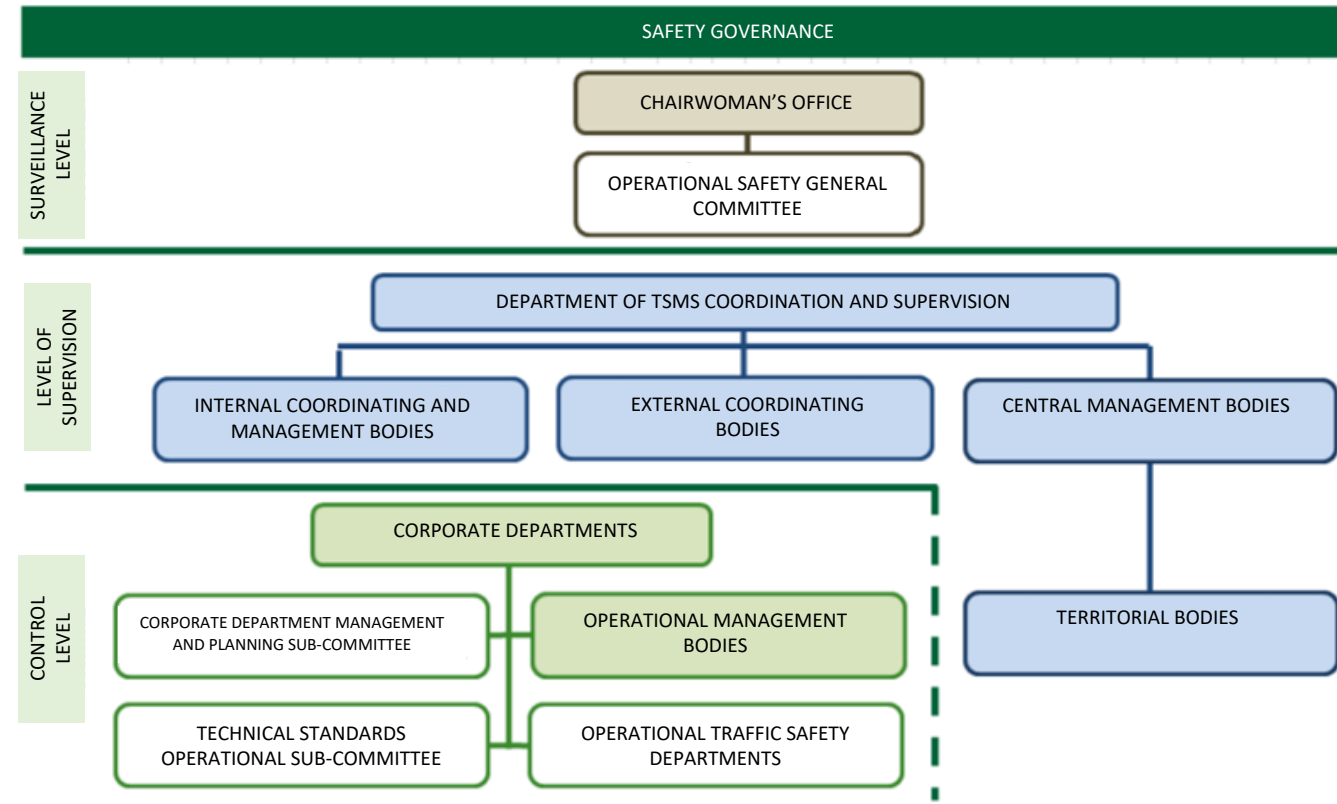
**LINE 4
JUST CULTURE**
Preliminary work to devise a Just Culture Policy, identifying processes to be included.



**LINE 5
REPORTING SYSTEM**
Complete the taxonomy of the NHS and the requirements the system must cover for start-up.

The **Traffic Safety Management Bodies** play an important role in monitoring and analysing compliance with the safety targets envisioned in the Annual Traffic Safety Plan.

**BODIES
COORDINATING
OR OTHERWISE
INVOLVED
IN SYSTEM
GOVERNANCE**



The active involvement and full engagement of staff is a key element in developing a **Positive Safety Culture**, by helping to build trust and fostering cooperation and support in the continuous improvement of traffic safety.

BODIES COORDINATING OR OTHERWISE INVOLVED IN SYSTEM GOVERNANCE

Various **management bodies** have been set up, each with different purviews and functions:



TRAFFIC SAFETY MANAGEMENT BODIES

Different bodies set up for overseeing and controlling the safety of operating activities with the aim of ensuring participation by all staff in the organisation, directly or through their representatives, reinforcing monitoring and achieving continuous improvement in traffic safety.

Based on the traffic safety governance level, area of action and scope, the following Management Bodies have been put in place.



In 2022, a total of **58 meetings were held between the various management bodies**, including eight Central Technical Committee meetings, four meetings of Sectorial Operational Committees for Maintenance and Operations, four meetings of Sectorial Operational Committees for Business and Commercial Operations, and 42 meetings of Territorial Technical Committees for each of the territorial divisions.

Meetings of the various TSMS governance coordination bodies were also held during the period, and the Company was actively involved in various national and international forums in order to share its experiences in traffic safety.

(24H NETWORK MANAGEMENT CENTRE

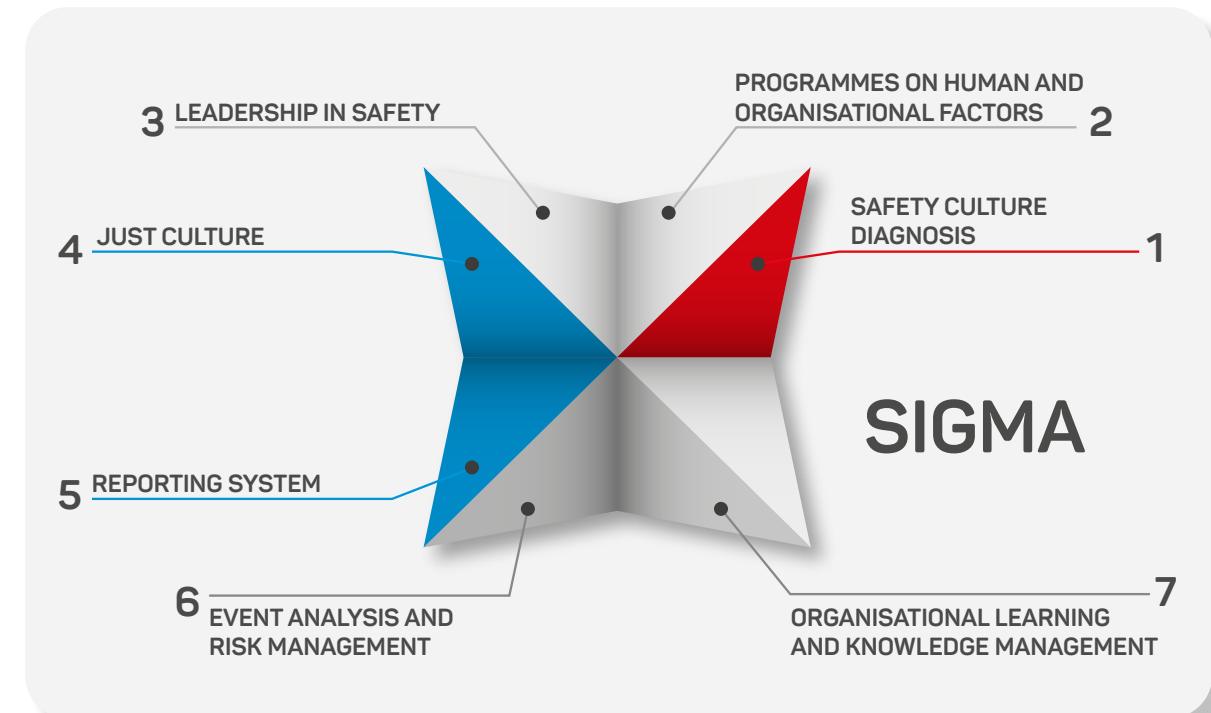
Adif AV has a **24H Network Management Centre**, which operates 24/7 and leads and coordinates the territorial traffic areas. It is the main liaison between Adif's maintenance and construction areas and railway operators to ensure that the temporary capacity restrictions generated by Adif in the RFIG are compatible with the operators' needs, and to resolve any contingencies that may disrupt the normal development of the Transport Plan and the scheduled execution of works and infrastructure projects quickly.

Representatives from the Company's communication and other business areas work there to coordinate actions and share information in real time. The centre shares IS tools with all Traffic areas and any others involved in rail traffic to perform its management and control functions.



(SAFETY-FIRST CULTURE

A safety culture is the way people in an organisation think and do things in a broadly similar way on matters relating to safety. Adif AV shall promote this Safety Culture across the entire organisation by promoting and implementing the **SIGMA Project**.



Figures on casualties during the year are as follows:

INFORMATION ON ACCIDENTS AND CASUALTIES

	2020	2021	2022
No. of traffic accidents ¹	0	3	1
Men killed	0	0	0
Men seriously injured	0	1	0
Women killed	0	0	0
Women seriously injured	0	0	0
Total no. of victims (killed and seriously injured)²	0	1	0

To help implement the criteria set out in the Safety Policy, the Annual Traffic Safety Plan (ATSP) is approved by the General Operation Safety Committee, where Adif AV Safety Objectives are established, along with programmes and actions to enable their fulfilment. Follow-up indicators are used to track these objectives throughout the year by the organisational and participatory bodies that make up the governance of their respective TSMS, thus allowing us to detect deviations and draw up action plans.

¹ Accidents with casualties in the year, of the total number of traffic movements on General Interest Rail Network managed by Adif AV: 2 slight injuries to males (employees) classified as “Other accident” following a collision during interlocking on the route Iniesta to Minglanilla (line 040).

² Accidents with casualties in the year, of the total number of traffic movements along the General Interest Rail Network managed by Adif AV



6.2. Information security (cyber security)¹



MILESTONES

- Termination of the managed **security service agreement** (MNEMO).
- **Annual risk analysis** of the projects to be undertaken by the various business areas.
- **Enhancement of protection and security measures for information systems.**
- Modernising **traffic management tools** (Sitra+).
- Implementation of **Multi Railway Undertaking Time Limits Document** and replacement of the B-Series Consignment with territorial and central zone Speed Limits documentation.
- Creation of philosophy and synergy for **territorial and central analysis of timeliness.**



COMMITMENTS

- **Ensure the integrity, availability and confidentiality of** systems, communications and technologies.
- Draw up a **Safety Action Plan** to increase network protection.
- Undertake the **IT/OT convergence project** to become achieve more cybersecurity maturity.
- Expand the scope of the **IT Security Management** System and work towards compliance with the National Security Framework.
- Increase the **monitoring capacity of the IT/OT infrastructure** across the various networks.
- Implement a **Security Management System at Suppliers**.
- Improving **circulation management tools.**
- **Plan RRF work to comply with financing obligations.**

¹ Content linked to Strategic Plan 2030, **Safety Pillar, Objective 2 (PSAF-SO2)**

We seek to enhance systems protection and security through new **cybersecurity** mechanisms. This ensures that Adif AV's management and operational information systems are protected against intrusion, attacks, unauthorised access and/or damage to the organisation's assets.

Digital transformation leads to more efficient and sustainable processes that yield better business results, although this digital transformation can only be achieved if cyber security is taken seriously.

Cyber security is managed in two key areas:

- Governance, Risk and Compliance (GRC) area, focused on regulatory compliance, risk analysis, risk treatment plans and auditing.
- Operations Area (Managed Security Operations Centre, or SOC for short), which is focused on prevention and detection of attacks and threats, to prevent any security incidents that might threaten Adif AV's information systems (investigation, containment, mitigation and troubleshooting).

Adif AV also has an **Information Security Policy** in place, which includes a statement of principles and objectives to ensure proper management of information security at Adif AV, aligned with the organisation's strategic guidelines and prevailing law and regulations. This policy was signed in October 2019 and is reviewed annually.

The policy applies across the entire organisation and reflects the Company's pledge to uphold and apply the rules and procedures on which the policy is based by ensuring compliance with regulations and its own business requirements.



As stated in the policy, Adif AV shall take into account the following **basic principles** when making decisions affecting information security:

- Security as an integrated process.
- Risk-based security management.
- Prevention, response and recovery.
- Lines of defence.
- Periodic reassessment.
- Security as a discrete function.

All staff —both in-house and external— are required to know and observe the security measures in place within their area of responsibility.

New measures in 2022:

- Technical and operational capacity building:
 - + Team expanded to 8 people.
 - + Deployment of security solutions: 2 Qualys scans for vulnerability management.
- New areas added to the Information Security Management System:
 - + Financial.
 - + Digital Transformation and Systems (SISC).
 - + HR (Training and Planning).

6.3. Safety and Self-Protection^{1,2}



MILESTONES

- Migration to an **intelligent video surveillance system** based on automatic scene analysis.
- Approval of the **Asset Security Policy** tailored to organisational demands and requirements.
- Approval of the **Asset Security Management** process, reflecting Adif AV's responsibility to ensure the safety of people and business continuity and to protect its assets against the threat of deliberate interference and/or deliberate attacks on the railway system.



COMMITMENTS

- No. of **crimes impacting the business**: ≤176.
- No. of **deliberate attacks**: ≤20.
- Percentage of **emergency situations** to have triggered the Self-Protection Plan: 100%.
- **Assessment for the provision of surveillance and security services**: ≥33.

¹ Content related to **GRI 416-1**: Assessment of the health and safety impacts of product and service categories

² Content linked to Strategic Plan 2030, **Safety Pillar, Objective 3 (PSAF-SO3)**

Protection of critical infrastructure means all activities there to ensure the functionality, continuity and integrity of critical infrastructure in order to prevent, mitigate and neutralise any damage caused by a deliberate attack against such infrastructure.

Adif AV is working hard to provide enhanced protection for installations through the use of new technologies. The Company also ensures safety and security at its facilities and infrastructure by implementing suitable incident and emergency systems and protocols in partnership with the relevant government authorities.

The Operator Security Plan of Adif AV is the strategic document setting out the general policies of the critical operator to guarantee the security of all installations



The **7 Specific Protection Plans** for infrastructure classified as critical at Adif AV are the operational documents describing the steps already taken and those to be taken down the line by critical operators to ensure the comprehensive security of their infrastructure. These documents:

- **Identify the levels of risk to which each of the infrastructures is exposed.**
- **Contain action plans for the prevention, management and response to risks that may endanger railway infrastructure.**
- **Plan and coordinate security-related actions.**
- **Enable enhanced protection of railway infrastructure in order to make it more resilient.**
- **Existing plans and procedures have been coordinated and standardised.**

These documents are reviewed every two years.

(SAFETY

In accordance with current legal requirements on the [review of Operator Safety Plans \(OSP\)](#) by critical operators, the third review of the OSP for the critical operator Adif AV—in the Rail Transport and Urban and Metropolitan Transport Subsectors— was submitted to the National Centre for the Protection of Critical Infrastructure (CNPIC) in 2022.

In 2022, the Secretary of State for Security sent Adif, following its review by the CNPIC, its resolution to approve one of the Specific Protection Plans for the infrastructure flagged as critical at Adif AV, meaning full approval.

SAFETY	2020	2021	2022
Administrative complaints submitted (no.)	122	169	149
Criminal charges brought (no.)	325	372	384
Safety inspections performed (no.)	1,183	1,265	1,090
Extraordinary processes carried out (no.)	55	66	46
Instances of aid provided to individuals (no.)	1,036	1,394	2,373
Instances of aid provided to victims of accidents (no.)	125	289	397
Instances of support provided to external entities (security forces and corps, fire brigade, 112, etc.) (no.)	1,433	1,510	1,646
Instances of support provided to railway undertakings (command points, maintenance, stations, etc.) (no.)	1,398	1,392	1,436
Instances of support provided to authorities (no.)	787	4,931	6,101
Detection of banned objects during luggage security controls (no.)	15,314	29,726	72,206
Items of lost property recovered	1,433	2,100	2,516
Score out of 45 in the assessment of the surveillance and security services	39.41	38.94	35.85
Station safety and security projects in which we have participated	55	44	63
Station safety and security projects drawn up	1	1	0

(SELF-PROTECTION AND EMERGENCIES

- **A coordination protocol has been put in place with each of the three existing passenger railway companies** for the management of self-protection and emergencies.
- **A coordination protocol has been set up with each of the 14 existing rail freight companies** for self-protection and emergency management.
- **A coordination protocol has been established with two of the border infrastructure managers** to ensure the sound management of emergencies affecting cross-border rail infrastructure.
- **A coordination protocol has been put in place with the emergency response services operating in an autonomous region of Castile-La Mancha**, for the management of self-protection and emergencies.

SELF-PROTECTION AND EMERGENCIES	2020	2021	2022
Self-protection plans carried out (No.)	29	31	39
Drills carried out (No.)	43	53	53
Inspections of protection assets and installations (No.)	71	89	85
Training sessions for internal and external staff (No.) ¹	143 (con 1,702 learners)	244 (con 2,500 learners)	265 (con 2,845 learners)

¹ Adif + Adif AV

An overall assessment of the quality of the surveillance and security services effectively provided is carried out on a monthly basis. This process takes into account the degree of compliance with the commitments made in relation to the operational organisation of the services offered by the successful bidder. The assessment process is described in the current Technical Specifications for the arrangement of surveillance and security services, which list the various items that must be scored and assign a weighting to each one within the global evaluation exercise, depending on the importance attached to it.

DISCLOSURES ON OUR PERFORMANCE WITHIN SOCIETY AND ON PRODUCT LIABILITY	2020	2021	2022
Assessment of the provision of the surveillance and security services points (points/45)	39.41	38.94	35.85
Deliberate attacks on critical infrastructure (No.)	17	13	12
Reports drawn up on emergency situations to have triggered the Self-Protection Plan (%)	100	100	100
Crimes with an impact on activities (No.)	42	118	166

In 2022, **Adif AV reported 12 incidents qualifying as deliberate attacks against railway infrastructure**, specifically alarms due to bomb threats and suspicious packages or luggage. The security forces had to be alerted in each instance and, in some cases, canine units and the TEDAC bomb disposal unit were required. Meanwhile, there were **166 incidents at Adif AV classified as crimes with an impact on the activity**; more precisely 21 for damage caused to infrastructure, 132 incidents involving the theft of electrical conductors, 7 thefts of railway material and 6 obstacles placed on the track with malice aforethought.

COMMITMENTS	2020	2021	2022
No. of crimes impacting the business	<=200	≤180	≤176
No. of deliberate attacks on critical infrastructure	<=25	≤24	≤20
Reports drawn up on emergency situations to have triggered the Self-Protection Plan (%)	>=90	100	100
Score for the provision of the surveillance and security services	>35	>=36	>=33



EMERGENCY SITUATIONS COVERED BY THE SELF-PROTECTION PLAN

MANAGEMENT UNIT	DATE	TYPE OF FACILITY	LOCATION	DESCRIPTION
EAST	09/01/2022	Station	Valencia, Joaquín Sorolla (CPS Valencia)	UPS fire at CPS
SOUTH	14/03/2022	Station	Malaga, María Zambrano	Catenary disconnection. Smoke in train cabin
SOUTH	09/05/2022	Station	Seville, Santa Justa	Office fire at marker 19.15
CENTRAL	22/06/2022	Station	Chamartín CC station	Build-up of people
NORTH-EAST	08/08/2022	Station	Sants station	Build-up of people
CENTRAL	06/09/2022	Station	Chamartín CC station	Feeder cable fire
CENTRAL	05/12/2022	Building	Offices at c/Títan	Technical room fire

6.4. Security in working environment¹



MILESTONES

- Adherence to the **Luxembourg Declaration**.
- Agreement reached with the **workers' representatives to set of a joint prevention service and the conditions for its implementation.**



COMMITMENTS

- Develop the **5th Zero Accident Plan: Horizonte 2030.**
- Annual planning of preventive activities: **Annual planning of the Prevention Service.**
- Automation of the **Prevention-based operating procedure for monitoring and control** of OHS.



¹ Content linked to Strategic Plan 2030, **Safety Pillar, Objective 4 (PSAF-SO4) and Objective 5 (PSAF-SO5)**

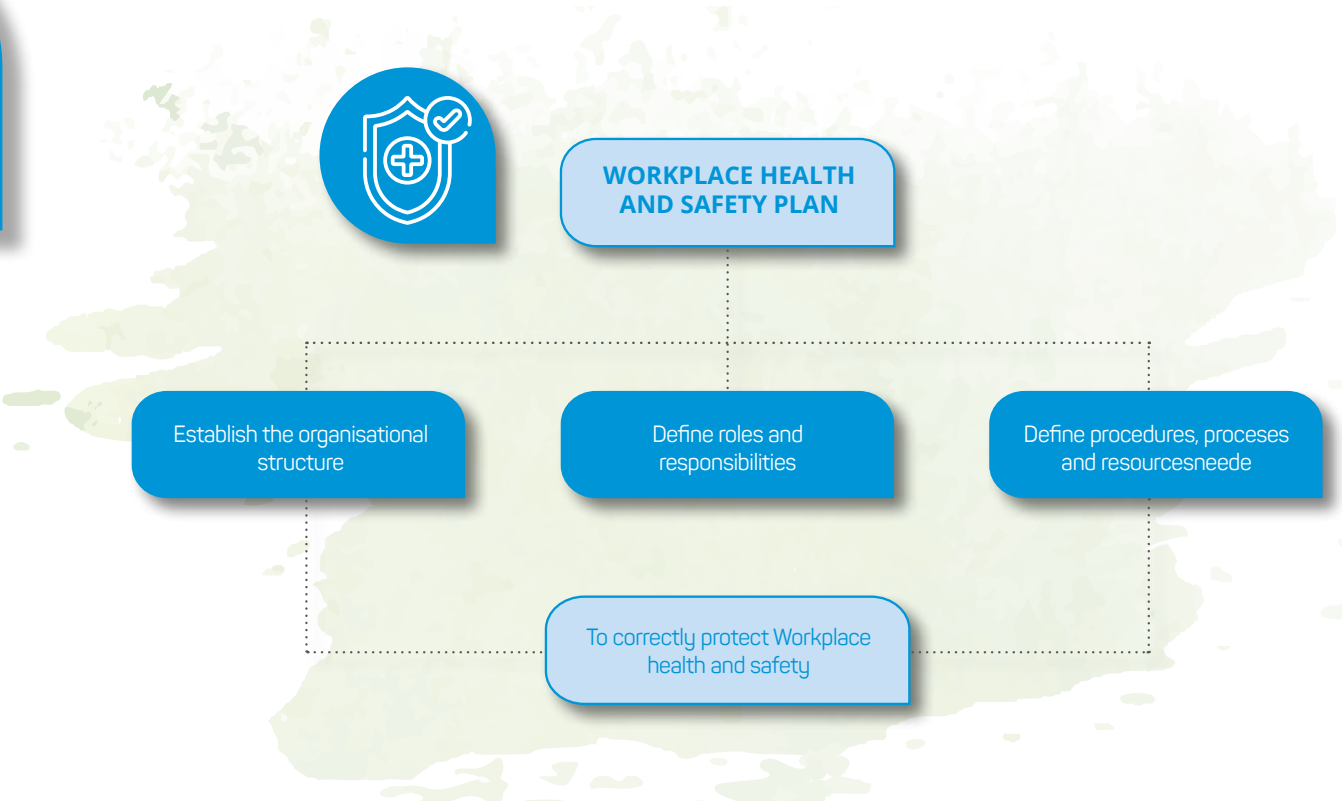
(HEALTH AND SAFETY FIGURES AT A GLANCE



Adif AV views occupational risk prevention as a legal, ethical and social requirement. Initiatives aimed at improving end-to-end safety (operational, environmental, civil protection, occupational health and safety and information security) continue to be deployed under the “safety” strategic pillar of the new 2030 Strategic Plan.

The strategic initiative envisioned in the **5th Zero Accident Plan** will contribute to the fulfilment of the UN Sustainable Development Goals (SDGs) through its associated targets and indicators.

This 5th Zero Accident Plan has been agreed by Adif and Adif AV with the workers’ representatives sitting on the General Health and Safety Committee and the Occupational Health and Safety Committee, respectively, in accordance with Spanish Law 31/1995, on occupational risk prevention. Adif AV also has an Occupational Risk Prevention Plan in place.



Adif AV draws up **plans for its accident prevention** effort annually with various objectives:



When it comes to workplace health and safety, the Company continues to pursue a policy of ensuring absolute safety and security for users and employees through the use of prevention policies. Our strong health and safety commitment covers our own employees and interactions with contractors and suppliers, with whom we cooperate to ascertain and control the related risks, and all others who work alongside Adif AV over the short or the long term.

The aim is to make progress in **improving working conditions**, the **physical and mental** wellbeing of workers, the constant and sustained **reduction of accidents at work and occupational diseases**, and to make **occupational risk prevention** part of all activities and across all hierarchical levels

6.4.1. Occupational risk prevention

Adif AV, in line with its corporate responsibility strategy, which seeks to ensure the comprehensive safety of the railway system and the environment, extends the principles of its Prevention Policy beyond the walls of the Company to permeate its relations with stakeholders. The Company works hard to coordinate its business activities with all contractors and other companies operating at its work centres.

The **main lines of initiative** pursued on the workplace health and safety front in 2022 were¹:

- Adif AV has set up its **Own Prevention Service** as a specific unit within the wider organisation. Its components distributed strategically across the company are devoted entirely to carrying out preventive activities. It provides the necessary assistance and advice to the various departments of the company, to the workers, to the Prevention Officers and to the Health and Safety Committees².
- **Channels of Communication** between the workforce and the company include trade unions and staff representative bodies, which hold regular meetings with the company and cover all areas of the business: general, traffic safety, occupational health, training and labour relations, among other³.

¹ Content related to **GRI 403-5**: Worker training on occupational health and safety and **GRI 403-6**: Promotion of worker health.

² Content related to **GRI 403-1**: Occupational health and safety management system; **GRI 403-3**: Occupational health services; **GRI 403-7**: Prevention and mitigation of occupational health and safety impacts directly linked by business relationships; **GRI 403-8**: Workers covered by an occupational health and safety management system.

³ Content related to **GRI 403-4**: Worker participation, consultation, and communication on occupational health and safety

The **Preventive Policies** of the previous year remain in effect, and work is in progress to update them accordingly for 2023. **Three new principles** will be introduced in relation to:

- Making the gender perspective part of preventive management.
- Health promotion with the aim of improving the physical and mental health and wellbeing of workers.
- Making generational and functional diversity an integral part of the workplace.

In tandem, the Company in continuing to implement the 5th Zero Accident Plan: Horizonte 2023. The concrete measures envisioned under each of the specific objectives or lines of action of the 5th Zero Accident Plan are agreed and planned in response to prevailing needs, priorities and available resources, in the successive Annual Prevention Activity Plans – Annual Programmes of the Prevention Service.

The most relevant occupational risks to which Adif AV is exposed are those typical of office work and in the control and supervision of construction work.

The **Occupational Risk Prevention Plans** remained in effect throughout 2022, and work was carried out to update them for the coming 2023 period. The plans will be reviewed in 2023 due to:

- Commitment to review them every four years.
- Adjustment to the new organisational structure of the occupational risk prevention service, which has been set up as a Joint Prevention Service (JPS), and all that this entails: annual report on the prevention service, regulatory audit, etc.
- Adaptation to the Strategic Plan 2030 (SP 2030) and its new strategic structure: mission, vision, ambition and purpose.
- Updating of the annexes to bring them into line with the current situation: organisational structure of each company, structure and composition of the JPS, 5th Zero Accident Plan: Horizonte 2030 and scope of certification of the Occupational Health and Safety Management System under ISO 45001:2018.
- Adjustments made to the management bodies currently up and running.

- Updates made following the recent accession to the Luxembourg Declaration.
- Prevention Policy of both companies updated.
- Updating to reflect the provisions of the Code of Ethics and Conduct and to explicitly include OHS commitments.
- Reflecting the existence of protocols for responding to harassment in the workplace and instances of sexual and gender-based harassment.
- Changes in internal regulations, and current (and future) OSHMS documents.
- Other minor changes and purely formal aspects.

A total of **64 occupational risk assessments** were carried out in 2022

The **main lines** of initiative pursued on the workplace health and safety front in 2022 were¹:

- Training in OHS: 3,196 training hours delivered.
- Health surveillance: through health check-ups and psychophysical tests.
- In 2022, Adif AV conducted 4 check-ups and 1 psychophysical test.

¹ Content related to **GRI 403-5** Worker training in occupational health and safety and **GRI 403-6**: Promotion of worker health

Key indicators relating to health and safety are as follows::

NUMBER OF OCCUPATIONAL ACCIDENTS BY GENDER¹

			Accidents not sustained while going to or from work	Accidents while going to or from work	Relapses
2020	Men	Lost time	0	0	0
		No lost time	0	0	0
	Women	Lost time	0	0	0
		No lost time	0	0	0
	TOTAL	Lost time	0	0	0
		No lost time	0	0	0
2021	Men	Lost time	1	0	0
		No lost time	1	0	0
	Women	Lost time	0	1	0
		No lost time	0	0	0
	TOTAL	Lost time	1	1	0
		No lost time	1	0	0
2022	Men	Lost time	1	0	0
		No lost time	0	0	0
	Women	Lost time	0	0	0
		No lost time	0	0	0
	TOTAL	Lost time	1	0	0
		No lost time	0	0	0

¹ Content related to **GRI 403-9:** Injuries due to occupational accidents and indicator **GRI 403-2:** Hazard identification, risk assessment, and incident investigation

Key figures relating to the health and safety indicators (frequency rate², severity rate³ and occupational accident rate⁴) are as follows:

		2020	2021	2022
Accident frequency rate	Men	0	2.8	3.48
	Women	0	0	0
	TOTAL	0	2.8	2.58
Serious accident frequency rate	Men	0	0.01	0.14
	Women	0	0	0
	TOTAL	0	0.01	0.11
Occupational accident rate	Men	0	4.72	5.96
	Women	0	0	0
	TOTAL	0	4.72	4.35

ABSENTEEISM

	2020	2021	2022
No. hours lost to absenteeism	9,789	5,513	6,058.41
Absenteeism rate	2.25	1.58	1.52

² Frequency rate = (No. of accidents / hours worked) *1,000,000

³ Severity rate = (No. of days lost / no. of hours worked) *1,000

⁴ Occupational accident rate = (No. of accidents *1,000) / Average no. of workers

In 2022, **3,196 hours of training** were delivered in the form of health and safety courses

DAYS LOST PER WORKPLACE ACCIDENT OR WORK-RELATED ILLNESS

	2020	2021	2022
Men	0	2	41
Women	0	0	0
Total	0	2	41

There were **0 occupational diseases**¹ in 2022 (0 in 2021). Adif AV also has various Health and Safety Committees set up. In 2022, there were **4 meetings of Adif AV's Workplace Health and Safety Committee**², the Company's most senior management-employee body on matters relating to workplace health, safety and hygiene, which issues guidelines and instructions on related matters³.

¹ Content related to **GRI 403-10**: Work-related ill health

² Content related to **GRI 403-4**: Worker participation, consultation, and communication on occupational health and safety

³ Content related to **GRI 403-5**: Worker training on occupational health and safety

Other initiatives pursued during the year:

- In the realm of occupational health surveillance: 4 compulsory health examinations; 1 psychophysical examination
- 64 occupational risk assessments
- 7 ergonomic/psychosocial risk assessments

Other indicators relating to safety in the workplace:

OTHER INDICATORS

	2020	2021	2022
% of employees participating in preventive medicine	3.22	17.06	14.35
Social aid supplement: (€ for medical expenses per employee)	0	167	1,556
No. of fatal accidents of own employees	0	0	0
No. of fatal accidents among contractor personnel	1	2	1
No. of accidents among contractor personnel	208	163	230

In 2022, the **COVID-19 Prevention Programme** in which the Ministry of Health has openly recognised that the Occupational Risk Prevention Services must ensure cooperation with the health authorities— pursued the following actions:

- **Information action plan:** activation of the necessary channels of communication, engagement and consultation, and generation of training and information content.
- **Regulatory action plan:** development of specific procedures, analysis and transfer of external regulations and lines of action defined by the Ministry of Health.
- **Preventive action plan:** deployment of organisational measures, provision of specific personal protective equipment, collective protective action in buildings/ units, ventilation and air conditioning requirements, diagnostic tests, etc.

To ensure the continuity of the public railway service, the occupational health unit attached the occupational risk prevention service had to adapt its usual approach — more precisely how it handles the “study and handling of contacts”— to the Strategy for the surveillance and control of COVID-19 following the acute phase of the pandemic, as established by the Ministry of Health.

(**ADIF AV AND STATION OPERATION AMID COVID-19**

In November 2022, the compensation process for the COVID-19 health crisis was completed in the form of rent relief.

At 31 December 2022, **there were no legal claims related to COVID-19 rent relief.**

The Ministry of Health has granted and openly acknowledged that the Occupational Risk Prevention Services are responsible for cooperating with the health authorities in adapting their activities with the overriding objective of limiting the spread of the coronavirus.



6.5. Environmental safety¹

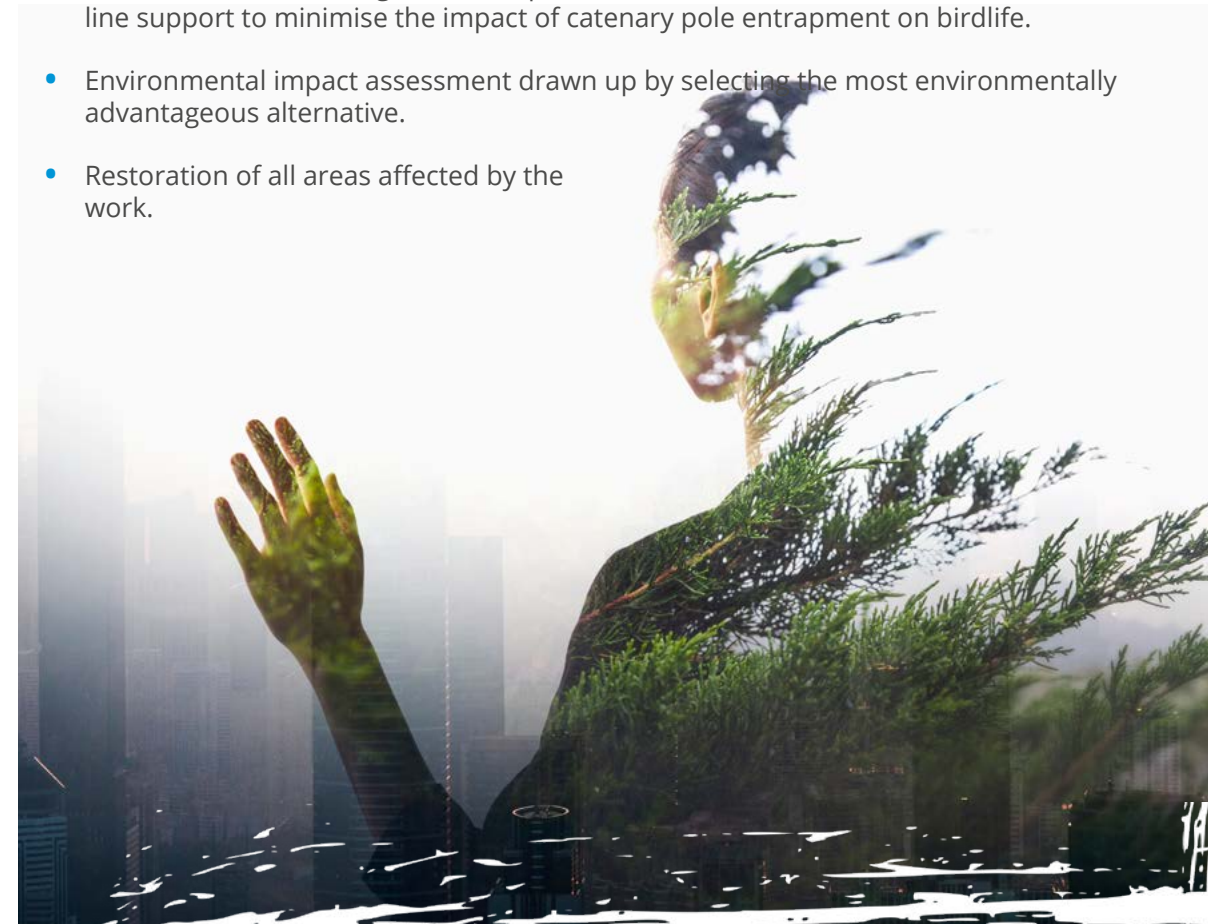
Adif AV ensures compliance with **protective and corrective measures** for the sound environmental and landscape integration of its infrastructure within the framework of the Integrated Management System. In doing so, it reports on all actions taken through a system of environmental integration indicators and EIS compliance, both in the construction phase and during subsequent monitoring activities following acceptance of the project.

The aim is to enhance **environmental protection** by augmenting and improving our preventive measures

Highlights during the period in relation to the **protection of Biodiversity**:

- Pilot project launched to monitor the effectiveness of the eco-pipeline for wildlife, achieved through video surveillance systems.
- Protocol drawn up to identify and remediate parts of the infrastructure likely to cause bird deaths through electrocution.
- Collaboration in the implementation of improved acoustic screens to minimise bird deaths and injury through collision with transparent screens.

- Catalogue of preventive measures drawn up for the water environment to be applied when constructing related infrastructure.
- Collaboration in defining technical specifications for metal structures for overhead contact line support to minimise the impact of catenary pole entrapment on birdlife.
- Environmental impact assessment drawn up by selecting the most environmentally advantageous alternative.
- Restoration of all areas affected by the work.



¹ Content linked to Strategic Plan 2030, **Safety Pillar, Objective 6 (PSAF-SO6)**

- Coordination with the competent administrative bodies to minimise the impact on biodiversity.
- Restrictions placed on construction work in order to minimise impacts on the most sensitive areas.



- Translocation of specimens to ensure their survival.
- Measures implemented and monitored to minimise the impact on Biodiversity.

- Annual follow-up reports drawn up on restoration and transplantation measures with recommendations based on effectiveness/cost.
- Replenishment of nesting or breeding substrates for species present in the areas affected.
- Monthly monitoring of on-site non-conformities considered to carry an environmental risk, and communication methodology put in place to speed up the resolution of the underlying deficiencies or shortcomings.
- Periodic reports required by the EIS reviewed to verify EIS compliance and effective implementation of the necessary corrective measures.
- Meeting held every four months on relevant incidents detected on site, at which the corrective measures to be adopted are determined.

The main environmental impacts of Adif AV's activities are land occupation, increased noise levels and, to a lesser extent, the risk of collision with birdlife and habitat fragmentation. Corrective action is taken to minimise these impacts, including the installation of screens and the construction of wildlife crossings.

Aside from mitigation measures, **offsetting measures** are sometimes implemented, including:

- Collaboration in the implementation of improved acoustic screens to minimise bird deaths and injury through collision with transparent screens. Catalogue of preventive measures drawn up for the water environment (surface and groundwater) to be applied when constructing related infrastructure.
- Support in implementing metallic structures to minimise the risk of birds becoming ensnared with the catenary poles.

Indicators related to Biodiversity are provided in the appendix under "Environmental information."



7

SERVICE PILLAR

7) SERVICE PILLAR

7.1. EXPECTATIONS AS TO PERCEIVED QUALITY

7.2. AID PROVIDED

The **Service Pillar** makes the Company's activity society-centric through **Connectivity, Mobility and Social Welfare**.




- **Incident management and coordination in the scheduling** of work to minimise the impact on traffic and therefore the social impact, following deregulation of the sector.
- New railway undertakings included in the **Incentives System**.
- Optimisation and awarding of the **new rent-a-car contract**.
- Optimisation of the **advertising business and award of the new contract**.
- Development of the **Ecomilla Project: Secure Bicycle Parking**.



- Improve **traffic circulation management tools**.
- **Planning of RRF work** to comply with financing obligations.
- **Manage RRF funds** in those components affecting stations.
- Further progress to be made in **developing the New Commercial Operating Model**:
 - + Implement the New Intelligent Customer Relationship Model (CRM Platform).
 - + Define the new car park operating model.
 - + Implement the national secure bicycle parking network.

The **main indicators** linked to this pillar within the operational dimension are:

PILLAR: SERVICE

	2020	2021	2022
Passenger transport liberalisation (Train-km share of LD/HS services of the new rail undertakings with respect to the single operator) ¹	N/A	4.75	6.86
Installation reliability (No.)	2,703	2,819	2,902
Installation availability (Minutes)	73.77	51.76	54.37
Track quality (Ratio)	99.10	99.17	98.64
High-speed lines commissioned (km)	123.6	162.6	269
HS expenditure executed in construction work (ratio of executed expenditure to internal budget)	1.10	1.95	1.39
 Urban integration (€M in cumulative investment made) (excluding VAT) ²	4,230.36	4,408.51	4,555.28
Commercial activity at stations (€M in commercial revenues) ¹	N/A	17.44	18.84

¹ Adif + Adif AV

² Aggregate data for Adif and Adif AV, considering the contributions made by Adif, Adif AV and the other entities or administrations taking part in the urban integration projects under the agreements signed.



7.1. Expectations as to perceived quality¹

PRIORITIES IN RELATION TO PASSENGER FOCUS



SERVICE



SAFETY



ACCESSIBILITY



SATISFACTION

Adif AV receives complaints regarding breaches of customer privacy and loss of customer data and related to users of the railway system, railway operators, customers, companies and governments of other countries. There are various **channels in place to ensure communication and transparency** (customer service offices, telephone numbers, email and postal addresses, website, meetings with citizen representatives, social networks, etc.).

Complaints, claims and suggestions related to potential violations of legal or other requirements, incidents or deviations help Adif reach out to its customers, learn more about their expectations and detect ways in which it can manage its stations better. They can be submitted at the Passenger Support Offices at the stations themselves or, in some cases, by e-mail.

Adif AV listens closely to its customers¹ views about the company and therefore carries out a study to determine **perceived quality**:

PERCEIVED QUALITY SURVEYS

	2020 ²	2021	2022
Perceived quality at stations (points/10)	-	7.83	In progress ³
Perceived quality in freight transport (points/10)	-	-	- ⁴

² No perceived quality surveys were conducted in 2020 due to the COVID-19 pandemic

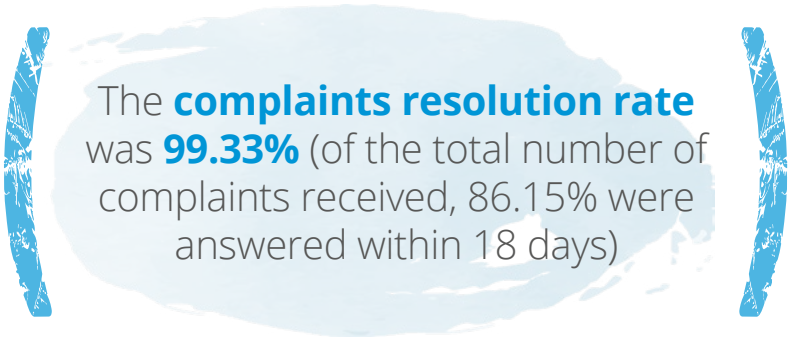
³ Survey conducted between November and December 2022. Data analysis is ongoing

⁴ No surveys are conducted as there is no need for a separate survey for the two network ownerships. The survey is the same for Adif and Adif AV, as there are no substantial differences warranting a specific survey. It is expected to be carried out again in 2023 once the situation has returned to normal. It will be performed over three years.

¹ Content linked to Strategic Plan 2030, **Service Pillar, Objective 2 (PSER-SO2)**

Lessees of the commercial establishments found at our stations were not asked to complete any satisfaction survey in 2022^{1,2} because the COVID-19 pandemic led to a reduction in the number of passengers at stations. This reduction in passengers also meant that many of the stores operating at the stations remained closed during the period. Therefore, it is concluded that the results obtained would not reflect the true levels of satisfaction, needs and expectations of the merchants.

Adif also operates a **grievances and suggestions service** to facilitate communication with customers and helps it to understand their expectations and detect areas where management can be improved, while establishing a protocol for the correct handling of any incidents. It uses a dedicated **IT tool** known as **RECLAMA** to manage all cases. Users receive responses either in writing at their mailing addresses or via email. In addition, aggrieved customers can enter their complaint in a book available at the Passenger Services Offices or in some cases send an email to convey their grievance. Adif AV also remains in close contact with customers through its presence on social media platforms (Facebook, Twitter and Instagram). It also provides a contact form on its website.



In 2022, claims, complaints and suggestions were also handled through the **Adif Acerca Service**.

¹ The deregulation process has accelerated the adaptation of major stations to the future challenges they face in coping with a significant increase in commercial passengers.

² Content related to **GRI 418-1**: Substantiated complaints concerning breaches of customer privacy and losses of customer data

Key information on claims and complaints received is as follows:

RECLAMACIONES RECIBIDAS EN ESTACIONES DE VIAJEROS⁴

	2020	2021	2022
No. of claims	1,003	1,866	3,653

COMPLAINTS RECEIVED BY TOPIC

	2020	2021	2022
Outsourced customer service	1	2	50
Adif Acerca support service	0	338	829
Outsourced information	0	0	0
Safety	283	464	593
Commercial services	61	33	57
Equipment	153	280	619
Facilities and accessibility	331	476	1,015
Customer service	49	52	126
Station commerce	4	4	9
In-station information	121	217	355
International information and bookings	0	0	0
Information, booking and nationwide ticket phone sales	0	0	0

⁴ Adif + Adif AV

A record is also kept of all **suggestions** received, revealing the following key figures:

SUGGESTIONS RECEIVED AT PASSENGER STATIONS*

	2020	2021	2022
No. of suggestions	87	65	154

SUGGESTIONS RECEIVED BY TOPIC*

	2020	2021	2022
International information and bookings related suggestions	0	0	0
Adif <i>Acerca</i> support service	0	11	19
Commercial services related suggestions	15	0	15
Security related suggestions	4	3	5
Station information related suggestions	6	6	12
Customer service related suggestions	3	2	8
Equipment related suggestions	17	21	45
Installations and accessibility related suggestions	42	22	49
Station sales related suggestions	0	0	0
Outsourced information related suggestions	0	0	0
Outsourced sales related suggestions	0	0	0
Outsourced customer service related suggestions	0	0	1

* Adif + Adif AV

PROVISION OF COMPREHENSIVE MAINTENANCE SERVICES AND AUXILIARY AND ADDITIONAL EXTERNAL SERVICES (ACA) AT PASSENGER STATIONS

The trend towards centralisation of facility maintenance contracts and cleaning contracts continued throughout the year, with contracts grouped into territorial areas by sub-department or station manager, thus allowing Adif AV to reduce the total number of contracts.

Meanwhile, maintenance services relating to station operation systems continued to be managed during the period, specifically the maintenance contract for the equipment and software associated with the gauge control system at the Madrid–Puerta de Atocha–Almudena Grandes and Barcelona Sants stations, and the maintenance contract for the **DENEVA passenger information system** software at **59 stations**.

Turning to **maintenance contracts** in force, there were no significant incidents, with the following three contracts being significant in terms of scope:

- Provision of Comprehensive Maintenance Services at Passenger Stations**, a single contract awarded in 6 lots, one for each station sub-division, and which began in the fourth quarter of 2021 and covers maintenance needs at all passenger stations. The work has led to various improvements. For instance, it has increased its capacity to carry out scheduled maintenance, shortened response times to corrective actions detected, enabled maintenance work in areas outside the station building and platforms, improved information on the inventory of existing assets at stations, allowed the Company to implement management monitoring using a computer tool (provided by the awarded companies), and allowed for visits to be made to suburban commuter stations managed by Adif but which fall outside the scope of the management mandate entrusted to Renfe.
- Maintenance of the hardware associated with the ELCANO passenger information system**, through a single contract comprising six centrally managed lots, covering 270 stations and allowing the Company to improve the functionality of the hardware and the reliability of the system, including equipment replacement activities and coordination with the ELCANO software support office. This is managed via a software package that ensures and preserves all the processes and documentation associated with the various planned actions and corrective maintenance.

- **Comprehensive maintenance of escalators and escalator ramps installed at passenger stations**, through a single contract comprising six lots and covering 345 pieces of equipment located at 35 main stations. It ensures the mobility of customers as they move through the stations and encompasses corrective action as and when needed. In 2022, this sometimes meant responding to significant breakdowns of equipment caused by meteorological phenomena (flooding at the station) or due to the age of certain hardware, meaning that major components had to be replaced so as not to compromise safety.



In relation to maintenance services, **a facility reliability indicator** was set up, covering 373 directly managed stations (not including commuter train stations or the metric gauge network). In 2022, the score was 84.08% (83.57% at year-end 2021). In addition, an **indicator measuring the uptime of essential** equipment was also established, covering 12 main stations. In 2022, the score was a provisional 98%, pending final data (97.84% in 2021).

At **stations owned by Adif AV**:

- Maintenance included in **gauge control** at 2 stations.
- Maintenance included in **SIV DENEVA** at 29 stations.
- Maintenance of **escalators** at 27 stations.
- Provision of **comprehensive maintenance services** at 46 stations.

(SERVICE IMPROVEMENTS

Work was tendered out in 2022 for the equipment and operating systems of the **Station Nerve Centre (SNC)** and further actions at the stations for remote management.

The station nerve centre will provide operation and maintenance services to all passenger stations and is designed with future capacity in mind so that a full suite of services can be provided at commuter stations.

EFQM QUALITY CERTIFICATES, 500+ SEALS OF EXCELLENCE AND ISO ASSURANCE

Adif AV has renewed **the EFQM 500 standard** for its excellent, innovative and sustainable management model based on the EFQM (European Foundation for Quality Management) Excellence model for the year 2022, **valid until 2025**. When it comes to the various certifications and seals of excellence held by the company, Adif AV is certified under the following standards: ISO 9001 — Quality management, ISO 14001 — Environmental management, ISO 45001 — Occupational health and safety, ISO 166002 — RD&I management, ISO 27001 — Information security management and ISO 200001-1 — Information technology. It also runs the pertinent legal audits, such as the one required under the Occupational Risk Prevention Regulations (RD 39/1997) and others for its construction, maintenance and operation management.

Those **certifications have the following scope**:

- **EFQM 500+ Seal of Excellence.** All of Adif AV.
- **STANDARD: ISO 9001**
 - + Management of the construction, maintenance and operation of the general interest rail network (RFIG).
 - + Management of the construction, maintenance and operation of the high-speed rail network comprising the RFIG.
 - + Centres of operation: All of Adif AV



- **STANDARD: ISO 14001**

- + Control and oversight of compliance with the environmental conditions set down in Adif's environmental impact statements, its environmental oversight plans and the requirements applicable to its rail infrastructure and facility construction activities.
- + Management and coordination of research studies and projects related with rail infrastructure and facilities.

- **STANDARD: ISO 27001**

- + The information systems supporting the operating service of Adif's Information Systems and Technology Department, in accordance with the applicable statement in force.

- **STANDARD: UNE 166002**

- + Research, development and innovation in railway technology.

- **STANDARD: ISO 170001-2**

- + Transit of disabled persons and/or persons with reduced mobility from/to the meeting point at Adif and Adif AV railway stations of origin and destination, covering such aspects as access, route and boarding/disembarkation and accompaniment in getting to the assigned seat, when such persons travel on Rail Operator trains between the stations listed in the annex of the certificate.

It should be noted that it is not only the ISO 9001 standard that requires the control of outsourced processes, products and services. All management system standards and regulatory provisions featuring a high-level structure insist on this requirement.

7.2. Aid provided¹



MILESTONES

MERGER AND OTHER CORPORATE GROUP TRANSACTIONS²

- Signing of an **agreement for the performance of construction work on the Valencia Phase 3 Access Canal**.
- Signing of **Protocols for railway integration in Bilbao and Vitoria**.
- Signing of **further addendum** for the performance of construction work resulting from the transformation of Valladolid arterial railway network.
- **Signing of an agreement to transfer the installations and facilities** of El Portillo station to Delicias station (Zaragoza).
- **Signing of the Participating Loan** for the Alicante railway integration plan and adjustments made to the maturities of the loans granted to the companies Palencia AV, Valencia Parque Central and Logroño Integración del Ferrocarril.
- Collaboration with other divisions of the state-owned enterprise to bring about the eventual **commissioning of the work to be carried out under the railway integration actions**, such as the arrival of the high-speed train at Murcia station or the inauguration of Sant Andreu Comtal station.

¹ Content linked to the Strategic Plan 2030, **Service Pillar, Objective 1 (PSER-SO1), Objective 3 (PSER-SO3), Objective 4 (PSER-SO4), Objective 6 (PSER-SO6), Objective 7 (PSER-SO7) and Objective 8 (PSER-SO8)**.

² Content linked to Strategic Plan 2030, **Service Pillar, Objective 4 (PSER-SO4)**.

In relation to the positioning of the **Corporate Group**, Adif AV works hard to play a meaningful role in the management of its investees and regularly analyses the competitive, economic, legal, operational, social, sustainability and environmental benefits and rewards of continuing to hold a stake in such companies.



MERGER AND OTHER CORPORATE GROUP TRANSACTIONS

Within the scope of the Corporate Group:

- Formulate a **purchase offer** targeting the shares of the other **REDALSA** owners.
- **Extinguish NECSA**. Collection of debts due to the granting of credit to Adif AV.

In relation to railway integration actions:

- Draw up the annual calendar **for technical committee meetings in relation to the railway integration corporations** in order to avoid possible incidents or delays that could lead to a loss of reputation.
- Draw up a document mutually agreed between the parties involved setting out the **technical conditions for the actions to be carried out by third parties** on the plotting of the railway.

- Implement the **economic commitments** made under the urban integration plans for **Alicante, Murcia and Valladolid**.
- Adjust the **maturities of the participating loans** granted to **Valencia, Logroño and Gijón**.
- Standardise the **economic commitments made** under the urban integration plans for **Barcelona, Murcia, Valencia and Valladolid**.
- Sign the **protocol for railway integration in Cartagena**.
- Sign the **agreement for the integration of Phase 2 – Almería**.



MILESTONES

COMMERCIAL OPERATION AND ACTION AT STATIONS¹

- Signing, optimisation and award of the **new Rent-a-car contract**.
- Optimisation of the **advertising business and award of the new contract**.
- **Ecomilla project** implemented at stations: **Secure Bicycle Parking**.
- **Deregulation of passenger transport** (passenger stations): deadlines set under the various framework agreements signed with railway undertakings for the allocation of capacity.
- Station accessibility **Adif ACERCA service**.
- Action Plan to improve **crossings between platforms**.



COMMITMENTS

COMMERCIAL OPERATION AND ACTION AT STATIONS

- Further progress to be made in developing the **New Commercial Operating Model**:
 - + Implement the New Intelligent Customer Relationship Model (CRM Platform), including digitalisation
 - + Define the new car park operating model
 - + Implement the national secure bicycle parking network

¹ Content linked to Strategic Plan 2030, **Service Pillar, Objective 8 (PSER-SO8)**

(PROJECT ECOMILLA AT STATIONS¹

The *Ecomilla* Project aims to **make it much easier and more sustainable for passengers to travel door-to-door** (from origin to station and from station to destination) using an **energy-efficient, zero-emission** form of transport.

To succeed in this task, the aim is to make the station a friendly space that achieves the strategic objective of improving the customer experience and enabling **intermodality between the various forms of transport**, so that passengers can choose the best alternative when making their decisions, thus reducing levels of uncertainty and delivering what is known as **mobility on demand**. Adif AV is currently designing an area where different sustainable mobility vehicles will be integrated (zero-emission, vehicle sharing/pooling), along with electric charging stations, secure bicycle parking, last-mile delivery, etc.

The aims are:

- A) Economic:** reduce the use of polluting vehicles and own vehicles. Pollution is a source of economic inefficiency by requiring additional resources. Efficient and sustainable mobility frees up resources for other, more necessary pursuits.
- B) Social:** managing demand and increasing the well-being of travellers and citizens, while also encouraging change in individual behaviours to achieve a new collective balance between travel and quality of life.
- C) Environmental:** reducing air and noise pollution, recovering public spaces in the city and combating climate change.

In January 2022, Ineco embarked on the Consultancy and Technical Assistance project to support the task of managing the various actions to be carried out under Ecomilla.

The Company is currently adapting the project (alignment of the Adif AV mobility strategy, standardisation of stations, etc.), which will ultimately allow the model to be adjusted to the various existing types of stations and to the demand for zero-emission mobility at stations.

The *Ecomilla* Project will allow for the creation of a **sustainable, modular and flexible mobility** model, fully adapted to the various station types and depending on the mobility requirements of each station at which the model is being implemented.

Main milestones reached in 2022:

- Meetings with the various agents/operators involved.
- Specific study of the constraints specific to each location: electrical power required,



spatial and surface constraints, access restrictions, relationship with the station building and with the city.

- Definition of the three pilot projects to start in the second half of 2023: Madrid Chamartín – Clara Campoamor, Madrid Puerta de Atocha and Seville Santa Justa.

¹ Content linked to Strategic Plan 2030, **Service Pillar, Objective 1 (PSEV-SO1)**

SECURE BICYCLE PARKING

This initiative is part of the *Ecomilla* Project, which aims to create a national network of safe parking facilities at stations operating under a single management model to **promote intermodality and rail-bicycle integration**.

In September 2022, the contract for the lease of spaces where to implement, run and maintain the secure bicycle parking project was put out to tender.

In January 2023, the contract was awarded to a joint venture comprising FCC Medio Ambiente, Don Cicleteo and Benito Urban for a fixed amount of €109,284 (€62,448 for Adif and €46,836 for Adif AV), plus 21% in variable revenue.

The following **high-speed stations** are covered by this contract:

ALICANTE	OURENSE
ALBACETE LOS LLANOS	PALENCIA
BARCELONA SANTS	PONTEVEDRA
CÁCERES	PUERTOLLANO
CASTELLÓN	SANTIAGO DE COMPOSTELA
CIUDAD REAL	SEGOVIA GUIOMAR
CORDOBA	SEVILLA SANTA JUSTA
CUENCA FERNANDO ZOBEL	TOLEDO
GRANADA	VALENCIA JOAQUIN SOROLLA
LEÓN	VALLADOLID
MADRID PUERTA DE ATOCHA	ZAMORA
MÁLAGA MARÍA ZAMBRANO	ZARAGOZA DELICIAS

The **main features** of this contract are as follows:

- A **national network with a single management model** is to be set up, extending the lessons learned from the pilot project to **42 Adif and Adif AV stations**.
- The parking area will be **located close to the station entrances**.
- They will be **safe and versatile spaces** and may offer additional services.
- The **structures or modules** will be **removable linkable**, lockable, theft-proof, vandalism-proof and suitable for heavy use, and will also protect the bicycles from adverse weather conditions. They will also feature electromechanical unlocking and locking mechanisms at the access points, and smart access control via an app, allowing only registered users to enter the car park.

The new contract will run **for 10 years**.



Meanwhile, the contract for charging stations at stations (Ecomilla Project) has been put out to tender, through the supply, installation, legalisation, **operation and maintenance of 1,079 electric vehicle charging stations at the car parks of 80 Adif and Adif AV stations.**

The work is one of the necessary actions to be carried out under the PLCCC 2022 Implementation Plan, which Adif and Adif AV are to perform in order to promote the deployment of electric vehicle charging infrastructure by **installing electric vehicle charging stations** in car parks located at passenger stations.

The actions may be co-financed with funds from the Recovery and Resilience Facility (RRF) within the broader framework of the **NextGenerationEU** temporary recovery instrument, as adopted by the European Council in July 2020 and implemented in Spain through the Recovery, Transformation and Resilience Plan (NRRP), which was passed via Resolution dated 29 April 2021, of the Undersecretariat, publishing the Agreement of the Council of Ministers of 27 April 2021. The tender will take place during 2023.

(STATIONS. DIGITALISATION OF THE PROCESSES AND PROCEDURES OF THE COMMERCIAL OPERATIONS DEPARTMENT. IMPLEMENTATION OF CRM AND CONTRACT MANAGEMENT TOOLS¹

In the last quarter of 2022, the specifications for the **New Intelligent Customer Relationship Model (CRM Platform)** were drafted alongside the Digital Transformation and Systems Department.



Tendering was arranged through MITMA's Dynamic Procurement System.

In December 2022, the specifications were validated by the Procurement Department and are currently awaiting a confirmation report from MITMA prior to publication.

Publication of the tender and implementation of the new intelligent customer relationship model (CRM) is expected to take place in the second half of 2023.

- Digitalisation and innovation
- Station Nerve Centre and actions at stations geared towards remote management

In 2022, the project was drafted and **actions carried out in relation to the equipment and operating systems needed for the Station Nerve**

Centre and to enable remote management of the stations, following approval of the dossier on 27 May 2022. The tender was published on the Public Procurement Platform on 17 October 2022 and on 22 October 2022 the tender announcement was published in the Official State Gazette. Bids may be submitted until 18 January /2023.

The contract budget is €28,33,065.14, which includes covering technological needs on the premises where the Station Nerve Centre will be located, at the Valdebebas station, and includes **actions directly targeting technological equipment for a total of 500 stations.**

The station nerve centre will provide **operation and maintenance services to all passenger stations (637)** and is designed with future capacity in mind so that a full suite of services can be provided at commuter stations.

- Scope at Adif AV: **46 stations**
- Budget for actions at Adif AV stations: €2,798,019.68

¹ Content linked to Strategic Plan 2030, **Service Pillar, Objective 1 (PSEV-SO1)**

(SHARED ASSET MANAGEMENT PLATFORM (BIM MODEL)

- Collaboration on the initiative to define a common model for asset management, especially in relation to the project to implement a common technological platform, which was put out to tender in the previous year.
- Collaboration on the project to implement Adif AV's BIM model, including the acquisition and implementation of technological products, some of which are already available, as is the case of the basic common data environment for the deployment of the entire platform or the promotion of a corporate topological model

(DEREGULATION OF PASSENGER TRANSPORT (PASSENGER STATION AREA-COMMERCIAL OPERATION)¹

In 2022, the deadlines set out in the various framework agreements signed with the *railway companies* for the allocation of network capacity were duly observed.

Spain is **the first European country** to have three railway companies providing high-speed services. At 31 December 2022, **RENFE** and **OUIGO** were operating on the Barcelona and Levante rail corridors, while **IRYO** was running on the Barcelona rail corridor

In the 2021/2022 Service Timetable, aside from Renfe and Ouigo, the third operator Ilsa (Iryo for commercial operations) joined the fray, requesting capacity to operate for the first time from 25 November along the Madrid Puerta de Atocha– Almudena Grandes–Barcelona-Sants corridor and, from 16 December, along the Madrid–Valencia route. Meanwhile, Ouigo, having already been running service on the Madrid Puerta de Atocha– Almudena Grandes–Barcelona-

Sants corridor since May of last year, began to run between Madrid and Valencia. As for Renfe Viajeros, after starting up its low-cost service, Avlo, on the Madrid–Barcelona corridor in 2021, extended its services by taking on the Madrid–Valencia route in February 2022. As of 11 December, rail operator SNCF, more precisely for its commercial product INOUI, began running the Barcelona-Paris route.



According to the latest quarterly activity data published by the Spanish National Markets and Competition Commission (CNMC) in December 2022, most high-speed corridors had already surpassed pre-pandemic occupancy levels by the end of the third quarter of 2022. The Madrid–Barcelona line reported 43% more passengers than in the same period of 2019, followed by Madrid–Valencia, which saw 11% more passengers. Elsewhere, the connection between Madrid and Seville fell 11% short of pre-pandemic levels.

¹ Content linked to Strategic Plan 2030, **Service Pillar, Objective 6 (PSER-SO6)**

With regard to the **agreements reached**, on 11 May 2020, and following the mandatory report issued by the CNMC confirming the objectivity, transparency and non-discrimination of the process, 10-year framework capacity agreements were entered into with the companies Renfe Viajeros, Ilsa and Rielsfera (later Ouigo). Due to the lingering effects of the COVID-19 pandemic, Adif AV held negotiations during the year with the three operators in order to make the rail network capacity commitments they had acquired in 2020 under these framework agreements more flexible. Notably, one of the framework agreements was amended in September 2022 and in compliance with Article 3.4. of the Commission Implementing Regulation (EU) 2016/545, which states that the framework capacity statement must be updated within three months of a substantial amendment being made to the framework agreement, the framework capacity tables contained in that statement were updated accordingly, in relation to the Adif AV Network. The changes were such that they did not affect the previous remaining indicative framework capacity arrangement.

(PASSENGER STATION MANAGEMENT INVESTMENTS TO IMPROVE STATIONS (ACCESSIBILITY , SAFETY, FUNCTIONALITY AND OPERATION, FIXED AND WIFI TELECOMMUNICATIONS NETWORKS)¹

Drawings were drafted in 2022 and construction work carried out to improve the functionality and operation of the stations, enhance the existing facilities and bring them into line with regulations, as we pressed on with the work relating to the deregulation and optimisation of station maintenance. Highlights here include **the main improvements made at Madrid Puerta de Atocha-Almudena Grandes station** (treating illness and disease, improving installations, etc.) and at **Barcelona Sants station** (improving evacuation routes, adapting air-conditioning installations, etc.).



¹ Content linked to Strategic Plan 2030, **Service Pillar, Objective 3 (PSER-SO3)**

(START OF WORK TO IMPLEMENT THE NEW COMMERCIAL OPERATION MODEL AT PASSENGER STATIONS¹

In deploying this new model, Adif AV is seeking maximise the commercial income of stations and make them **"Living and Breathing Centres"** and **"Meeting Points"**. They will serve a strong social and sustainability function and the commercial model will be able adapt to the changes resulting from the deregulation of passenger transport.

The **four strategic objectives (and 12 initiatives)**, for Adif AV stations defined for the **new plan** were as follows:

A	B	C	D
Boost the retail business	Drive other businesses	Strengthen the brand and connect with customers	Strengthen the model, along with capacities and tools
A.1	B.1	C.1	D.1
Design the commercial mix at other stations	Optimise the advertising business.	Set up VIProoms and coworking spaces.	Strength employee organisation and strategic vision.
A.2	B.2	C.2	D.2
Implement and extend the Atocha Master Plan Insignia.	Optimise the Car parks business.	Launch the loyalty programme.	Commercial management model and control of commercial revenue.
A.3	B.3	C.3	D.3
Competitive dialogue for retail and car rental.	Launch new businesses.	Reposition Adif-owned brands.	Implement CRM and contract management tools.

¹ Content linked to Strategic Plan 2030, **Service Pillar, Objective 8 (PSER-SO8)**

(CONSOLIDATION OF THE ADVERTISING MANAGEMENT MODEL AT PASSENGER STATIONS²

In April 2022, a **new advertising and promotional exploitation contract** was signed with the company *Global Media*, which had submitted the bid offering the best price-quality ratio.

Advertising activity is carried out by a single contractor exclusively for passenger stations, freight terminals and other areas owned by Adif and Adif AV.

The contract covers **648 stations managed by Adif and Adif AV**, including all the commuter stations (Cercanías) managed by the operator, in order to unlock and take full advantage of the synergies to be had by carrying out joint advertising actions at large high-speed terminals and in the main commuter hubs.

The project includes an extensive digitalisation plan, the progressive elimination of paper billboards and an investment plan of €3.3 million, to be delivered by *Global Media*.

Installation work **has already begun** on the following:

- 600 digital billboards at 234 stations, of which 31 are at Adif AV stations, 26 at multi-operator stations and 177 at commuter stations.
- 19 large-format digital screens and other digital advertising media located throughout the main stations.
- Billboard *marketing* supports, brand advertising actions (*branding*), promotional advertising actions at stands (which will not be marketed exclusively by the successful bidder), and any other initiatives that may arise down the line.

Under the new operating model, *Global Media* meets 70% of the net sales if the amount is higher than the minimum guaranteed income (€3 million for year 1, rising by 2% each year). The term of the contract is 10 years, with the option to extend for a further 5 years.

² Content linked to Strategic Plan 2030, **Service Pillar, Objective 8 (PSER-SO8)**

CONSOLIDATION OF THE COMMERCIAL MANAGEMENT MODEL OF PREMISES USED FOR CAR RENTAL ACTIVITIES (RENT-A-CAR) AT PASSENGER STATIONS¹

Rent a car is an essential business for Adif as it is **the fourth largest source of commercial revenue for both Adif and Adif AV** and is the most productive commercial activity (€/m²).

The contracting bodies of Adif AV and Adif resolved, on 30 May and 3 June 2022, respectively, to award 8t contracts to 8 operators for the rental of self-drive vehicles for a total amount of €39,844,820.61 (€2,000,360.38 for Adif and €37,844,460.23 for Adif AV). The contracts covered **71 Adif and Adif AV stations, 151 premises and 2,343 parking spaces**, meaning 10 more stations, 36 more premises and 692 more spaces than the corresponding figures under the 2015 tender.

OPERATOR	ADIF PREMISES	ADIF AV PREMISES	ALL PREMISES	FIXED INCOME ADIF BID	FIXED INCOME ADIF AV BID	TOTAL FIXED INCOME BID
ATESA	14	25	39	1,049,431.14€	11,592,800.85€	12,642,231.99€
AVIS	1	14	15	83,269.85€	6,088,655.66€	6,171,925.51€
EUROPCAR	7	13	20	339,673.10€	7,124,490.34€	7,464,163.44€
HERTZ	6	9	15	286,513.63€	3,620,013.62€	3,906,527.25€
OK MOBILITY	-	2	2	-	1,394,361.00€	1,394,361.00€
RENTING SOLUTION	1	-	1	32,785.45€	-	32,785.45€
SIXT	1	8	9	208,687.21€	8,013,730.68€	8,222,417.89€
VIAJES REINA	-	1	1	-	10,408.08€	10,408.08€
TOTAL	30	72	102	2,000,360.38€	37,844,460.23€	39,844,820.61€

¹ Content linked to Strategic Plan 2030, **Service Pillar, Objective 8 (PSER-SO8)**

The award was based on just one criterion: the best economic offer, meaning the highest fixed rent offered for the first year of the contract, seeing as though successive years would each see an automatic increase of 2%. Aside from the fixed rental payments, operators will have to pay variable income of 3% or 4.5%, depending on the station.

The contract runs for 5 years. Flexibility mechanisms have been included so that the contract may be terminated where construction or similar work at the station affects the services provided by the operators. Moreover, the contractual framework ensures maximum agility in relations with the operators.



Under the new operating model, the parking bays assigned to each car rental establishment are for the exclusive use of the successful bidder of the premises to which they are assigned.

The model also takes into account the new transport trends to have arisen in the wake of the COVID-19 pandemic, the new forms of mobility generated by new technologies, traffic restrictions imposed on combustion engine vehicles, and incentives for electric cars.

Last but not least, the tender **process got under way in 2022 for the installation of 1,079 electric charging stations at 80 stations** in order to comply with Royal Decree-Law 29/2021, promote electric mobility and improve the customer experience. This will allow the successful bidders to electrify their vehicle fleet.

(UNIVERSAL ACCESSIBILITY AT PASSENGER STATIONS'

The Service Pillar (SO7 and SO8) of the SP 2030 describe all of **the improvements made in terms of station accessibility**, with this being a social challenge of the utmost importance for Adif AV. Indeed, accessibility is a top priority social challenge at Adif AV. The goal is to gradually improve accessibility at the stations they manage, eliminating any barriers that could imply discrimination in the use of rail transport.

Along these lines, Adif AV continues to deploy and work towards annual action plans with the ultimate aim of ensuring a transport system rooted in equality, dignity, maximum autonomy, comfort and safety, which is accessible and does not raise barriers for people with disabilities.

Given the large number of passenger stations that exist throughout Spain, efforts are focused on those that see the largest numbers of passengers in accordance with applicable regulations, though without forgetting the rest. It should be noted that the measures put in place for stations with more than 750 passengers/day largely involve the construction of crossings at




¹ Content linked to Strategic Plan 2030, **Service Pillar, Objective 7 (PSER-SO7); Service Pillar, Objective 8 (PSER-SO8)**

different levels. This process naturally affects the track, as the platforms need to be widened in order to build the entrances equipped with lifts to take passengers up to the crossing points.

Along these lines, significant accessibility work was successfully completed at **stations such as Andoain and Aranjuez**. Meanwhile, work began at **stations such as Ordizia and Amurrio**, and construction work continued on the **Recoletos** project.

ACCESIBILIDAD EN ESTACIONES DE VIAJEROS

	2020	2021	2022
 % of passengers accessing stations with accessible routes managed by Adif/Adif AV*	85.45	85.94	86.88
Investment in actions related to station accessibility (€M), excluding VAT*	7.92	5.80	4.86

Work continued throughout 2022 on **improving accessibility to stations** by carrying out works to extend platforms to allow for the construction of underpasses or overpasses with lifts or ramps, which in many cases affect the track but must be overcome without interrupting normal station services

* Adif + Adif AV

(Adif ACERCA SERVICE AT PASSENGER STATIONS¹

Assistance and support for people with disabilities or reduced mobility began to be provided at Adif passenger stations back in 2007, initially by Adif and Renfe-Operadora. Subsequently, this service was provided exclusively by Renfe-Operadora further to an agreement signed between the two entities on 19 December 2011, under the brand name RENFE ATENDO.

On 12 December 2020, Adif took over the service within the context of the deregulation process of rail passenger transport and Regulation (EC) 1371/2007 of 23 October on rail passengers' rights and obligations. Since 7 May 2021, the service has been provided under the brand name:



The brand was created on the basis of accessibility criteria and CERMI (Spanish Committee of Representatives of People with Disabilities) was involved in creating the brand. The Adif Acerca service is currently provided at **141 stations** in two modes:

- **Permanent mode** (mobility assistants are available in person during station opening hours): the service can be requested at **69 stations**, up to half an hour before the train departs. These stations account for approximately 82% of the total requests made for assistance.
- **Ad hoc mode:** the service can be requested up to 12 hours before the train's departure at a total of **72 stations**.

The service includes a centre tasked with supervision, coordination and monitoring activities, known as the **Central Support Office (CSO)**. Since 1 November 2021, the CSO has been run by the temporary joint venture (UTE) formed by Fundación COCEMFE and Fundación Bequal. The CSO is located at Madrid Atocha commuter station and is open daily from 6:00 am through

to midnight. The CSO ensures the optimal organisation of the service, liaises with the various railway undertakings and sees to it that any incidents are promptly resolved.

Since 14 July 2022, the support service for people with disabilities or reduced mobility has been run by the joint venture ACERCA PMR, formed by the companies Clece, S.A. and Integra Mantenimiento, Gestión y Servicios Integrados, Centro Especial de Empleo, S.L. Not only does it provide assistance to passengers of **Renfe-Operadora** and **OUIGO** passengers (from July 2021), but also to passengers of rail operator **IRYO**, which began operating on 25 November 2022, and from 11 December to rail operator **SNCF**, more precisely for its commercial product Inoui running the Barcelona–Paris route.

As regards the improvements made to the service, Adif has earned the UNE 170001-2 Universal accessibility standard, under the Adif ACERCA brand name.

Adif and Adif AV have framed their universal accessibility policy within the **2030 Strategic Plan**, which is inspired by their responsibility to society, as they resolutely tackle the **challenges of the UN Agenda 2030**

In December 2022, an **investment proposal worth €4.9 million** was approved for the supply of equipment and brand image media for the Adif ACERCA service:

- Platform lifts.
- Wheelchairs.
- Stairlifts.
- Furniture.
- Service signage.
- Other equipment or items associated with passenger mobility and the provision of the service.

¹ Content linked to Strategic Plan 2030, **Service Pillar, Objectives 7 (PSER-SO7) and 8 (PSER-SO8)**

Further improvements currently being made at both Adif and Adif AV stations include:

- **At all permanent stations (69)**, the **SVISUAL service** is now available to facilitate communication for the hearing impaired through a video-interpretation service in Spanish sign language and also in Catalan sign language at stations located in Catalonia.
- The station's **welcome points are being gradually extended**: car park, Kiss & Ride area (area where vehicles stop to drop off or pick up passengers) or even at the city's own public transport stops present at the station.

- A new **assistance management app**, which will replace those currently in use, is currently out for tender and will feature new functionalities to further improve matters.
- As part of the Digital Transformation Plan for Passenger Stations, an **app will be made available to help anticipate requests for the Adif Acerca Service**, based on a log of past requests for assistance and other conditioning factors (number of trains running, peak periods, etc.).





(ACTION PLAN TO IMPROVE CROSSINGS BETWEEN PLATFORMS¹

In 2022, further progress was made towards the programme of improvement actions started in 2019, featuring **three courses of action**:

- **Implementation of protection elements at crossings for passenger use**, including the installation of caution signs on platforms and whistle signals for trains, installation of signs prohibiting crossing the tracks along platforms and the installation of platform marking and lighting at designated crossing points.
- **Implementation of protective measures for service use crossings**, including the installation of deterrent fencing that can be kept locked and signage prohibiting the entry of any person other than railway staff or emergency personnel.
- **Raising of crossings** where such crossings are not considered necessary for the operation of the station or railway activity. In such cases, prohibition signs will be put up and all elements or material that cross the track infrastructure will be raised. This will also include the installation of deterrent fencing at the end of the platform or the widening of platforms at certain crossings. Once these actions are complete, they will be removed from the inventory.

This particular plan envisions all actions to be carried out until 2030, with a final target of reaching 57% of the total number of active crossings by October 2022. Class 1 protection equipment is expected to be completed in 2026, while class 2 protection equipment will be implemented as the project takes shape. Installation of the prototype began in December 2022, with testing scheduled to get under way in 2023.

In October 2022, an update of the inventory of crossings between platforms of Adif and Adif AV was drawn up and submitted to the AESF and MITMA in compliance with Royal Decree 929/2020 on railway operational safety and interoperability.

A total of **28 active crossings** have been identified at **Adif AV stations**, of which:

- One is for passenger use
- 27 are for service needs

¹ Content linked to Strategic Plan 2030, **Service Pillar, Objective 7 (PSER-SO7)**



8

SUSTAINABILITY PILLAR

8. SUSTAINABILITY PILLAR

8.1. ENERGY TRANSITION

8.2. CLIMATE CHANGE POLICY

8.3. BIODIVERSITY PROTECTION

8.4. SPANISH CIRCULAR ECONOMY STRATEGY 2030

8.5. SUSTAINABLE SUPPLY CHAIN

8.6. WE GENERATE A POSITIVE SOCIAL IMPACT




8.7. GREEN CALLING OF ADIF AV: SUSTAINABLE FINANCING

8.7.1 Green Bond Standard.

8.8. ENVIRONMENTAL MANAGEMENT

The **Sustainability Pillar** and related objectives reflect our commitment to efficiency with society by creating a healthy environment and employing transparent practices. The main indicators for the **environment, social and good governance** dimensions are as follows:

PILLAR: SUSTAINABILITYS

	2020	2021	2022
 Reduction in GHG emissions (t of CO _{2eq})	13,028	15,016	15,426
 Improvement in energy efficiency (GWh equivalent)	104.18	120.56	123.60
 Passengers boarding / alighting at accessible stations (% of passengers) *	85.45	85.94	86.88
Code of Ethics (No. of disclosures)	2	3	5
Transparency (% of estimated claims)*	1.28	3.30	5.15

In this chapter we describe how Adif AV manages its **environmental commitments** and **implements measures to combat climate change**. These environmental commitments cover issues such as waste management, sustainable use of natural resources and the protection of biodiversity and ecosystems.

* Adif + Adif AV



8.1. Energy transition¹



MILESTONES

- **Electricity supplied** to 3,452 supply points, resulting in total energy consumption of 2.72 TWh.
- **Renewable Guarantees of Origin** obtained **for all electricity supplied**.
- **Electricity price hedging** with the approval of the railway operators and the CNMC.
- **Traction energy obtained from non-traction energy uses.**
- Progress made in obtaining rulings and decisions for **the economic recognition of compensation payable for train braking energy** returned to the electricity system on the UIC network.
- In 2022, **compensation for energy discharged into the UIC network** generated savings for the railway sector of €18.97 million (excluding VAT), equivalent to compensation for 84.4 GWh of energy discharged.
- **Tendering and award of contracts for the drafting of projects**, administrative processing of permits, performance of construction work and operation and maintenance **activities on solar photovoltaic installations – 21 without surplus energy and 25 with surplus.**
- Access and connection permits secured for the 4 MW **photovoltaic solar plant in Alcázar de San Juan (Ciudad Real).**
- Application submitted for prior administrative authorisation and environmental processing of the 15 MW **photovoltaic solar plant in Miraflores de la Sierra (Madrid).**
- **Construction drawings** approved for the **energy remote control centre** of the **Orense-Monforte-Lugo section.**
- **Construction drawings approved for the Totana electric traction substation** and related auto-transformer stations on the **Murcia-Lorca section.**
- **Permits processed** for access and connection to the **electricity transmission grid under the 2021–2026 Energy Plan.**

¹ Content linked to Strategic Plan 2030, Sustainability Pillar, Objective 1 (PSUS-SO1)



COMMITMENTS

- **Ensure that all the electricity** supplied to points with and without a remote metering system includes a **renewable Guarantee of Origin**.
- **Continue to develop the complementary traction current service** by including it in the Network Statement.
- Make further progress in obtaining **rulings and decisions for the economic recognition of compensation payable for train braking energy** returned to the electricity system on the UIC network.
- Present the application for **prior administrative authorisation and environmental processing** of the **Alcázar de Aranjuez photovoltaic solar plant**.
- Obtain the **Environmental Impact Statement for the traction substations and supply lines** on the **Lorca-Almería section**.
- Obtain the **Environmental Impact Statement for the traction substations and supply lines** on the **Teruel-Sagunto section**.
- Obtain the **environmental decision for traction substations and supply lines** on the **Puertollano-Mérida section**.
- Initiate **environmental processing for the power installations needed to electrify** the **Illescas-Talayuela section of the Madrid-Extremadura line**.
- Start of **work on contracts to build self-consumption installations without surplus energy** (21 installations) and **with surplus energy** (25 installations).
- **Approve of the construction drawings for the Marchenilla substation and associated auto-transformer stations and remote power control centre** for the **Ronda-Algeciras section**.
- **Approve the construction drawings for the Casatejada traction substation and related auto-transformer stations** on the **Plasencia-Badajoz section**.

(**SUSTAINABLE USE OF RESOURCES**

Adif AV consumes various resources needed to carry on its activities. In its pursuit of good environmental practices, with the support of its **Environmental Management System**, the Company strives to minimise, to the extent possible, its consumption of the resources it uses in the course of carrying out its activities and the impact of its activities on the environment. The main resources consumed are energy, water and materials. Its main impacts are emissions, soil contamination and waste generation, among others.



Indicators related to energy consumption are provided in the appendix under the section on “Environmental information”, showing consumption from primary energy sources and consumption of renewable energies² and energy intensity³.

In the realm of environmental management, Adif AV uses **weed killer** to impede the growth of herbaceous plants in the infrastructure and facilities it owns, as their growth can generate issues for the running of tracks and increase the risk of fire along track verges. Herbicide consumption per unit area treated (38.3%⁴).

¹ Figures at year-end 2021
² Content related to **GRI 302-1**: Energy consumption within the organization
³ Content related to **GRI 302-3**: Energy intensity
⁴ Latest figure available for year-end 2021

The other **indicators related to the consumption of materials** in the course of **construction operations**⁵ and **recycled materials**⁶ are set out in the appendix under “Environmental information”.

Indicators related to the consumption of water⁷ are set out in the appendix under “Environmental information”.



⁵ Content related to **GRI 301-1**: Materials used by weight or volume
⁶ Content related to **GRI 301-2**: Recycled materials consumed
⁷ Content related to **GRI 303-1**: Interactions with water as a shared resource

Renovation of public buildings and infrastructure

Buildings account for 40% of the total energy consumed. The Company has a large portfolio of property assets (stations, buildings, halts, housing, etc.), thus requiring considerable amounts of energy and mineral inputs for their construction, maintenance and renovation. Adif AV firmly intends to focus more and more on innovation and digital transformation to make infrastructure and buildings smart, more efficient and sustainable.

(ENERGY MANAGEMENT

Energy management is one of the main lines of action under the Plan to Combat Climate Change. This line includes initiatives to improve the current management of energy consumption by acquiring more in-depth knowledge of processes, thus helping to optimise them and generate savings. This includes projects to develop smart grids, install remote measurement and control systems, and implement management metrics, such as **energy audits**.

In terms of energy management, the **main actions** can be summarised as follows¹:

- Adif AV managed **3,452 electricity supply points** in 2022, with incoming energy consumption of 2.72 TWh.
- Of the total consumption, 99% relates to a total of **1,321 supply points equipped with remote metering systems**.
- Further progress was made in obtaining decisions from the Ministry for Ecological Transition and the Demographic Challenge for the **economic recognition of compensation for train braking energy returned** to the electricity system on the UIC network.
- **Railway undertakings are now involved in the energy procurement process**, with various electricity price hedges carried out in 2022 with the approval of the railway operators and the CNMC. Notably, the procurement of traction energy has been tendered separately as of 1 April 2023, which will ultimately give railway operators greater flexibility and decision-making capacity with respect to energy procurement.

- The following **has been included in the Network Statement**:

- + As of January 2022, the traction current supply service may be billed through **on-board metering technology in the electrified grid in alternating current**, for those railway operators that request this form of billing.
- + Changes to the service were published in August 2022. For **DC electrified lines**, the billing unit was changed from €/thousand TKB to €/MWh (with wh/TKB conversion ratios by type of service), thus favouring the switch to on-board metering and enabling a closer adjustment to real costs. There was also a monthly update of costs and forecasts and recognition of the energy returned to the network by regenerative braking systems. For **lines electrified via alternating current** and following the recommendations of the CNMC, a discount was included for billing with on-board metering, along with different passenger/goods conversion ratios.



¹ Content linked to Strategic Plan 2030, **Sustainability Pillar, Objective 1 (PSUS-SO1)** Lead the way in bringing about the energy transition Develop an energy community

RENEWABLE ENERGY/DEVELOPMENT OF PHOTOVOLTAIC INSTALLATIONS FOR SELF-CONSUMPTION



Decarbonisation and renewable energies are one of the main lines of action under the Plan to Combat Climate Change. The aim of this line is to replace fossil fuels with less polluting alternatives to champion the use of renewable energies. The plan includes actions such as the electrification of currently non-electrified sections, purchasing electricity with GoO certification or a host of initiatives to promote the modal shift to rail, such as improving connections with ports, rail motorways and so forth. autopistas ferroviarias, etc.

Plan to achieve self-consumption through the use of renewable energies, solar panels at 21 stations, a tender within the framework of the Plan to Combat Climate Change 2018–2030. This initiative is taking place amid rising electricity prices and coincides with the open call for tenders for the development of a global project for self-consumption across the railway network. The focus is on photovoltaic energy. The 21 photovoltaic panels will be distributed on land lying next to the tracks across all of Spain, in what is a first step towards self-consumption.

Key actions during the year in relation to the installation of solar panels:

- Tender and award of the contract titled “Consulting and technical support on the environmental processing and drafting of the construction drawings for the traction substations, related auto-transformer centres, high voltage supply lines, overhead contact line and remote energy control centre on the Illescas–Talayuela section of the L500 Madrid–Extremadura line”.

- Award of the contract titled “Consulting and technical support on the drafting of the construction drawings for the traction substations, related auto-transformer stations, high voltage supply lines and remote energy control centre on the Teruel–Sagunto section”.
- Signing of the construction contracts with Red Eléctrica for the grid access points under the 2021–2026 Energy Plan.

Under the **Energy Self-consumption Plan of Adif and Adif AV**, the aim is **to build some 50 solar photovoltaic self-consumption facilities** in a bid to promote the deployment of renewable energy generation in railway infrastructure through the following technologies:

- **Self-consumption without surplus:** on 18 April 2022, the contract for the installation of 21 solar photovoltaic installations for self-consumption without surplus energy was awarded, with work slated to begin in January 2023. These installations will have an estimated combined total capacity of around 1.8 MW, with self-consumption energy expected to cover more than 13% of the total energy consumed at the locations. The net annual energy generated will be close to 2.7 GWh and average utilisation of the PV energy generated for self-consumption will exceed 99%.



- **Self-consumption with surplus:** on 1 August 2022, a contract was awarded for the construction and subsequent operation and maintenance of the 25 solar photovoltaic installations under the self-consumption with surplus modality. At year-end 2022, the construction drawings were in the process of being drawn up. These installations will have a combined total installed capacity of 6.1 MW, with self-consumption energy expected to cover more than 27.4% of the total energy consumed at the locations. The net annual energy generated will exceed 9 GWh and average utilisation of the PV energy generated for self-consumption will reach 85%.
- **Self-consumption in large areas:** in July 2022, a contract was awarded to install large-area photovoltaic solar panels in Miraflores, with a capacity of 15 MW. Plans are also afoot to build a solar photovoltaic plant in Alcázar de San Juan, with an installed capacity of 4 MW.

FERROLINERAS/IMPLEMENTATION OF CHARGING STATIONS FOR ELECTRIC VEHICLES AT ADIF AND ADIF AV STATIONS

The project aims to promote the deployment of electric vehicle charging infrastructure by installing electric vehicle charging points in car parks located at passenger stations. These works include the supply and installation, legalisation, and operation and maintenance of **1,079 electric vehicle charging stations in the car parks of 80 Adif and Adif AV stations.**

The work may be co-financed with funds awarded under the **NextGenerationEU Recovery and Resilience Facility (RRF).**



ENERGY EFFICIENCY

Energy efficiency is one of the main lines of action being pursued under the Plan to Combat Climate Change. This line seeks to improve the energy efficiency of the railway system, both for non-traction and traction uses, and thus reduce energy consumption. It includes **actions aimed at improving lighting, renewing air-conditioning systems and DHW equipment and building reversible substations**, among other initiatives.

The Company is required to conduct **energy audits** in accordance with Royal Decree 56/2016, in order to identify energy saving and efficiency opportunities and, in the process, reduce greenhouse gas emissions. The results of the energy audits carried out in 2022 are expected to be presented in the first quarter of 2023.

In response to the energy crisis resulting from the war in Ukraine, Spanish Order PCM/466/2022 and Royal Decree-Law 14/2022 were approved in mid-2022. This required Adif AV to rush through a series of sustainability, energy saving and efficiency measures aimed at reducing energy consumption and increasing our energy independence, thus making further progress towards the gradual decarbonisation of the economy and championing the generation of energy from renewable sources (monitoring of measures implemented through registration on the IDAE platform). The **catalogue of Responsible Public Procurement (social and environmental)** currently being drawn up will insist that **contracting specifications** include requirements relating to, among other matters, energy management and efficiency, use of renewable energies, and local materials. This will help ensure that contracts are awarded to those companies that, among many other criteria, promise lower energy consumption and a lower carbon footprint when carrying on their construction projects

Energy efficiency criteria are also being included **in the specifications for building projects (stations).**

Since 2019
Adif AV has been committed
to procuring **100% Green Electricity**
that comes with a **Guarantee of
Origin (GoO)**

In 2022, Adif AV arranged **various electricity price hedges** with the approval of the railway operators and the CNMC. Notably, the procurement of traction energy has been tendered separately as of April 2023, which will ultimately give railway operators greater flexibility and decision-making capacity with respect to energy procurement.

Meanwhile, the **new methodology for billing the complementary service of traction current for railway operators** was finalised in 2022, in response to the deregulation of the passenger rail transport sector. This effectively ensures transparent and equal billing for all operators. This service improvement has been included in the **Network Statement**, with the service having now undergone the following improvements:

- **The traction current supply service** may be billed through on-board metering technology in the electrified grid in alternating current, for those railway operators that request this form of billing. A new data capture system was put in place, capable of receiving, storing and exporting the compiled energy data without corrupting it. All related procedures under the new methodology were also implemented.
- The 2022 Network Declaration now contains all the information needed for railway operators to apply for this new billing modality and to register those electrical units they wish to add to the new system. In addition, **the methodology for classifying TKB** as a billing unit was drawn up as an estimation method.
- For **DC electrified lines**, the billing unit was changed from €/thousand TKB to €/MWh, thus favouring the switch to on-board metering and enabling a closer adjustment

to real costs. There was also a monthly update of costs and forecasts and recognition of the energy returned to the network by regenerative braking systems. For **lines electrified via alternating current** and following the recommendations of the CNMC, a discount was included for billing with on-board metering, along with different passenger/goods conversion ratios.



8.2. Climate change policy¹



MILESTONES

- Coordination and monitoring of Adif and Adif AV's **Climate Change Action Plan 2018–2030**.
- Running **energy audits** under the terms of Royal Decree 56/2016 to identify energy saving and efficiency opportunities.
- **Sustainability, energy saving and efficiency measures** put in place to reduce energy consumption and increase energy independence (Order PCM/466/2022 and Royal Decree-Law 14/2022).



COMMITMENTS

- **Update the Climate Change Action Plan** in accordance with the guidelines and calculation methodology of the Science Based Targets initiative (SBTi), thus achieving globally aligned climate science-based targets to reduce carbon emissions and keep the global temperature increase within the thresholds established in the Paris Agreement (carbon neutral by 2050).
- Register **Adif AV's Carbon Footprint at MITERD** and calculate **Scope 3 emissions**.
- Achieve more reliable **monitoring of measures to improve sustainability, energy saving and efficiency**, by recording them on the **IDEA platform**.
- Continue to oversee the process of drawing up **global studies** to analyse the **adaptability of the entire rail network to the adverse effects of climate change**.

¹ Content linked to Strategic Plan 2030, **Sustainability Pillar, Objectives 2 (PSUS-SO2) and 4 (PSUS-SO4)**

CLIMATE CHANGE FIGURES

123.6^{GWH}

MImprovement
in energy efficiency
(GWh equivalent)

15,426^{tCO₂Eq}

Reduction of GHG emissions
(Tn of CO₂ eq)

91.5%

of renewable energies

In 2022, a climate risk related to the adaptation of railway infrastructure to **the adverse effects of climate change** was identified and included in the Adif and **Adif AV Risk Map**

(2018–2030 CLIMATE CHANGE ACTION PLAN

In the 2030 Strategic Plan of Adif and Adif AV, climate commitment is a priority business strategy under the **“Fight the effects of climate change” SO (Strategic Objective)**, with the stated aim of contributing to the development of an environmentally friendly mode of transport that makes responsible use of scarce resources.

The 2018–2030 Climate Change Action Plan is therefore a strategic initiative at both Adif and Adif AV. A **Climate Change Action Plan Monitoring Committee** has also been set up and tasked with quarterly monitoring to update the Company’s two KPIs: “Reduction in GHG emissions” (tCO₂eq avoided) and “Become more energy efficient” (GWheq saved). The findings and results of this monitoring activity are reported to the Adif and Adif AV Management Committee.

In 2022, **main update** was made to provide a more detailed analysis of consumption from 2018 to 2021. Moreover, the scope of the projects in their initial version was updated and new projects were added.

Notable projects that Adif and Adif AV are now undertaking and that have been included in the draft new version of the Climate Change Action Plan: the Energy Self-consumption Plan (installation of photovoltaic solar panels for self-consumption with and without surplus energy), the installation of charging stations for electric vehicles, the implementation of ferrolineras, the replacement of diesel C boilers with less polluting technology, and energy guidelines, among others.



When defining this risk, **several action plans** have been included to improve its control and minimise its impact on the companies, including the following:



- Drawing up **global studies on the adaptability of the entire rail network to the adverse effects of climate change.** Based on the findings of these studies, adaptation plans will be drawn up and implemented on each of the lines, so as to implement in each case the measures needed to adapt to the effects of climate change and thus make railway infrastructure more resilient.
- **Further progress in acting on the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)**

of the Financial Stability Board (FSB) on the disclosure of financial information related to the risks and opportunities associated with climate change. The process of applying these recommendations will be addressed in the Management Reports of Adif and Adif AV, especially with regard to what Article 32 of the new Law 7/2021 on Climate Change and Energy Transition has to say.

- The **study and use of new data analytics tools to provide more in-depth information on meteorological events**, with the aim of providing data for risk indicators and supporting the task of drawing up Climate Change Adaptation Studies.
- **The assessment and updating of contingency action plans or procedures in response to environmental emergencies**, which should include a section on any resulting adverse effects of climate change. This ensures that climate change is assessed when defining action plans in response to environmental emergencies or incidents, especially those involving climate-related events.

- **Assessment of the vulnerability of existing infrastructure to adverse climate change-related events by identifying flood-prone areas.** Potentially flood-prone road sections are identified by drawing up maps that give a preliminary classification of the potential flood risk of each area flagged.

LINES OF ACTION TO COMBAT CLIMATE CHANGE

Energy management

Energy efficiency

Decarbonisation and renewable energies

Resilience of rail infrastructure

Culture and awareness-raising

The Climate Change Action Plan of Adif and Adif AV envisions specific **objectives for reducing energy consumption and greenhouse gas (GHG) emissions** and sets specific targets for 2020, 2025 and 2030

The increased frequency and severity of extreme weather events as a consequence of climate change threatens the integrity of both railway infrastructure and the railway services we provide. We must therefore ensure the resilience of existing infrastructure and of all new infrastructure that is planned to be built and commissioned.

In addition, obtaining financing through EU funding, green bonds and other routes is conditional on ensuring adaptation to the adverse effects of climate change, and so the proper management of this risk is also an opportunity to access funds/support and attract investors.

Moreover, the lack of such adaptation jeopardises the achievement of the objectives set at strategic and institutional level and may have a reputational impact. and institutional objectives and may have an impact at the reputational level.

The Climate Change Action Plan addresses mitigation by improving the resilience of railway infrastructure, and also seeks to promote a culture and awareness of climate change. In relation to **climate change mitigation**, there are three lines of action consisting of various projects to generate tangible reductions in energy consumption and greenhouse gas emissions:

The Climate Change Action Plan envisions projects such as **reversible substations**, electrification and the **Ecomilla Project** to champion modal transfer to rail and contribute to **more sustainable urban mobility**

Thanks to the actions taken by Adif and Adif AV under the framework of the Climate Change Action Plan, it is estimated that the cumulative reduction in emissions generated by the railway system will reach 777 ktCO₂eq (based on electricity mix) and 3,700 ktCO₂eq by 2030 (based on the electricity market with the purchase of green energy with GoO). Adif AV alone will contribute 264 KtCO₂eq (according to electricity mix) and 1,400 KtCO₂eq (according to electricity market with the purchase of green energy with GoO) to the cumulative emissions reduction.

If the modal shift is taken into account, **the cumulative emission reduction of both companies by 2030 is estimated at more than 8,400 ktCO₂eq.**

A wide array of actions are being carried out under the framework of the Climate Change Action Plan to achieve these objectives, structured into the following **lines of action**:

- **Energy management:** this line includes initiatives that seek to improve the current management of energy consumption by acquiring more in-depth knowledge of the process. This includes projects to develop smart grids, install remote measurement and control systems, and implement management metrics, such as energy audits.
- **Energy efficiency:** this line seeks to improve the energy efficiency of the railway system, both for non-traction and traction uses, and thus reduce energy consumption. It includes actions aimed at improving lighting, renewing air-conditioning systems and DHW equipment and building reversible substations, among other initiatives.

Decarbonisation and renewable energies: the aim of this line is to replace fossil fuels with less polluting alternatives to champion the use of renewable energies. It includes actions such as the electrification of currently non-electrified sections, purchasing electricity with GoO certification or a host of initiatives to promote the modal shift to rail, such as improving connections with ports, rail motorways and so forth.

In the **promotion of renewable energies**, from 2019 we will purchase 100% of the electricity consumed in the railway system the railway system with **Guarantee of Origin (GoO)**, guaranteeing that all of the electricity used in the railway system comes from renewable sources

Energy audits must be carried out once every 4 years in accordance with the law (Royal Decree 256/2016). Adif and Adif AV carry out these audits not only in the interests of regulatory compliance, but also to obtain a detailed consumption map and identify workable energy saving actions that can be carried out over the coming years.



In 2022, **electricity purchased with Guarantee of Origin (GoO)** amounted to 652.62 TJ (551.87 TJ in 2021), representing 91.5% (89.8% in 2021) of the total energy consumed

In 2022, energy audit visits were performed in order to identify opportunities to optimise and save energy at the various facilities owned and operated by Adif and Adif AV, such as improved lighting, the installation of photovoltaic panels, or the renovation of air conditioning and DHW equipment. Once the findings of these audits are published in the first quarter of 2023, we can assess the merits of implementing the energy improvement measures.

An **energy guidelines software package** has also been developed so that standardised energy saving measures are used across all of Adif and Adif AV whenever we design a refurbishment, or a new facility, building or station.

In 2022, Adif AV **reduced its final and primary energy intensity** by 12% and 11%, respectively, compared to the previous year

INITIATIVES AND TARGETS IN RELATION TO CLIMATE CHANGE ADAPTATION AND/OR CLIMATE CHANGE MITIGATION

When it comes to improving the resilience of railway infrastructure, we are carrying out global studies on adaptation to the adverse effects of climate change by analysing railway lines along the entire network. **The aim is to have the entire rail network analysed by 2030.**

In relation to the **climate change adaptation objective**, the Company will continue to draw up global studies into adaptation to the adverse effects of climate change as we move through 2023. These studies will ultimately lead to adaptation plans setting out the adaptation measures needed to reduce those identified risks that are considered unacceptable.

Adaptation to the adverse effects of climate change features the following key risk indicators (KRIs): expenditure on emergency action in response to weather events, impact of weather events on conventional network reliability, impact of weather events on HS network

reliability, impact of weather events on conventional network availability, and impact of weather events on HS network availability.

ADIF /ADIF AV ADHERENCE TO THE 2019 CLIMATE RESPONSIBILITY PLEDGE OF THE INTERNATIONAL UNION OF RAILWAYS (UIC)



The Climate Change Action Plan is aligned with the ultimate goal of becoming carbon neutral by 2050, an objective that Adif AV has embraced by **adhering to the 2019 Climate Responsibility Pledge of the International Union of Railways (UIC).**



Indicators related to energy efficiency are provided in the appendix under “Environmental information”.

Energy savings since 2009 amount to 123.6 GWheq /year (120.26 GWheq /year in 2021), and 15,016 tCO2eq /year have been avoided thanks to the **energy efficiency and decarbonisation actions** deployed since 2009

Adif AV complies with prevailing legislation with respect to its emissions obligations.

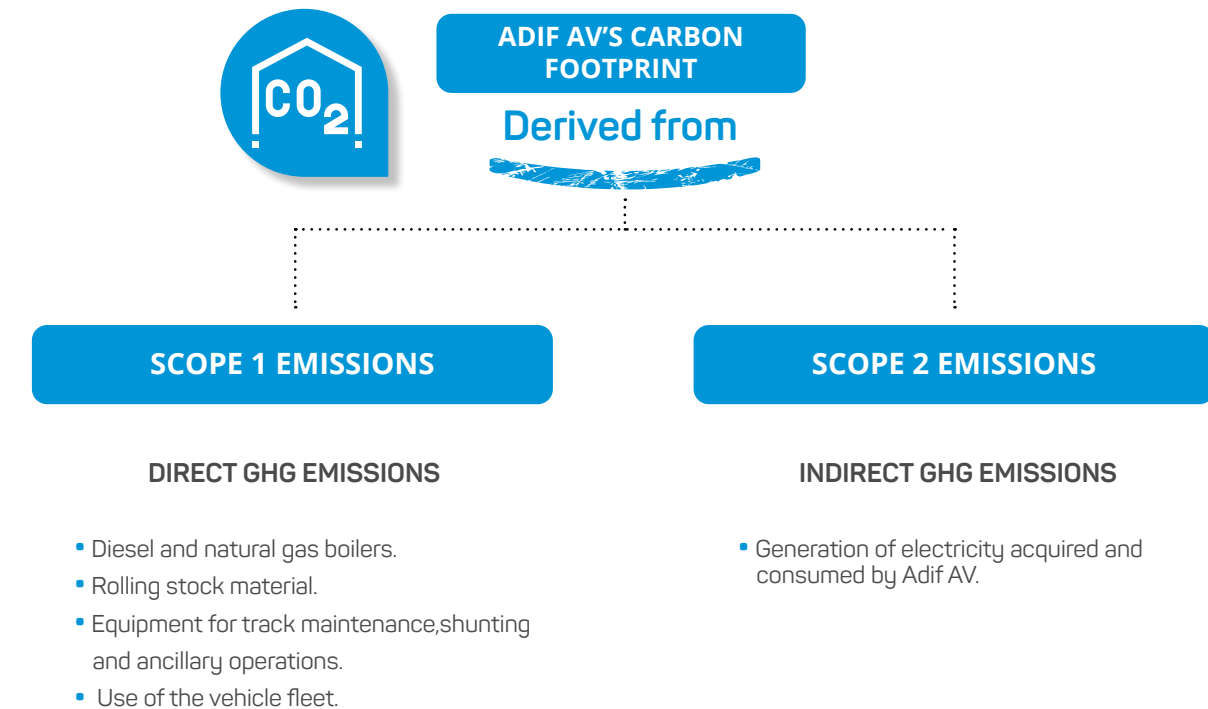


GHG emissions generated by Adif AV activity are indirect emissions (originating in the generation of electricity consumed) and direct emissions (from the energy consumed by diesel and natural gas boilers, rolling stock, machinery and other vehicles).

These emissions are monitored by **calculating their carbon footprint**, thus providing valuable information on the GHG emissions generated by the activities carried out by an organisation.

Indicators related to the reduction of GHG emissions (tCO₂_{eq}/year) are provided in the appendix under "Environmental information".

Indicators related to the scope of the carbon footprint are provided in the appendix under "Environmental information".



8.3. Biodiversity protection^{1,2}

BIODIVERSITY PROTECTION FIGURES

€3.08 M

earmarked for fire prevention *

296

environmental review reports for projects

286

Regulatory reports related to environmental oversight of works subject to environmental impact assessment

Adif AV ensures compliance with **protective and corrective measures** for the sound environmental and landscape integration of its infrastructure within the framework of the **Integrated Management System**. In doing so, it reports on all actions taken through a system of environmental integration indicators and EIS compliance, both in the construction phase and during subsequent monitoring activities following acceptance of the project.

In compliance with current legislation in Spain, all high-speed lines must undergo an **Environmental Impact Assessment** so as to ensure the adequate prevention of specific environmental impacts, while at the same time establishing effective remediation or offsetting mechanisms should any such impact materialise. Of particular concern are the possible impacts on biodiversity: unique species of flora and fauna, habitats of special interest, and protected natural areas.

This procedure culminates in an Environmental Impact Statement, which determines whether or not it is advisable to undertake the project from an environmental standpoint and, if so, establishes the framework and conditions under which it must be carried out in order to avoid, or otherwise remediate or offset any resulting impacts.

Adif AV has assigned an **Environmental Works Manager**

to all sections of the high-speed line. This role ensures compliance with the provisions set out in the Environmental Impact Statement and respect for environmental legislation and sees to the effective implementation of the environmental integration measures set out in the corresponding construction projects.

In locations presenting special environmental value, this work may also be supported by Joint **Committees for Environmental Monitoring and Construction Control**, made up of representatives from national (Ministry of Development, Ministry of Ecological Transition and Demographic Challenge), regional and, in some cases, local bodies.

Once the relevant environmental requirements have been established and applied to each section of the track, the Company acts on a mandate from the Secretary of State for Infrastructure and Transport (attached to the Ministry of Development) by drafting and approving the construction drawings for each solution, and also assumes responsibility for the construction and operation phases.



¹ Content related to **GRI 304: Biodiversity**

² Content linked to Strategic Plan 2030, **Sustainability Pillar, Objective 3 (PSUS-SO3)**

* (latest available figure, updated as at year-end 2021 with the publication of the environmental report in May 2023).

(IDENTIFICATION OF PRIORITY BIODIVERSITY AREAS

Priority biodiversity areas are identified during the project phase through knowledge of and access to the **Spatial Data Infrastructure (SDI) of the Ministry for Ecological Transition and Demographic Challenge**. When it comes to the **Natura 2000 network**, each Autonomous Region has specific information on how to manage these natural areas.

Once these areas have been identified, as required by the ADIF General Standard “Index on type and content of the environmental integration annex for projects” (NAG 3-0-1.0), a description must be provided of all protected natural areas and other areas of interest (Natura 2000 network, Protected Natural Spaces, Habitats of Priority Interest, etc.), in order to identify and take action to protect those areas potentially affected by the construction of the project.

Subsequently, based on the environmental analysis carried out, a territorial classification must be drawn up for the purpose of locating temporary and permanent auxiliary elements.

The category of “**excluded areas**” includes areas of superior environmental quality and fragility (protected natural areas, listed sites, those inventoried or proposed for protection, natural habitats of European interest, unique biotopes or otherwise of interest for the proper conservation of sensitive or significant fauna, unique vegetation formations, etc.).

At the actual construction site, the contractor is required to draw up an **Environmental Management Plan** which must include the spatial and temporal restrictions to be taken into account when carrying out the work to minimise the resulting impact on biodiversity. These requirements typically relate to construction sites that are located close to Natura 2000 areas or enclaves where flora and fauna species of interest are known to be present.

(BIODIVERSITY-RELATED TARGETS AND DEADLINES

As part of its pledge to protect the environment, Adif AV works hard to promote the **environmental integration of railways** while **ensuring the utmost respect for natural areas, biodiversity and local and native ecosystems**. Therefore, key concerns include the conservation of native and especially endemic species, which can be directly attacked by other invasive species. .

Thus, with the aim of building a verified knowledge base with homogeneous criteria for future consultations, the Company is now working to create a to-do **list for the eradication of invasive alien species** on land affected by railway infrastructure work, including a detailed description of how to proceed and providing an assessment in terms of cost/effectiveness.



(BIODIVERSITY COMMITMENTS

Adif AV relies on experts to carry out most of its biodiversity protection actions, including an expert advisor on fauna (with more than 8 years of experience) and in technical support for the environmental integration of projects and works entrusted to Adif AV.

Actions carried out by Adif AV in the field of biodiversity:

- High-speed line between León and Gijón: **Agreement reached with Fundación Oso Pardo**
- High-speed line between Palencia and León: **Commitment to protecting Iberian wolf (*Canis lupus*) populations.**
- Diagnostic work on the **status and conservation of the olive ridley sea turtle** and the basis for its recovery in the province of Almería.



- **“Group on Habitat Fragmentation Caused by Transport Infrastructures”**, which fosters partnerships between public administrative bodies, environmental bodies and the scientific community in implementing measures to prevent or otherwise remediate the main effects of transport infrastructures on fauna.
- **BISON programme (Biodiversity and Infrastructure Synergies and Opportunities for European Transport Networks)** is an european programme that aims to increase practical knowledge on the application and effectiveness of biodiversity mitigation measures.
- **ITTECOP programme (Programme of Transport Infrastructure, Territories, Ecosystems and Landscapes)** is an initiative of the Ministry of Environment of the Republic of France, focusing on the effectiveness of wildlife escape devices.
- Coordination by Adif AV on the **Life Project** “Development and demonstration of an anti-bird strike tubular screen for High-Speed Rail lines”, with the participation of FCC Construcción, Prointec, Renfe and the Autonomous University of Madrid. The aim of this project was to reduce the impact of high-speed lines on birdlife by experimenting with a prototype anti-bird strike screen. The resulting prototype was shown over time to generate a reduction in the risk of collision, and has therefore been transferred to projects and other railway works.
- For the four works between the towns of Vera and Los Arejos lying along the Murcia-Almería section, Adif AV reached a scientific consultancy agreement with the University of Almería (UAL) to ensure the success of the **plant restoration works in a unique climatic environment.**

8.4. Spanish Circular Economy Strategy 2030¹

Adif AV lends its full support to the Spanish Circular Economy Strategy 2030 and the **1st Circular Economy Action Plan 2021–2023**, with six initiatives included in the thematic areas of: Consumption, Waste Management, Secondary Raw Materials Market and Employment and Training.

The following **progress has been made towards the various projects** included in the Action Plan:

- 1. Ecomilla project:** in the process of redefining the model.
- 2. Catalogue of environmental and social criteria for procurement processes:** in progress. The internal working group headed up by the Environment Sub-Department continues to develop the Catalogue of Environmental Clauses to be included in railway infrastructure contracts, including clauses related to circular economy. Standard clauses have now been drawn up for inclusion in all types of contract, as well as clauses governing supplies. Further progress was also made in defining clauses for services and construction work, with only the final wording pending approval. In tandem with this, the Company is currently drawing up a draft User Guide to the Catalogue of Environmental Clauses. Both documents are expected to be finalised in the coming months.
- 3. Comprehensive programme for the social recovery of disused railway assets:** in progress. The number of contracts has been increased. In 2022, nine contracts were signed for a total of 23 properties leased under the Development Assets Programme.
- 4. Efficient management of surplus land from railway infrastructure work to allow for the environmental recovery of degraded environments or their reuse in other construction projects:** in progress. Data collected as of 31 August 2022: 13.26% of the earth and stone entering the site for the infrastructure construction work comes from the valorisation of surplus earth from other sites (539,439 out of 4,067,592 m³ used). 37.26% of the surplus clean earth and stone left over from construction work is used at other sites or for the restoration of degraded areas (4,035,164 out of 10,830,800 m³ of surplus).



¹ Content linked to Strategic Plan 2030, **Sustainability Pillar, Objective 4 (PSUS-SO3)**

5. Measures to improve the reuse of topsoil on construction sites for landscape restoration and integration following the impact of railway work: in progress.

Data collected as of 31 August 2022: Percentage of surface area to be occupied where topsoil is recovered and stockpiled: 94.69%; 10,467,323 m² stripped out of 11,054,323 m² occupied. Percentage of topsoil properly conserved: 90.53%; 2,821,224 m³ well conserved out of 3,116,342 m³ stockpiled. Percentage of areas to be restored on which topsoil has been previously spread: 100%; 300,481 m² with topsoil spread over 300,481 m² of surface area to be restored in completed works.

6. Promoting the use of sustainable materials and management techniques at railway stations: in progress. In 2022, there were 10 drafted projects utilising finished, recycled, regional and sustainable material out of the total number of projects at least 10% of the material costings of which were linked to sustainable solutions.

The Adif AV network features a common repository that stores the information received from each project and where users can view the status of each project. A project follow-up report was also created during the period and will be updated as and when further information is received, at least on an annual basis.

Adif AV is also working to **achieve a controlled and documented delivery of waste**¹ to an authorised manager through the coordination of an agent, thus helping to ensure not only the best practices in waste management but also reliable data about those practices.

The new Adif and Adif AV waste management model

was approved by the Management Committee in 2021 and implemented in 2022. Under this new model, EMFESA was once again entrusted to act as waste manager for Adif and Adif AV. The internal procedure governing this activity was also approved during the period.

¹ Content related to **GRI 306-1: Waste generation and significant waste related impacts**

The main improvement we expect to see in relation to consolidated waste management data will come from the application of Adif AV's **new waste management model**



This model looks to centralise the management of new types of waste through the Corporate Environmental Body and thus to make the associated data more direct and complete each time.

The progressive centralisation of waste management, limited to hazardous waste from 2011 but extended to historical waste since 2022, provides greater assurance of controlled and documented delivery to an authorised waste manager through the coordination of a global waste agent. This helps to ensure not only best practices but also reliable data when it comes to waste management. In 2022, **100% of the waste managed in this way was recovered (100% in 2021)**.

Indicators related to waste generation are provided in the appendix under “Environmental information”.

8.5. Sustainable supply chain



MILESTONES

- Preparation of the **2022 EFQM Report**.
- **Renewal of EFQM 500 certification** for excellence, innovation and sustainability in management.
- Preparation of the **Improvement Plan under the 2022 EFQM Assessment**.
- Audit conducted of **compliance of the Management System with ISO certification standards**.
- **Administrative/back-office efficiency actions** undertaken.
- **Process map updated**.
- **Responsible Public Procurement Project:** Harnessing the Company's procurement potential to promote the achievement of environmental and social goals.
- **Encourage the creation of a risk sheet for each process**.



COMMITMENTS

- Increase the **scope of certification under ISO 14001** – Environmental management.
- Monitor the **Improvement Plan as part of the 2022 EFQM Assessment**.
- Meet the tendering and awarding deadlines set by the European authorities in relation to the **Recovery and Resilience Facility (RRF)**.

(RESPONSIBLE PUBLIC PROCUREMENT

With regard to the applicable legal regime for procurement, Adif AV does not have its own procurement policy and is subject to the provisions of Spanish Law 9/2017, of 8 November, on public sector contracts and transposing into Spanish law the Directives of the European Parliament and of the Council 2014/23/EU and 2014/24/EU¹.

As regards the wording of the terms for Adif AV tenders, it is worth noting that certain employee **clauses are common** to all tenders. The following clauses can be found in all of the contracts:

- Employ, for the fulfilment of the contractual obligations, a percentage of permanent employees equal to or higher than 20%.
- Employ, for the fulfilment of contractual obligations, a percentage of female workers equal to or higher than the national average of new employees in the (affected) sector, provided that the availability of the construction labour market allows for this.
- Employ a percentage of workers with special needs equal to or greater than 1% for the fulfilment of contractual obligations, provided that the availability of the labour market in the (affected) sector allows for this.
- Fulfil contractual obligations in strict compliance with applicable health and safety regulations.

In accordance with Articles 127 of Law 9/2017 and 46 of Royal Legislative Decree 3/2020, contracting authorities may require, in the technical specifications, in the award criteria or in the terms of contract performance, specific **social labels** proving that the contracted service meets the required characteristics. For instance, these labels

may relate to gender equality or provide assurance that the main ILO Conventions have been observed.

The award criteria set out in Article 145.2 of Law 9/2017 and 66.2 of Royal Decree Law 3/2020 include, without limitation, those relating to **the social characteristics of the subject matter of the contract** and to gender equality plans put in place when performing the contract, broadly including: equality between women and men; promoting the recruitment of female talent; ensuring a healthy work-life balance; improving working conditions and wages; training and occupational health and safety; reliance on ethical and social responsibility criteria; or criteria referring to the supply or use of products based on fair trade during the performance of the contract (Articles 145.2 of Law 9/2017 and 66.2 of Royal de la Royal Decree Law 3/2020).

Article 149.4 d) of Law 9/2017 and Article 69.3 d) of Royal Decree Law 3/2020 state that **tenders showing abnormal or disproportionate** values that do not respect labour or social obligations will not be accepted, and nor will those that attempt to justify below-market prices, or fail to comply with European, national or international social or labour obligations, particularly those described in the relevant annexes of both such laws. These annexes **mention the following conventions**, among others:

- **ILO Convention 29** on forced labour.
- **ILO Convention 105** on abolition of forced labour.
- **ILO Convention 111** on discrimination (employment and occupation).
- **ILO Convention 100** on equal remuneration.
- **ILO Convention 182** on worst forms of child labour.



¹ Content related to **GRI 416-1**: Assessment of the health and safety impacts of product and service categories

Furthermore, according to a joint interpretation of Articles 201 and 202 of Law 9/2017 and Articles 27.4 and 105 of Royal Decree Law 3/2020, these social obligations should be verified by the person ultimately responsible for the contract. **These obligations must be fulfilled by contractors and subcontractors alike.**

All of this has been reinforced by the **Socially Responsible Procurement Plan** applicable partially to procurement at Adif AV (contracts under the threshold stipulated in Article 1 of Royal Decree Law 3/2020).

Potential subcontractors are required to agree **to comply with our Health and Safety Health and Safety** procedures in a written declaration

With regard to **environmental contracts**, there are general guidelines on the environmental clauses that should be included when it comes to the procurement of goods, work and/or services. Given the wide array of contracts signed and activities carried out across the organisation, it is the contract managers who select the environmental clauses to be included in each procurement process.

Almost all Adif AV suppliers are Spanish

The environmental guidelines and **criteria to be followed for the procurement of goods, work and/or services** are based on absolute compliance with legal regulations and proper waste management. In addition, where the bidders or manufacturers of products or services have implemented an environmental management system (such as EMAS or ISO 14001 or equivalent) covering and certifying the activities to be carried out, this circumstance is viewed in a positive light.

LAdif AV management is aligned with **internationally recognised frameworks** such as the International Organization for Standardization (ISO) and the European Foundation for Quality Management (EFQM). The sound running of the organisation is achieved through process management, by detecting the company's strong points and areas for improvement.

Each time it puts a tender out to call, Adif AV runs a **supplier selection process** in which the suppliers must certify their business and technical expertise and solvency, while also **satisfying certain social and environmental criteria**, which are determined individually for each supplier approval process¹

Despite the complexity of supplier assessment and approval processes, in accordance with the reference standards for certifiable management subsystems and the principles of the Public Sector Procurement Law, all areas and departments analyse contracts in terms of compliance with bidding terms and propose improvements that can be implemented in similar procurement and tender processes down the line.

¹ Content related to disclosure **GRI 414-1**: New suppliers that were screened using social criteria

DISCLOSURES ON OUR PERFORMANCE WITHIN SOCIETY AND ON PRODUCT LIABILITY

	2020	2021	2022
Purchases framed by responsible criteria (%)	100	100	100



Adif AV offers a broad selection of sustainable business **training courses** to employees at the Procurement Department **in the field of corporate sustainability.**, who are free to choose the topics that interest them most.

(EMPLOYMENT AND LOCAL DEVELOPMENT (LOCAL SUPPLIERS INDICATOR)

The Assets for Development programme is performed entirely at Adif, targeting disused buildings and other property assets, something that Adif AV does not have.

These properties are typically between 70 and 150 years old, and once operated along important railway corridors in the first half of the 20th century.

Participation of Adif AV
in the **ERPC Sustainable Procurement
Working Group of the UIC**

(MONITORING SYSTEMS AND AUDITS IN SUPPLIER EVALUATION PROCEDURES

Despite the complexity of **supplier assessment and approval processes**, almost all areas make a positive effort to respond to the needs of the system, in accordance with the reference standards for certifiable management subsystems and the principles of the Public Sector Procurement Law. To succeed in this task, they analyse contracts in terms of compliance with bidding terms and propose improvements that can contribute knowledge and experience in the bidding terms of similar procurement and tender processes down the line.

At present, the process of evaluating what we procure is still not perceived as a process that adds value to management

8.6. We generate a positive social impact¹

This section describes the social actions through which Adif AV is aiming to have a positive impact on the local communities in which it Company operates, especially within the environment where its projects are located.

PRIORITIES IN RELATION TO IMPACT ON THE COMMUNITY



SUPPORTING THE
COMMUNITY



COLLABORATING
WITH ENTITIES



SOCIAL
SATISFACTION



GENERATING
IMPACT

The activities carried out by Adif AV generate various qualitative and quantitative impacts within the communities in which it operates. Our contribution to social and economic development is shown in the indicators found throughout this report bearing the following label:



In addition, all related **indicators related to social impact** can be found in the appendix under "Supporting social and economic development".

CONTRIBUTIONS TO FOUNDATIONS AND NON-PROFIT ORGANISATIONS

Adif AV is committed to long-term projects and alliances with non-profit organisations (associations, foundations and public institutions), focusing on those aspects linked to its own **activities and impact on society**. The aim is to prioritise the segments of society most directly affected by the service provided. Dialogue with stakeholders (third sector), conflict mediation, representation of the company in the main sustainability forums.

Adif AV made the following contributions to non-profit organisations in 2022:

CONTRIBUTIONS TO FOUNDATIONS AND NON-PROFIT ORGANISATIONS

2020	2021	2022
€311,602	€596,129	€1,337,588

¹ Content linked to Strategic Plan 2030, **Sustainability Pillar, Objective 5 (PSUS-SO5)**



To meet the growing demands of today's society and achieve the goals enshrined in the 2030 Agenda of the United Nations, companies need to set up means of implementation and cooperation that will enable them to unlock synergies and multiplier effects for the common good, as stated in SDG 17 of the Agenda. To succeed, Adif AV collaborates with non-profit organisations through a variety of different formulas. In addition, Adif and, by extension, Adif AV is a signatory entity and participant partner of the UN Global Compact Spain, promoter partner of Forética, and partner of the AEC Sustainability Community. It also collaborates as a sponsor with the Royal Academy of Engineering (RAI).

(IMPACT ON LOCAL POPULATIONS AND TERRITORIES

To address and reduce the impact that Adif AV has on the environment, the Company assesses the impact of the railway in various cities by analysing different parameters on how well or otherwise the railway co-exists with the city. This enables the Company to verify that its actions are effective in reducing this impact with respect to the baseline situations¹.

Main projects and partnerships:

- **Open Station Programme.** Tool to coordinate and develop cultural, social and environmental initiatives at railway stations managed by Adif Alta Velocidad.
estacionabierta@adif.es
- **Sponsorship Policy.** CCriteria for handling applications for this type of action.
Contact: patrocinios@adif.es
- **Non-profit organisations with which we have signed agreements:**
 - + Asociación para la Prevención, Reinserción y Atención a la Mujer Prostituida (APRAMP)
 - + Fundación Festival Internacional de Teatro Clásico de Almagro
 - + Comité Español de Representantes de Personas con Discapacidad (CERMI)
 - + Fundación de los Ferrocarriles Españoles (FFE).
 - + Federación Española de Bancos de Alimentos (FESBAL)
 - + Museo Nacional Centro de Arte Reina Sofía
 - + Junior Achievement
 - + USAL

¹ Content related to disclosure **GRI 413-1**: Operations with local community engagement, impact assessments, and development programs

The **Open Station Programme** contributes to the achievement of the **UN Sustainable Development Goals**

As part of its corporate responsibility and sustainability drive, Adif AV has been running an programme since 2008 known as **Estación Abierta** (Open Station).




It is a valuable tool for coordinating and undertaking cultural, social and environmental initiatives at railway stations managed by Adif AV, always under the criteria of corporate responsibility and without any ulterior commercial motives. It aims to enhance the social connection of the station with its surroundings and thus increase the value that Adif AV contributes to the places where it operates.

The Open Station programme is **Adif AV's main instrument for materialising collaboration with the third sector**, granting them free access to an excellent platform (every year more than 150 million people pass through Adif AV stations) for carrying out their activities and thus helping them achieve their objectives, while allowing our stations to generate added value for citizens by providing them with cultural, social or environmental content.

The programme pursues **three lines of action**:

- Opening up the station to its community (visits and social activities);
- Raising awareness of values through collaboration with NGOs (exhibitions, information desks, membership schemes and fundraising activities, flash mobs, concerts, etc.).
- Cultural actions to promote new artists (concerts and exhibitions).

The **key value creation indicators (OPEN STATION PROGRAMME)** for Adif AV in 2022 were as follows:

	No. of activities (Open Station Programme)	259
	No. of non-profit entities with which we have collaborated	62
	Assessment of the outcome of the activity (provided by the company)	8.33
	Assessment of the collaboration provided by Adif AV (provided by the company)	9.11
	No. of stations with Open Station Programme	31
	Unused amounts reversed	44
	IMPACT.-Economic return (€)	18,207.61
	IMPACT.- Return for members (it is estimated that on average a member contributes around €120 per year) (No)	1,263
	IMPACT.- Total Compute (€)	169,767.61
	Loss of earnings (€)	455,878.98









The **Open Station programme** supported **62 non-profit organisations** during the period (62 in 2021) allowing them to carry out their activities at Adif AV stations and **raise a total of €455,879** (€248,595 in 2021)

To evaluate the Open Station Programme, a series of **quantitative indicators are measured quarterly and annually:**

ACTIVITIES UNDER THE OPEN STATION PROGRAMME

	2020	2021	2022
Opening up the station to its community (%)	14	5.3	3.09
Cultural initiatives (%)	11	6.4	11.58
Value awareness campaigns (%)	75	88.3	85.33

INDICATORS RELATED TO THE SOCIAL DIMENSION

	2020	2021	2022
 No. of stations with Open Station programme	60	28	31
 Passengers boarding / alighting at accessible stations (% of passengers)	85.45	85.94	86.88
 No. of activities under the Open Station programme	197*	171	259
 Percentage of purchasing with responsible criteria (%)	100	100	100
 No. of non-profit organisations with which the Company collaborates	71	62	62
 Investment in the community (loss of profit - Open Station programme) (€)	267,269	248,595	455,878
 Percentage of requests for information from the press and media answered on time or within seven days (%)*	95	95	96.1
 No. of sponsorship contracts signed ¹	2	2	3
Membership of national associations (Corporate Responsibility)	3	3	3

* Adif + Adif AV

¹ The sponsorships extend to both Adif and Adif AV, but for accounting purposes are registered at Adif

Adif AV also has a **Sponsorship Policy** that serves as a framework for channelling contributions to strategic projects. The sponsorships extend to both Adif and Adif AV, but for accounting purposes are registered at Adif.

Adif AV is a member of the Spanish Association of Tunnels and Underground Works, the Madrid Open City Association, the Spanish Energy Club and the European Railway Energy Settlement System (ERESS)¹.

COLLABORATION WITH STAKEHOLDERS IN THE FIELD OF SUSTAINABILITY

UN GLOBAL COMPACT – SPAIN



The UN Global Compact Spain is a non-profit organisation, internationally considered **the world's largest corporate sustainability initiative** and the only organisation mandated by the United Nations to work with the private sector towards the SDGs.

Launched in 2000, the United Nations Global Compact is the world's largest corporate sustainability initiative. There are currently more than **21,000 member** organisations in over **160 countries** around the world and 70 local networks. In Spain, more than 1,100 organisations have joined the initiative, making it one of the five local networks with the largest number of member organisations and, therefore, one of the most relevant at international level.

It aims to encourage the effective **implementation of the 10 Principles of the Global Compact** while promoting **the integration of the Sustainable Development Goals in the business sector**. Notably, it is the only organisation mandated by the United Nations for this purpose.

* Content related to disclosure **GRI 2-28: Membership of associations**

The UN Global Compact Spain is **the only organisation in the field of sustainability that has been designated to form part of the Sustainable Development Council**, an integral part of the governance structure for the implementation of the 2030 Agenda in Spain and tasked with structuring the participation of civil society in the achievement of the SDGs. It is also a member of CERSE, the State Council for Corporate Social Responsibility of the Ministry of Employment, and of the Advisory Council for the 2030 Agenda of the Community of Madrid.

Since 2018 Adif, **and extensively Adif AV, is a signatory of the UN Global Compact Spain**, by means of an agreement of approved by the Board of Directors

The Company decided it was strategically important for it to join that particular non-profit platform, the world's largest corporate sustainability initiative championed by the United Nations. Membership fits nicely with Adif's commitment to driving meaningful change in the way in which the Company approaches corporate responsibility and integrates it into its business strategy and operations in order to improve its performance and impact on society, contributing actively to achieving the SDGs of the 2030 Agenda in Spain. The ultimate objective is to generate value for all the organisation's stakeholder groups and contribute further to sustainable development.

We would also highlight Adif AV's collaboration in 2022 in the **"Good practices"** communication campaign launched by UN Global Compact Spain. Adif AV was involved in the internal and external dissemination campaigns through its Communication and Corporate Reputation Department:

Further highlights in 2022 included **our participation in the following sustainability activities** carried out by UN Global Compact Spain:

- Training courses for managers and employees on the SDGs, which are part of Adif's catalogue of training courses
- Knowledge pills (2)
- Posts (17)
- Virtual training (12)
- Events (11)



Forética is **the leading organisation in the field of sustainability and corporate social responsibility** in Spain. Its mission is to integrate social, environmental and governance issues into corporate and organisational strategy and management, thus maximising their positive contribution to achieving a sustainable future. Forética currently has **more than 200 members**.

Adif/Adif AV joined Forética in 2017 as a partner-promoter. Moreover, in 2019 it joined the Public Company Sustainability and CSR Action Group. The ultimate aim of this collaborative leadership platform in sustainability and CSR at state-owned companies headed up by Forética is to make further progress

in the field of corporate sustainability and contribute to the achievement of the 2030 Agenda for sustainable development.

In 2022, the Action Group focused on the key actions needed to progress towards zero net emissions and on the role of public entities in promoting higher standards of care and promotion of health and wellbeing at state-owned enterprises.

The Company **took part in more than 20 events and workshops** related to the three Forética Clusters. Key actions in which Adif AV took part:



CLIMATE CHANGE CLUSTER

Leading business platform in Spain in the field of climate change. The cluster —led in 2022 by Bankinter, Chiesi, Grupo Cooperativo Cajamar, Engie, LafargeHolcim, Naturgy and Nestlé— comprises more than 80 large companies. This business meeting point seeks to promote the leadership of the private sector in climate-related matters, to showcase its good practices, to facilitate dialogue and exchange between companies and to be a key liaison with the competent government bodies and public authorities. In 2022, the Climate Change Cluster focused its work around the theme “Call to action for net-zero: beyond business boundaries”, with the aim of addressing the need to understand climate change from a broader perspective for business and effectively including the supply chain in the process. It also tackled the latest developments in climate reporting, namely on climate taxonomy and mitigation and adaptation targets.

SOCIAL IMPACT CLUSTER

Business meeting point for leadership, knowledge, exchange and dialogue on social impacts —both internal and external— coordinated by Forética in Spain. The cluster, led by Grupo Cooperativo Cajamar, Ibercaja, ILUNION Mahou-San Miguel, Manpower Group, Mapfre and Naturgy, is made up of 68 large enterprises, including IBEX 35 listed companies, subsidiaries of multinationals and family-owned businesses. In 2022, the thematic work of the Cluster focused on integrating ‘S’ for society into the business fabric, focusing in particular on the steps taken in relation to human rights due diligence, social taxonomy and the DEI factor in ESG.

TRANSPARENCY, GOOD GOVERNANCE AND INTEGRITY CLUSTER

Business platform coordinated by Forética in Spain and tasked with promoting a sustainable corporate governance model and addressing different issues related to the management of ESG concerns by transferring the main trends in this realm and functioning as a meeting point where companies can talk and exchange knowledge. The platform, coordinated by Forética and led by CaixaBank, Grupo Cooperativo Cajamar, Cuatrecasas and Leroy Merlin, brings together more than 68 participating companies with the aim of showcasing the advances and good practices of the business sector in making non-financial aspects part of the management of companies, while also acting as a key liaison with ministries, public administrations and regulatory bodies. In 2022, the Transparency, Good Governance and Integrity Cluster focused its efforts on the most outstanding actions in making sustainability part the supply chain and reflected on the main challenges and opportunities relating to the new reporting frameworks of the Corporate Sustainability Reporting Directive (CSRD) and the forthcoming Corporate Sustainability Due Diligence Directive.

“SUSTAINABILITY AND CSR AT STATE-OWNED ENTERPRISES” ACTION GROUP

The ultimate aim of this collaborative leadership platform in sustainability and CSR at state-owned companies is to make further progress in the field of corporate sustainability and contribute to the achievement of the 2030 Agenda for sustainable development.

SPANISH BUSINESS COUNCIL FOR SUSTAINABLE DEVELOPMENT¹

Advisory body made up of a total of 44 chairmen and CEOs of large companies that are members of Forética. The Council is a high-level forum where top executives from the leading companies in sustainability in Spain convey their message of business leadership in matters of sustainability. They also share trends, challenges and solutions and project their vision and strategic recommendations for sustainable development in the environmental, social and governance (ESG) fields. In 2022, it met on two separate occasions.

¹ In 2021, the Council embraced [five commitments](#) focused on achieving zero net greenhouse gas emissions, restoring biodiversity, respecting human rights, promoting diversity, equality and inclusion, and operating with the highest standards of corporate governance and transparency.

8.7. Green calling of Adif AV: Sustainable financing¹



MILESTONES

- **Renewal of the Adif AV Green Financing Framework.**
- Award to draw up the Second Opinion under the **Green Financing Framework.**



COMMITMENTS

- **Raise the funds needed** for the period.



¹ Content linked to Strategic Plan 2030, **Sustainability Pillar, Objective 6 (PSUS-SO6)**

The **Green Financing Framework was renewed** in 2022, under which Adif AV issues its green bonds. The previous document had been in force since 2019, when several changes were made to the first version published in 2017. The most significant change was to include “green” loan financing within the framework existing at that time.

The current document is aligned with the Green Bond Principles (GBP) of ICMA (International Capital Market Association), as well as the Green Loan Principles (GLP) of the LMA (Loan Market Association), in their most updated versions.

Furthermore, **the new Framework displays a strong commitment to the European Taxonomy and its technical screening criteria relating to activity 6.14** — Infrastructure for rail transport, as well as the DNSH (“Do not significant harm”) principle and the minimum safeguards set out in European legislation.

The aim as always is to raise the necessary funds for the activity of Adif AV during the year. The maximum limit on the Company’s borrowing capacity is set out in the State Budget, though this margin includes operating, investing and financing costs that have been budgeted for the period, so as to ensure the financial capacity needed to meet or honour such commitments at all times.

These payments include debt maturities, which are an important part of the target to be met, especially bond issues maturing each year. The Company will have to refinance a total of €1,122 million in 2023, of which €600 million relates to bond issues maturing in 2023.

(PUBLICATION OF NEWSLETTERS FOR INVESTORS

In 2022, Adif AV continued to rely on the channel it had set up in previous years to share the progress and achievements of Adif AV in relation to ESG and other matters with investors and stakeholders: the Investor Newsletter (**quarterly publication**).

Issues 8, 9 and 10 of the newsletter publication were sent out in April, July and November, respectively. Not only do the newsletters give accounting and financial figures to show the financial position of Adif AV, they also outline the investments made and explain the latest news and developments. In a nutshell, **they address all sorts of issues considered relevant to investors.**



The articles published in 2022 addressed numerous topics of public interest, notably the commissioning of the Madrid–Galicia line or the opening of the tunnel between Atocha and Chamartín stations. Other articles touched on Adif AV’s financial activity (such as the green bond issue carried out in October, or the renewal of the Framework in August), while more were devoted to the Company’s ESG endeavours, from the *Ecomilla* project to the anti-fraud policy put in place.

All Adif AV Newsletters also include an outline of the Company’s financial position, **the bonds issued to date**, and a **summary of Spain’s economy** obtained through a report issued quarterly by the Ministry of Finance.

All issues published to date can be found on the website of Adif AV, at: <https://www.adifaltavelocidad.es/boletin-informacion>

They are invariably published in English, as they are mainly intended for international investors, and an alert goes out to everyone on Adif AV’s contact list following the release of a new issue. A copy is also delivered to our internal stakeholders.

The Newsletter has been welcomed by investors, as it gives them a better **understanding of the Company’s situation and the ESG** projects it is invested in.

CORPORATE FORUM ON SUSTAINABLE FINANCE

Several Adif AV representatives continue to participate monthly in the meetings convened by the Corporate Forum on Sustainable Finance, CFSF.

This organization was set up in 2018 by some of the largest European issuers of sustainable financial products, both public and private, and which **Adif AV joined in June 2019**. The forum holds monthly meetings, at which its members present the progress they have made in sustainable financing and exchange views on regulatory and financial developments in order to take joint positions to make sustainability criteria a bigger part of the world of financing.

Various new members joined the forum in 2022, including Belgian group Elia. Aside from its monthly meetings, the *Corporate Forum* held meetings with various sustainability rating agencies, such as the one held in November with *Sustainable Fitch*, at which the agency explained to the members of the *Corporate Forum* its new advances in ESG-related matters, as well as meetings devoted to pressing current issues, such as the progress made by the European authorities in developing the new green bond standard. All the *Corporate Forum* meetings took place remotely during the period, although it is expected that some will be held in person in 2023.



8.7.1. Green Bond Standard: Sustainable financing



On 25 October, Adif AV launched its **sixth issue of fixed income securities under the "green bond"** format. As on previous occasions, this latest placement reflects the objectives of the Strategic Plan for the coming years, known as Plan Transforma 2030, and Adif AV's strong commitment to sustainability, as set out in previous sections of this report.

In this case, this issue of green bonds was placed under the new umbrella framework that Adif AV has embraced: its Green Financing Framework, renewed in August 2022 and aligned with the Green Bond Principles (GBP) of ICMA (International Capital Market Association), which defines the two following **types of project to which the Company has pledged to allocate the funds raised obtained its green bonds:**

- Investments related to **new high-speed rail lines and the extension of existing lines.**
- Investments related to the **maintenance, improvement and energy efficiency of high-speed rail lines.**

This Framework also embodies the unflinching commitment and firm alignment of Adif AV to the principles set out in the **European Taxonomy**, specifically those relating to **activity 6.14** (Infrastructure for rail transport).

The **main features of Adif AV's sixth green bond issue** are as follows:

- **Amount: €500,000,000**
- **Effective date: 17 October 2022**
- **Payment date: 25 October 2022**
- **Maturity: 30 July 2029**
- **Coupon: 3.5% per annum**
- **Net amount: €498,800,000**

With this latest issue, Adif AV remains **the second biggest issuer of green bonds in the Spanish public sector** (behind only the Spanish Treasury). At national level, it ranked sixth, with a total green bond issuance volume of €3,500 million.

From an investment standpoint, for this latest green bond issue, the percentage of participants classified as socially responsible remained at 73%, in line with the previous year's issue.

Sustainable financing in 2022 grew to €60.134 billion in 2022 (up 9% on the previous year), according to data provided by the Spanish Observatory of Sustainable Financing – OFISO. During 2022, sustainable issues accounted for 21% of the total Spanish capital market (excluding Public Treasury funding).

Total issues of green, social and sustainable bonds in Spain came to €21.777 billion in 2022, 76% of which related to the green bond format. This figure is down 24% on the previous year, more than the global market decline.

(GREEN BOND REPORT – 2021

This report, published in 2022, describes the commitment to transparency embraced by Adif AV through its 2019 Green Financing Framework. In accordance with the specific principles for green bonds (*Green Bond Principles published by ICMA, International Capital Markets Association*), the report is a clear reflection of Adif AV's commitment to inform its investors of the projects to which it has allocated these funds during the period, as well as the impact metrics if available. The report is issued at least once a year and until all funds obtained from an issue have been fully allocated to eligible projects.

This report must also include an attestation by an external auditor, who reviews the method for monitoring and allocating funds and effectively confirms that they were indeed allocated to projects considered eligible under the *Green Financing Framework*.



8.8. Environmental management



MILESTONES

- Ensuring the **proper management of contaminated land and waste**.
- **Coordinating the environmental side** of the Management System.
- **Centralising information related to the process** across the entire organisation.



COMMITMENTS

- Pursue further expansion of the scope of **environmental certification**.
- Head up a working group tasked with drawing up a **Catalogue of environmental clauses for Responsible Public Procurement**.
- **Increase the environmental culture and awareness** of staff by working on the Environmental Training Plan.
- **Improve the Environmental Monitoring System** while performing construction work not subject to an EIS.
- **Improve environmental control in certified activities**.



In this chapter we describe how Adif AV manages its **environmental commitments** and implements **measures to combat climate change**. These environmental commitments cover issues such as waste management, sustainable use of natural resources and the protection of biodiversity and ecosystems.



ENVIRONMENTAL FIGURES AT A GLANCE

15,426^{tCO₂Eq}

Emissions reduction

123.6^{GWH}

Improvement in energy efficiency

91.5%

Of renewable energies

€47.01 M

In resources earmarked for environmental protection¹

100%

Waste recovered

58.98%

Of passengers at stations certified in accordance with ISO 14001

€3.08 M

earmarked for fire prevention²

296

environmental review reports for projects

30

Environmental impact statement alignment reports (design phase)

¹ Latest available year-end 2021

² Latest available year-end 2021. Figure updated as at year-end 2022 with the publication of the environmental report in May 2023

ENVIRONMENTAL PRIORITIES



COMBATING
CLIMATE CHANGE



PROTECTING
BIODIVERSITY



USE OF
RESOURCES



WASTE MANAGEMENT AND
CIRCULAR ECONOMY

Adif AV's environmental performance is fully disclosed in its latest Environmental Report for 2021, thus fulfilling its commitment to report on the environmental aspects of its activities and the results obtained.

The aim is to identify and respond to **actual and potential environmental impacts** so as to achieve greater efficiency in its actions, **prevent or mitigate negative impacts** and **enhance opportunities for improvement**

ADIF | **SEGRETATION**
Via mandate

ADIF AV

Adif AV manages the environmental aspects



ADIF AV ENVIRONMENTAL MANAGES DUTIES

- ✓ Provision of advice on energy efficiency.
- ✓ Support in technical actions related to the environment.
- ✓ Electricity management (non-traction use).
- ✓ Oversight of the environmental Policy.
- ✓ Promotion of certified environmental management systems.
- ✓ Maintenance of open communication and information channels with institutions and the public.
- ✓ Oversight of compliance with applicable environmental legislation.

Adif AV's activity is certified under the scope of the **Environmental Management System**, thus ensuring that the environmental impacts of its activities are prevented, mitigated, corrected or otherwise offset. The ultimate goal is to ensure compliance with environmental law and regulations and to preserve and protect the environment and biodiversity.

Adif AV has a management **system certified by AENOR**, based on an environmental management approach and the principle of continuous improvement. The organisation has implemented all the necessary tools **under UNE-EN ISO 14001**, as well as documented procedures to ensure sound environmental management within the organisation



MAIN ENVIRONMENTAL IMPACTS

Derived from

CONSTRUCTION OF NEW LINES

- Problems affecting soil, fauna, vegetation and cultural heritage.
- Generation of noise and vibrations.

LINE OPERATION

- Soil contamination.
- Generation of hazardous waste.
- Generation of noise and vibrations.

¹Content related to disclosure **GRI 2-24**. Embedding policy commitments

The importance of sound environmental management when carrying on the business is supported just like any other strategic concern in the Enterprise Risk Management model, thus requiring regular monitoring and control in terms of risk management. Adif AV complements its Environmental Management System by allocating funds and human resources as needed to minimise any negative impact.

Within the **Insurance Programme**, the Company has arranged general civil liability insurance covering operations at both Adif and Adif AV and also **complementary civil liability**, which includes additional and specific coverage for environmental civil liability. This supplementary guarantee covers environmental liability under Law 26/2007 (partially implemented by Royal Decree 2020/2008 of 22 December) covering primary, supplementary and compensatory repair costs.

Thanks to the its **good environmental practices**, Adif AV received **no serious or very serious administrative fines or sanctions¹ in 2022** due to1 environmental breaches (the same as in 2021)

¹ The criteria for classifying a sanction as minor, serious or very serious are set out in the agreement to initiate the sanctioning proceedings, or in the decision ultimately delivered. Sanctions are graded on the basis of the rule that was breached.

PERFORMANCE IN RELATION TO CERTIFICATIONS

	2020	2021	2022
Certified centres	2	2	2
Percentage of passengers at stations certified under environmental management standard ISO 14001 in respect of total passengers at Adif AV stations	58.60%	58.98%	60.77%

Adif AV's **management system** identifies the environmental aspects derived from the organisation's activities, products and services, as well as the associated environmental impacts, from a life cycle perspective. All the **environmental impacts that may be caused under normal and abnormal operating conditions are identified and evaluated**, as are those that could arise as a result of unforeseen events affecting the environment. This allows the Company to determine the significant aspects on which to propose action for environmental improvement.

In 2022, the Company successfully finished the environmental diagnoses for 41 sites on the metric width network, 6 passenger stations and 1 high-speed maintenance depot, while also continuing to ensure full legal compliance by identifying and assessing legal requirements. During this period, it reviewed and/or drew up documentation related to the **processes of environmental diagnosis, contaminated soil management and waste management**.

Notably, Adif AV has a certified management system, based on an environmental management approach and the principle of **continuous improvement**. This system is used to plan the environmental objectives and processes needed to generate outcomes in accordance with the principles enshrined in the **Adif and Adif AV Environmental Policy**. The processes are then implemented accordingly and monitored and measured, along with the objectives and operational criteria. Last but not least, action is taken to bring about continuous improvement once the results and outcomes have been monitored and measured.

The organisation has implemented all the necessary tools under **UNE-EN ISO 14001**, as well as documented procedures to ensure sound environmental management within the organisation.

Adif AV's Environmental Management System is based on ISO 14001:2015 and is certified by AENOR. Via this certification, the Company is in a position to assure that it:

- Guarantees compliance with applicable environmental legislation with respect to the certified activities and centres.
- Establishes and implements objectives for continuous improvement in the certified system so as to in turn enhance the environmental management of the covered activities.

The certificate covers the following aspects of Adif AV's activities:

- Control and oversight of compliance with the environmental conditions set down in Adif AV's environmental impact statements (EISs), its environmental oversight plans and the requirements applicable to its rail infrastructure and facility construction activities.
- Management and coordination of research studies and projects related with rail infrastructure and facilities.



Environmental improvement actions within the Adif AV **Management System are controlled via audits (both internal and external)**, certification and monitoring, which are performed annually. The resulting findings are used to ensure the continuous improvement of the system.

The Company's Management System Certified under UNE-EN ISO 14001 includes a **documented procedure for "Identifying and Assessing Environmental Aspects"** in relation to the various processes that make up the Adif and Adif AV management system. According to this documented systematic approach, that environmental aspects that could potentially arise during an unforeseen emergency situation are identified and assessed.

With the aim of improving the management of **potential environmental emergencies** affecting the business of Adif and Adif AV, the Company has documented procedures in place titled "How to respond to emergencies affecting the environment" and "How to respond to minor environmental incidents". These procedures effectively provide the organisation with a set of common guidelines on how to take stock of the situation and how best to proceed in order to prevent or mitigate potential adverse environmental impacts and provide an adequate and effective response.

(NOISE POLLUTION

One of Adif AV's key objectives in terms of noise pollution in 2022 is to identify noise issues and reduce environmental pollution due to noise and vibrations. Improvements here will improve quality of life for people living in the vicinity of railway environments. This will include the following actions:

Preventive measures:

- Acoustic studies during the construction phase.
- Acoustic studies during the operational phase.
- Environmental review of acoustic projects.

Emission reduction measures:

- Strategic Noise Maps to detect exceedances of noise quality objectives
- Handling of complaints and queries on acoustic issues
- Environmental monitoring of acoustics at construction sites

Emission remediation measures:

- Noise action plans for the design of corrective measures in noise exceedance areas flagged via strategic noise maps, complaints or consultation processes.



The related impact is the **reduction in noise and vibrations**, thus leading **to improved quality of life for people** living in the vicinity of the railway environment

In 2022, Adif and Adif AV received between them **a total of 298 complaints** relating to noise and vibrations.

The following data shows data obtained in relation to noise pollution.

TREND IN NOISE-RELATED COMPLAINTS

	2020	2021	2022
Complaints specific to Adif AV	15	22	5
Complaints common to Adif and Adif AV	10	10	39

(SOIL CONTAMINATION

One of the main measures established at corporate level at Adif AV to prevent soil contamination is a procedure to train and keep an accurate record of all people tasked with fuelling duties.

In 2022, the Company drew up a **“Contaminated soil management” procedure and a technical instruction titled “Preparation and presentation of Preliminary Status Reports/ Status Reports (PSR/SR)”**, both of which regulate the functions and responsibilities of Adif AV in compliance with applicable law and regulations on contaminated soil, in particular, the recently approved Law 7/2022 of 8 April, on waste and contaminated soil for a circular economy, all with the ultimate aim of ensuring the protection of soil and ground and surface water.



Both documents are part of the Adif and Adif AV Strategic Plan 2030, more precisely the Sustainability Pillar, Strategic Objective 3 – Recover nature and biodiversity: Ensure the protection of nature and take action that helps to reverse the degradation of ecosystems, thus reducing pressure on biodiversity, further to the 2030 Agenda for Sustainable Development and in particular SDG 15. Life on land; Target 15.3. Combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.

The Company has also drawn up a **Contaminated Soil Management Plan**, as a strategic tool for planning and managing the remediation of contaminated soil present in Adif AV railway infrastructure.

In 2022, there were **no incidents** related to **soil contamination** at Adif AV, the same as in 2021

Indicators related to soil contamination are provided in the appendix under “Environmental information”.



9

RESULTS-DRIVEN PILLAR

9. RESULTS-DRIVEN PILLAR

9.1. ANALYSIS OF ACTIVITY AND PERFORMANCE

- 9.1.1. Analysis of activity and performance
- 9.1.2. Financial indicators for the business
- 9.1.3. Railway charges
- 9.1.4. Charges for use of RFIG lines
- 9.1.5. Charges for use of stations and other facilities
- 9.1.6. Liquidity and capital
- 9.1.7. Coverage ratio – ESA (European System of Accounts)
- 9.1.8. Investments carried out during the year

9.2. INTERNATIONAL PROJECTION

9.3. CONSOLIDATING SUCCESSFUL PARTNERSHIPS

- 9.3.1. Property management and urban integration
- 9.3.2. Urban integration joint ventures (JVs)
- 9.3.3. Corporate Group

9.4. INFORMATION ON PROCUREMENT


9.5. INFORMATION ON RRF FUNDS FOR SUSTAINABLE PROJECTS

9.6. INNOVATION AND DEVELOPMENT

- 9.6.1. RD&I management
- 9.6.2. Digital transformation

The **results-driven** pillar aims to make us more financially efficient by optimising resources and costs and increasing revenues on the path to improving competitiveness. The main indicators under this pillar are as follows:

PILLAR: RESULTS-DRIVEN

	2020	2021	2022
EBITDA (€M)	-8.5	58.7	231.8
Profit/(loss) for the period (€M)	-460.9	-425.4	-296.8
 Use of EU funds (%) ¹	111.8	16.5	90.4

¹ % (Cumulative amount of aid received in the quarter/annual amount expected to be received in aid (proceeds – repayments of aid))



9.1. Analysis of activity and performance¹



This section describes Adif AV's tax strategy and provides information on profit before tax, income tax paid (if any) and government grants received.

9.1.1. Analysis of activity and performance

The main items on Adif AV's 2022 income statement compared to previous years are presented below.

GLOBAL RESULTS

€ million	2020	2021	2022
Country-by-country profit/(loss)	-460.9	-425.4	-296.8
Country-by-country income tax paid	0	0	0
Government grants received by country (Spain) ²	134.3	0	359.7

¹ Content linked to Strategic Plan 2030, **Results-driven pillar, Objective 1 (PRED-SO1)**

² Content related to **GRI 201-4**: Financial assistance received from government, European agencies and others

PROFIT/(LOSS) FOR THE YEAR

€ million	2020	2021	2022
Operating income	806.7	1,103.3	1,621.7
Operating expenses	1,066.3	1,305.4	1,674.0
Operating profit/(loss)	-259.6	-202.1	-52.4
EBITDA	-8.5	58.7	231.8
Net finance income/(cost)	-201.3	-223.3	-244.4
Profit/(loss) before tax	-460.9	-425.4	-296.8
Profit/(loss) for the year	-460.9	-425.4	-296.8

Adif AV reported a **loss before tax** of €296.8 million in 2022, compared to a loss of €425.4 million in 2021, an improvement of €128.656 million or 30%.

The most significant changes in the income statement headings are as follows:

- Operating loss in 2022 amounted to €52.4 million, an improvement of €149.8 million on the loss of €202.1 million reported in 2021, which represents an improvement of €149.8 million.

The main changes were:

- Growth in revenue of 44% to €172.9 million on the back of higher production in 2022 thanks to an increase in traffic and passenger numbers following the lifting or easing of COVID-19 restrictions.


- Growth in operating income of 57%, from €579.7 million in 2021 to €910.9 million in 2022. This increase was driven by the subsidy of the offsetting charge tariff of €66.1 million. In 2021, this subsidy was €40.8 million. There were also increases in rental income and revenue from services following the withdrawal of the discounts and relief previously in place to mitigate the impact of the pandemic and ensuing economic crisis. Revenue from traction power supplies rose to €299.7 million, underpinned by the increase in rail traffic and higher prices.
- “Other operating expenses” was up €331.2 million or 36%, of which €284.2 million related to an increase in traction electricity expenses, and €33.8 million to an increase in energy expenses for Non-Traction Uses (NTU), which were offset by income in the same connection. There was also a cost increase of €33.4 million in the repair and maintenance of infrastructure and buildings.

The **Financial Result (net finance expense)** in 2022 shows a negative balance of €244.4 million, compared to a negative result of €223.3 million in 2021. This was mainly the result of:

- A 1% year-on-year drop in finance costs, from €319 million in 2021 to €314 million in 2022. This effect was largely due to a reduction in the expense incurred on derivative instruments (from €1.7 million in 2021 to €0.5 million in 2022, disappearing altogether at the end of 2022), as well as a reduction in financial costs for late interest on payments to contractors and persons subject to compulsory land purchase.
- Finance income was down 21%, largely due to the commissioning of high-speed lines and the resulting reduction in income from the capitalisation of the related finance costs.

All of the above gave rise to the following figures for **economic value generated, distributed and retained** in 2022.

ECONOMIC VALUE¹

€ million	2020	2021	2022
Economic value generated ²	805.4	1,092.6	1,574.9
 Economic value distributed ³	1,015.2	1,257.2	1,587.5
Economic value retained ⁴	-209.8	-164.6	-12.6

Adif AV comprises the following business segments:

- **Network management:** includes the processes of capacity management, traffic safety, network statement, rail infrastructure maintenance and traffic management.
- **Construction:** includes construction of the lines entrusted to the Company.
- **Management of stations and other assets:** this segment includes station management, meaning all activities needed to provide services to the end customer, as well as telecommunications management and management of other assets.
- **Energy:** managing the supply of electricity.

¹ Content related to **GRI 201-1**: Direct economic value generated and distributed
² Economic value generated: ordinary + extraordinary income
³ Economic value distributed: operating expenses + finance costs + taxes
⁴ Economic value retained: economic value generated – economic value distributed



The following table **compares Adif AV's operating income in 2022 and 2021**, by business segment:

€ THOUSAND 2021	TOTAL	Network management	Construction	Energy	Management of stations and other assets	Common expenses
Revenue	390,570	338,490	0	0	52,080	0
Self-constructed property, plant and equipment	9,188	0	9,188	0	0	0
Supplies	0	0	0	0	0	0
Other operating income	579,672	42,610	19,082	379,377	137,899	704
Staff costs	-15,016	-553	-11,115	-536	-2,213	-599
Other operating expenses	-908,742	-351,300	-18,126	-384,105	-121,589	-33,622
Profit/(loss) from intra-group transactions	0	-8,336	-1,514	8,458	1,450	-58
Provision surpluses	3,056	0	0	0	0	3,056
2021 EBITDA	58,728	20,911	-2,485	3,194	67,627	-30,519

€ THOUSAND 2021	TOTAL	Network management	Construction	Energy	Management of stations and other assets	Common expenses
Amortisation and depreciation	-378,208	-339,452	-37	-78	-37,879	-762
Recognition of non-financial and other grants	120,820	116,507	0	0	4,243	70
Impairment and gains/(losses) on disposal of assets	-3,484	-313	0	0	-3,171	0
Non-recurring income/(expense)	0	0	0	0	0	0
Share of overheads	0	-11,206	-14,848	-1,247	-3,910	31,211
2021 OPERATING PROFIT/(LOSS)	-202,144	-213,553	-17,370	1,869	26,910	0

€ THOUSAND 2022	TOTAL	Network management	Construction	Energy	Management of stations and other assets	Common expenses
Revenue	563,511	484,553	0	0	78,958	0
Self-constructed property, plant and equipment	9,984	0	9,984	0	0	0
Supplies	0	0	0	0	0	0
Other operating income	910,931	68,168	17,444	679,043	144,831	1,445
Staff costs	-15,885	-615	-12,065	-570	-2,098	-537
Other operating expenses	-1,239,940	-384,018	-16,654	-693,085	-125,325	-20,858
Profit/(loss) from intra-group transactions	0	-14,462	-1,581	14,823	1,238	-18
Provision surpluses	3,189	674	0	0	0	2,515
2022 EBITDA	231,790	154,300	-2,872	211	97,604	-17,453

€ THOUSAND 2022	TOTAL	Network management	Construction	Energy	Management of stations and other assets	Common expenses
Amortisation and depreciation	-417,870	-375,494	-38	-237	-41,317	-784
Recognition of non-financial and other grants	134,062	129,167	0	34	4,788	73
Impairment and gains/(losses) on disposal of assets	-351	-3,131	0	0	2,780	0
Non-recurring income/(expense)	0	0	0	0	0	0
Share of overheads	0	-7,910	-8,522	-49	-1,683	18,164
2022 OPERATING PROFIT/(LOSS)	-52,369	-103,068	-11,432	-41	62,172	0

9.1.2. Financial indicators for the business

The following table shows various **general economic and financial indicators**.

FINANCIAL INDICATORS FOR THE BUSINESS

	2020	2021	2022
RATIOS SHOWING THE DEGREE OF SELF-FINANCING			
LEVEL OF AUTONOMY Indicates the degree of autonomy in respect of third-party financing.	52.05%	50.20%	50.83%
FINANCING OF FIXED ASSETS Indicates the % of long-term financing for non-current assets.	98.40%	98.76%	98.21%
PROFITABILITY RATIOS			
TOTAL ASSET TURNOVER Indicates the degree of efficiency when it comes to asset management.	1.40%	1.95%	2.96%
FIXED ASSET TURNOVER Indicates the degree of efficiency in managing fixed assets.	1.43%	2.03%	3.02%
CURRENT ASSET TURNOVER Indicates the degree of efficiency in managing current assets.	85.26%	49.32%	146.42%

FINANCIAL INDICATORS FOR THE BUSINESS

	2020	2021	2022
LIQUIDITY RATIOS			
LIQUIDITY RATIO Indicates how many monetary units are liquid for every 100 assets.	1.65%	3.95%	2.02%
CASH RATIO Shows the Company's ability to honour its current payment commitments.	0.51%	0.77%	0.53%
SOLVENCY RATIO Indicates the Company's ability to cover its liabilities with its assets.	2.09%	2.02%	2.03%
FINANCIAL PROFITABILITY Shows the return on own funds.	-3.32%	- 3.68%	-2.12%
ECONOMIC PROFITABILITY Effective capacity to remunerate all capital available to the Company, both own and third-party.	-0.96%	- 1.02%	-0.60%
WORKING CAPITAL (€ million) Indicates the Company's ability to honour its short-term obligations.	-755.56	-591.07	-876.42

AVERAGE SUPPLIER PAYMENT PERIOD:

In accordance with Additional Provision Three of Law 15/2010 of 5 July, the following table provides information for 2020, 2021 and 2022 on payment deferrals made to suppliers, as per the methodology set out in the Resolution of the Spanish Accounting and Audit Institute of 29 January 2016.

PAYMENTS MADE AND OUTSTANDING AT 31 DECEMBER:

Amount (€ thousand)	2020	2021	2022
Average supplier payment period (days)	54.86	46.49	44.40
Ratio of transactions paid (days)	56.92	48.45	46.10
Ratio of transactions outstanding (days)	34.81	29.89	23.79
Total payments made (€ thousand)	1,550,533	1,783,437	2,688,343
Total payments outstanding (€ thousand)	159,131	210,494	221,740

The Company has included in this calculation both the figures relating to “Suppliers and other payables” and those relating to suppliers of property, plant and equipment.

9.1.3. Railway charges

Pursuant to the Rail Sector Act (Law 38/2015, or LSF for its acronym in Spanish), Adif AV charges railway companies for **use of railway lines attached to the General Interest Railway Network (RFIG)** and for the **use of stations and other railway facilities**.

The LSF transposes into the laws of Spain the rules contained in Directive 2012/34/EU of the European Parliament and of the Council of 21 November 2012. The LSF covers almost all aspects of railway legislation, including matters relating to the transparency and sustainability of railway infrastructure financing, and provides a new and more complete classification of railway-related services and new and more precise rules on charging for access to railway infrastructure.

Article 23 of the LSF, as amended by Article 1(19) of Law 26/2022 of 19 December, explains the remit of the general rail infrastructure managers, including the fixing, review and collection of railway infrastructure charges, in accordance with applicable law and regulations.

In Title VI, the LSF regulates the economic and tax regime of the railway sector in a bid to strike a balance between the economic viability of the system and the promotion of rail transport. It seeks to provide incentives to improve network performance, reduce disturbances, optimise the use of the infrastructure and reduce the costs of making it available.

It also governs the legal regime of charging for the use of railway lines and for the use of service facilities and provides an updated tariff regime for the provision of services, thus advancing free access to service activities without compromising the sustainability of the railway infrastructure.

Law 26/2022, of 19 December 2022, amending Law 38/2015, of 29 September 2022, on the railway industry, introduced changes in the wording of Chapter II, on charges and prices for the use of railway infrastructure and service installations. Railway charges are essentially the amounts that infrastructure managers receive from railway undertakings for use of the lines of the General Interest Railway Network (RFIG) and passenger stations, freight terminals and other service installations.

However, Transitional Provision One of Law 26/2022, “Provisional application of current charges and suspension of the entry into force of the modification of certain sanctions”, states that the system for determining railway charges in effect at the time that Law takes effect will continue to apply until the relevant values under the system provided for in that Law are calculated, approved and published.

Article 71 of the General State Budget Law 22/2021 for the year 2022 approved **the new railway charges with indefinite effect**. However, in order to mitigate the effects of the COVID-19 crisis on rail transport, Transitional Provision Six of that same Law temporarily modifies the unit amounts of the railway charges, rendering null and void the unit amounts provided for in Article 71 during the period running from 1 January to 31 December 2022. Therefore, during that period the railway infrastructure manager applied the unit amounts set out in Transitional Provision Six, which are therefore the charges effectively paid by the railway undertakings throughout 2022.

Thus, as had also happened in 2021, a Transitional Provision was included in the General State Budget Law 22/2021 (Transitional Provision Six), according to which “The Ministry of Transport, Mobility and Urban Agenda shall compensate railway infrastructure managers accordingly for the difference between the fees that they should have received by virtue of the unit amounts provided for in Article 71 and those they effectively received from the railway undertakings as a result of the payment calculations issued on the basis of the unit amounts provided for in this Transitional Provision Six.”

This compensation by the Ministry of Transport, Mobility and the Urban Agenda was charged to the budget allocations included in the agreements signed on 26 July 2021 between the central government and the infrastructure managers for the economic sustainability of the infrastructures that make up their network.

The compensation received for tariff reductions in 2022 at Adif AV amounted to €61,760 thousand for the charges set out in Article 97 and to €4,345 thousand for those set out in Article 98.

The aim of this tariff proposal is to provide the railway system with incentives to facilitate and promote the supply of services at the beginning of the rail passenger transport liberalisation process and recovery to pre-pandemic levels of traffic.

The **methodology for calculating the charges**, in accordance with applicable European regulations and the LSF, is to pass on to the railway operator all the costs directly attributable to the rail service.

The following costs are directly attributable to the rail service provided:



- The costs of the capacity adjudication process, traffic management, traffic safety and replacement of safety and traffic control facilities (**recoverable under mode A**).
- Railway infrastructure maintenance and upkeep costs (**recoverable under mode B**), and
- Electrification installation maintenance and upkeep costs and related replacement costs (**recoverable under mode C**).

Financial expenses, replacement costs corresponding to platform, tunnels, bridges, track, buildings and resources used for maintenance and conservation, as well as the expenses needed to ensure a reasonable development of such infrastructures and all costs that allow the rail infrastructure manager to achieve the economic sustainability of the infrastructure it manages, may all be recovered, provided that the market can accept it, by adding them to the full amount chargeable for the use of railway lines (**mode B**).

The following table shows **revenues, by charge type**, in 2022, 2021 and 2020.

	Amount (€ thousand)	2020	2021	2022
CHARGE FOR USE OF INFRASTRUCTURE		268,075	326,322	466,483
Adjudication of capacity		52,413	68,270	92,660
Use of railway lines		197,085	239,803	348,521
Use of transformer and distribution installations		20,661	19,499	26,580
Discounted charge for use of RFIG lines		-2,084 ¹	-1,250	-1,278
CHARGES FOR USE OF STATIONS AND OTHER FACILITIES		59,007	63,737	96,490
Use of Passenger stations		43,000	51,489	78,299
Variable gauge		3,377	3,870	4,454
Use of Track with platform		12,630	8,378	13,731
Use of track – other service installations		-	0	6
TOTAL CHARGES		327,082	390,059	562,973

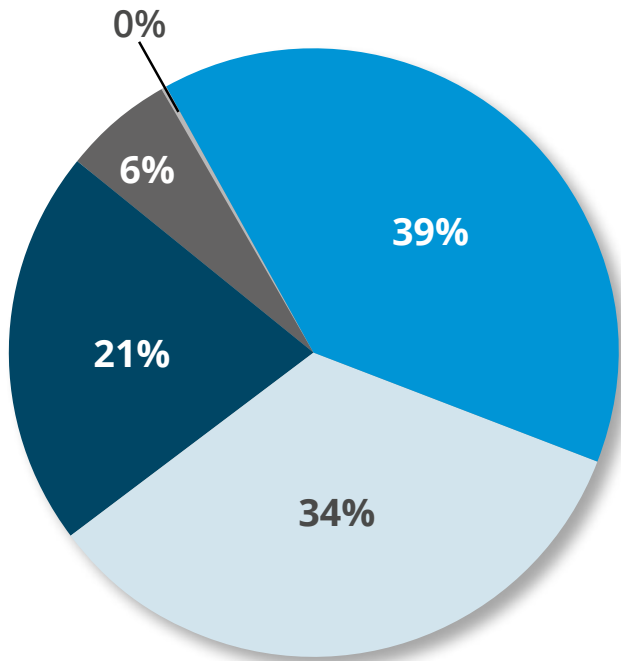
¹ Of the €2,084 thousand recognised in 2020 for the rebate on the RFIG line usage fee, €2,074 thousand related to rebates settled for 2020, while €10 thousand related to the adjusted figure of the rebate payable for 2019.



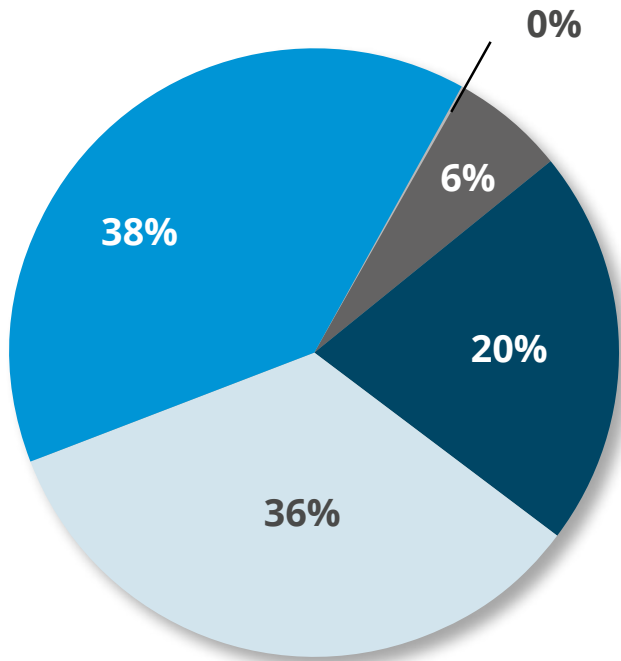
9.1.4. Charges for use of RFIG lines

Tariff income earned from use of RFIG lines in 2022 **was up 42.95% on 2021**, following a production increase (traffic growth) of 34.43%. Shown below is the contribution made by each type of RFIG usage fee to total 2022 revenues.

Revenue by tariff type, 2021-Adif AV



Revenue by tariff type 2022-Adif AV

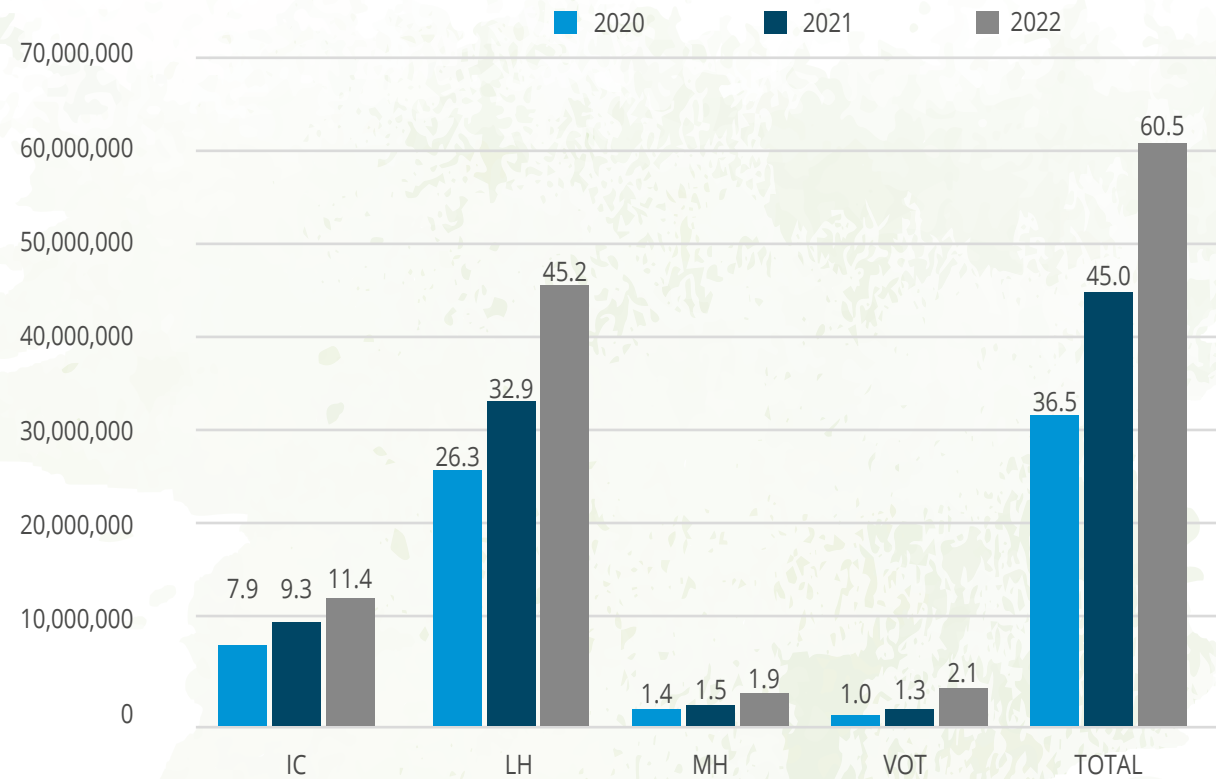


- Adjudication of capacity
- Adjudication of capacity/Addition
- Use of railway lines
- Use of railway lines/Addition
- Use of transformer and distribution installations

Overall traffic, measured in terms of train-km, rose by 34.43% from 45.0 million train-km in 2021 to 60.6 million in 2022. This change was due to an increase in traffic on all lines, especially VOT services, which increased by 55.92%, together with the new long-distance HS lines, which increased by 37.66%.

The following chart shows the trend in traffic during 2021-2022, measured in train-km travelled, by type of service:

Train-km distribution by type of service 2020-2021-2022-Adif AV



IC - COMMUTER & MEDIUM DISTANCE RAIL PASSENGERS

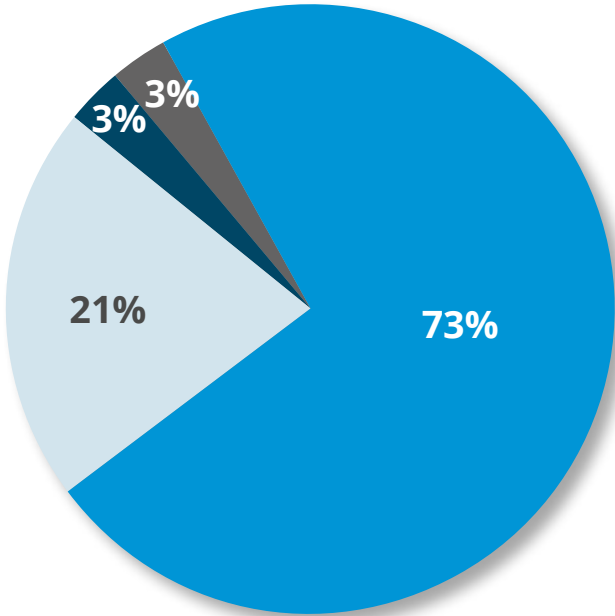
LH - LONG DISTANCE RAIL PASSENGERS

MH - RAIL FREIGHT TRANSPORT

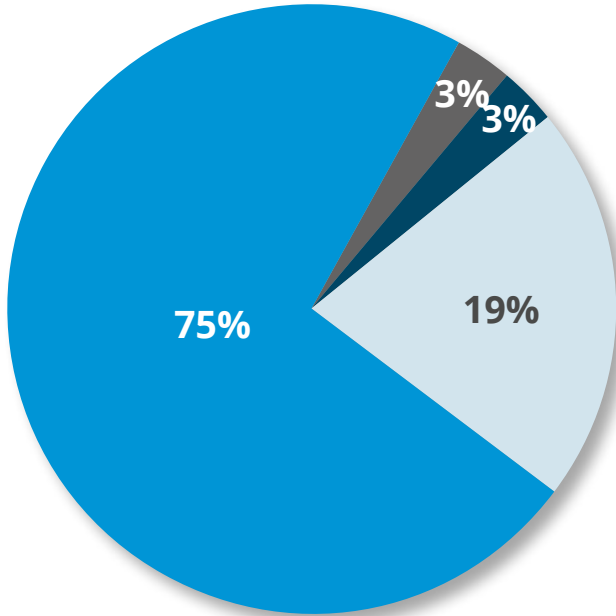
VOT - FORMATION TRAINS PASSENGERS, ISOLATED ENGINES AND TEST TRAINS

The following chart shows **the distribution by type of service of the train-km travelled** in 2022:

Train-km distribution by type of service 2021-Adif AV



Train-km distribution by type of service 2022-Adif AV



- IC
- MH
- LH
- VOT

The following table shows **changes in the number of train-km running in 2021 and 2022 on the main Adif AV lines:**

THOUSANDS OF TRAIN-KM FROM USE OF THE RFIG	2020	2021	2022	CHANGE	% CHANGE
MADRID – ANDALUSIA	10,738	12,289	16,085	3,796	30.89%
MADRID – LEVANTE	4,813	6,308	9,065	2,757	43.71%
MADRID – BARCELONA – FRENCH BORDER	9,882	12,979	17,888	4,909	37.82%
MADRID – VALLADOLID – LEÓN – ZAMORA	3,156	4,401	7,570	3,169	72.00%
MADRID – BADAJOZ – LISBON	-	0	192	192	100.00%
OTHER LINES	8,088	9,075	9,763	688	7.58%
TOTAL	36,677	45,053	60,563	15,510	34.43%

To encourage the efficient operation of the rail network and promote new rail transport services in accordance with Article 97.6 of Law 38/2015, in 2022 Adif AV established a discount on the charge for use of the lines that make up the General Interest Rail Network (RFIG), under modes A and B, for annual increases in traffic in accordance with the criteria set out in that law.

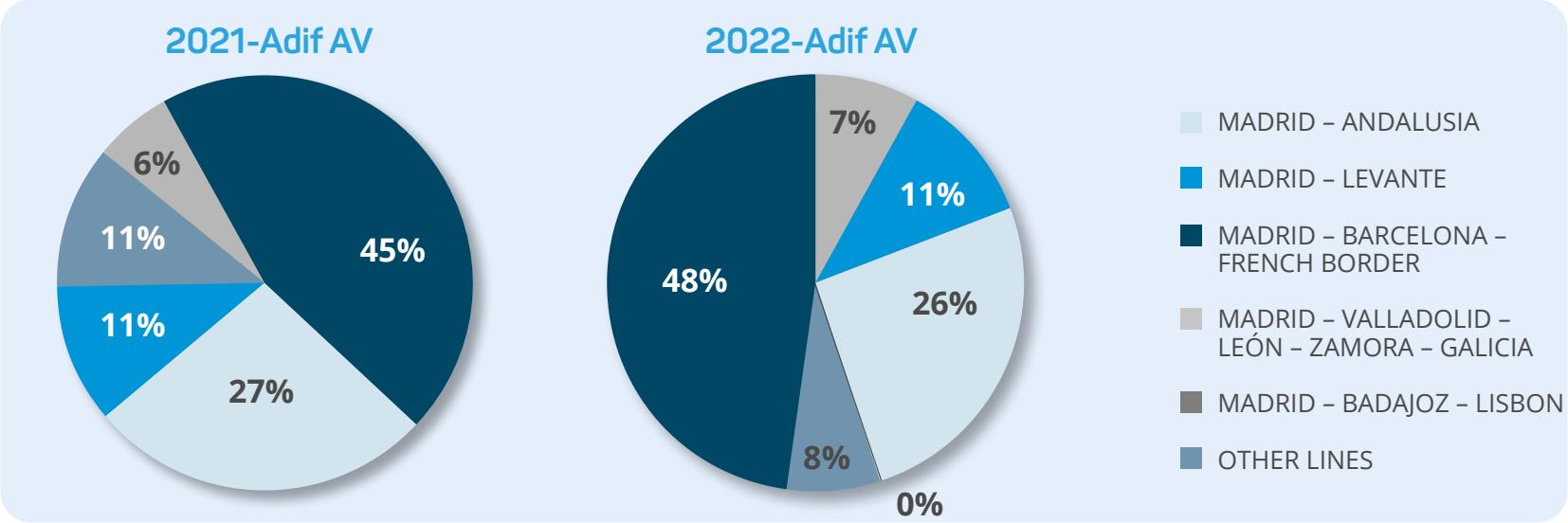
The following **lines were offered at a discount in 2022** along the network of Adif AV:

- Lines along High-Speed Axis 11 Madrid Chamartín – Valladolid – Bifurcación Venta de Baños.
- Lines along High-Speed Axis 12 Madrid Atocha – Barcelona – French Border.
- Lines along High-Speed Axis 16 Olmedo – Medina – Zamora – Galicia.

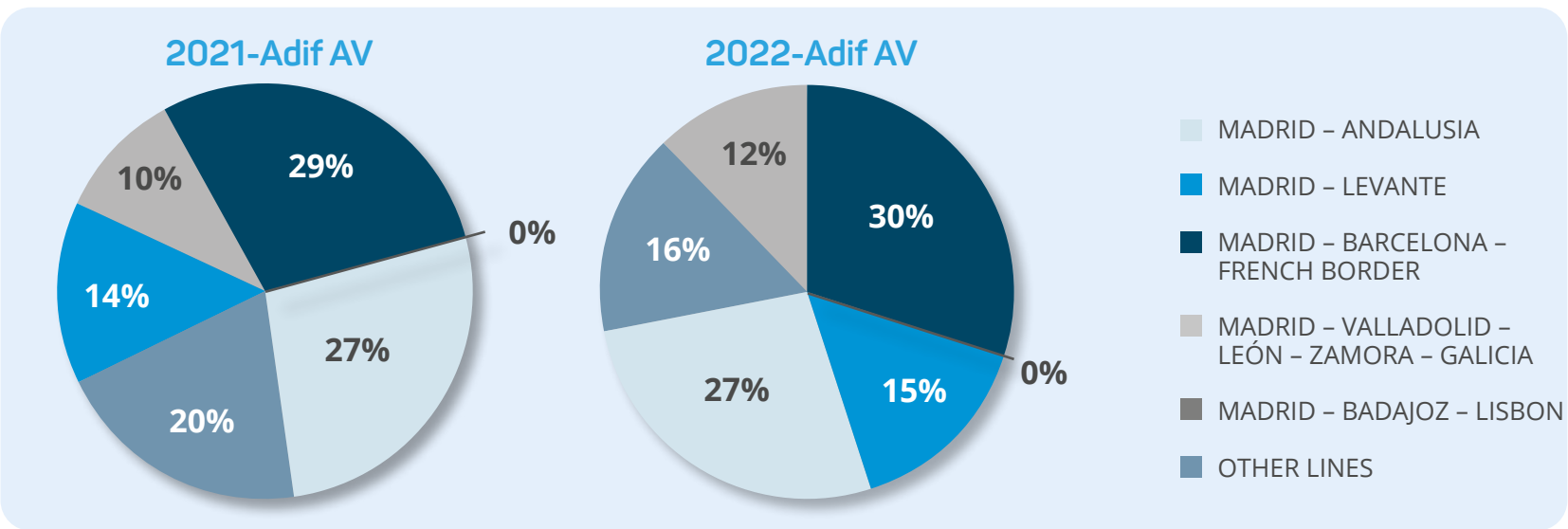
The discount generated at Adif AV in 2022 amounted to €1,278 thousand.

The following charts provide a breakdown of revenue and train-km travelled in 2022 along the main lines of Adif AV:

Revenue by axis



Train-km distribution by axis



9.1.5. Charges for use of stations and other facilities

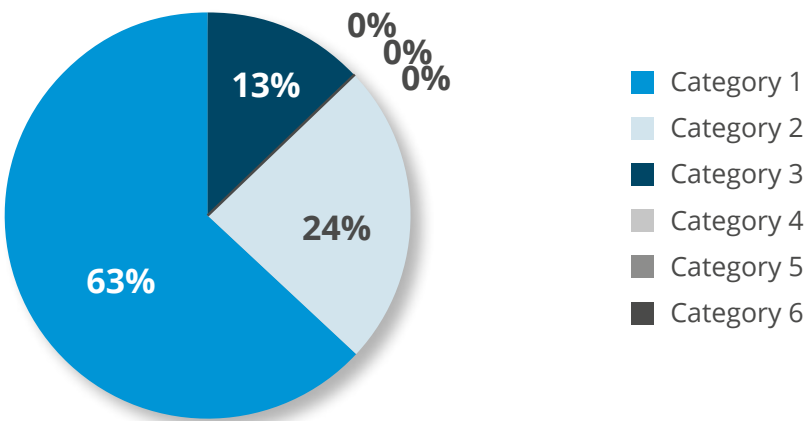
Revenue from charging **for use of stations and other facilities was up 51.39% compared to 2021**, following the lifting of the mobility restrictions put in place amid the pandemic.

Revenues from **station use charges were up 52.07% on 2021**, even taking into account that the change in station classification meant that 4 stations at Adif AV were switched to a higher category and 2 to a lower category. Meanwhile, revenue from the addition for intensity of station use grew by 68.09%, as the number of passengers boarding and alighting at stations increased in 2022 compared to 2021, as shown below:

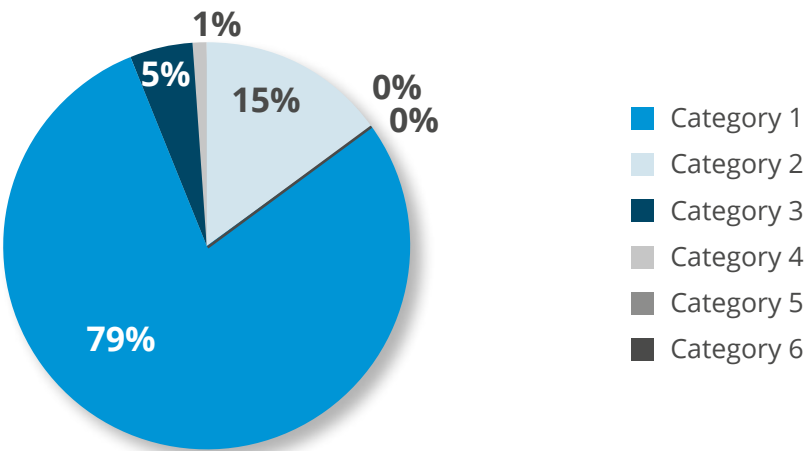
	2020	2021	2022	% CHANGE
Passengers (Nº)	71,220,896	98,527,115	152,612,091	54.89%



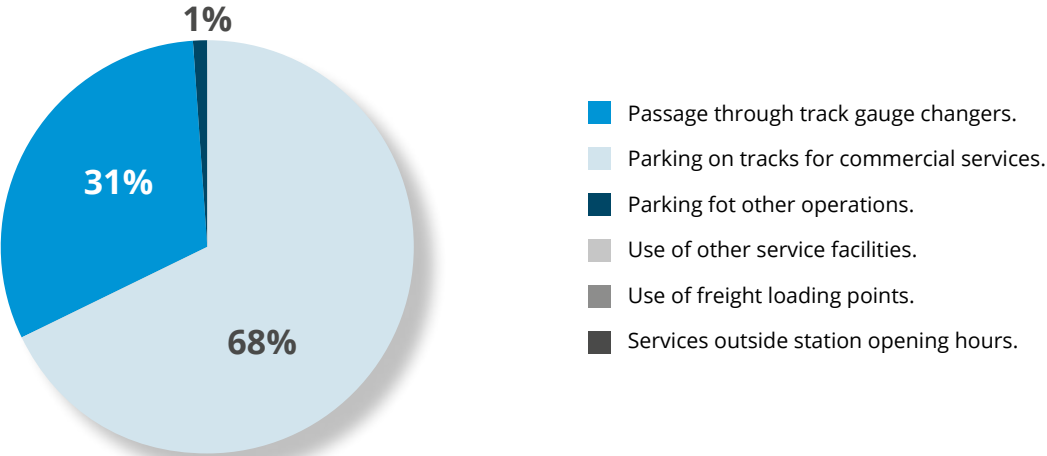
Revenue by passenger station, 2021-Adif AV



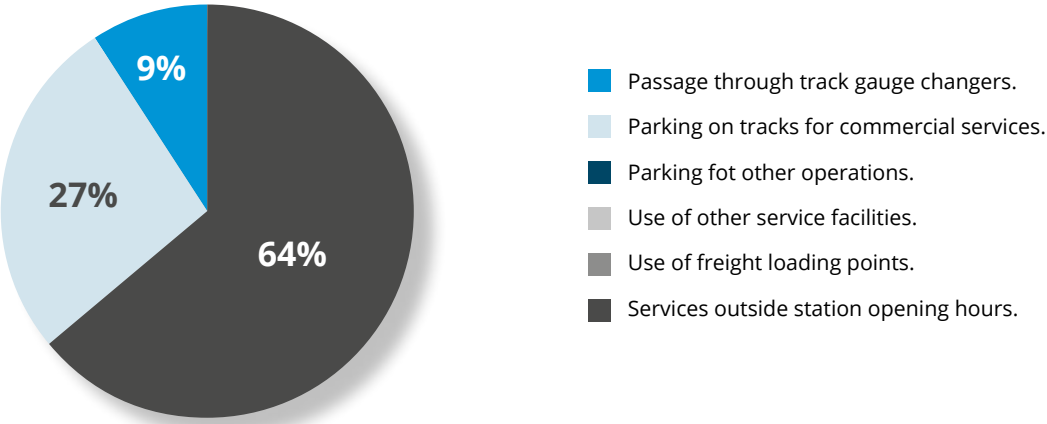
Revenue by passenger station, 2022-Adif AV



Revenue for use of other facilities, 2021 - Adif AV



Revenue for use of other facilities, 2022 - Adif AV



9.1.6. Liquidity and capital

The Company's liquidity is managed centrally in order to optimise its available cash.

The following table shows **cash and cash equivalents** in 2020, 2021 and 2022:

Amount (€ thousand)	2020	2021	2022
Net cash flows used in operating activities	(240,521)	(691,682)	(311,270)
Net cash flows used in investing activities	(895,083)	(837,747)	(1,086,256)
Net cash flows from financing activities	1,122,718	1,332,133	1,638,955
Net increase/(decrease) in cash and cash equivalents	(12,886)	(197,296)	241,429

Amount (€ thousand)	2020	2021	2022
Grants received	134,345	196	359,680
Contributions from the State	311,574	466,174	311,574
Proceeds from and payments for financial instruments	676,799	865,763	967,701
Total cash flows from financing activities	1,122,718	1,332,133	1,638,955

The Company's liquidity is managed centrally in order to optimise its available cash.

Adif AV's **working capital** moved from a negative €591.1 million at 31 December 2021 to a negative €876.4 million at 31 December 2022, representing a net negative change of €285.4 million. This situation has not generated any liquidity stress for the Company, given the contributions received under the General State Budget for 2022 and the fact that external financing may be arranged subject to the authorised debt limit.

The Company also had a total of €355 million in undrawn short-term credit facilities in place with financial institutions at 31 December 2022. These facilities mature in the short term, with some of them tacitly rolling over each year, subject to a maximum number of rollovers.

The Company also pursues a policy of optimising its borrowing costs and reduced its reliance on external borrowing in 2022 as far as possible. While it was authorised to increase its long-term borrowings from financial institutions and its debt through fixed income issues by a nominal €758 million, such debt was actually down €753 million at year-end.

Indebtedness in terms of both bank borrowings and bond issues includes debt arranged by Adif AV mainly with the European Investment Bank, though also with other financial institutions and via bond issues under the EMTN Programme, to finance investments made in previous years in property, plant and equipment, as envisioned in the Multi-year Action Plan.

On 11 February 2022, the prospectus for the EMTN Programme with a nominal amount of €8 billion was renewed on the Irish Stock Exchange and passported to the Spanish National Securities Exchange Commission (CNMV) on the same date.

The combination of interest rates and the diversification of funding sources brought the average interest rate on Adif AV's long-term borrowings with financial institutions and on debt through fixed income issues to 1.78% per annum at 31 December 2022, with an average life of 9.19 years (1.59% per annum at 31 December 2021, with an average life of 9.03 years).

9.1.7. Coverage ratio – ESAC (European System of Accounts)

Spanish Royal Decree-Law 15/2013 of 13 December, on the restructuring of state-owned enterprise Administrador de Infraestructuras Ferroviarias (Adif) and other urgent economic measures, includes an Additional Provision One regulating the criteria and procedures to ensure compliance with the principle of financial sustainability of the new state-owned enterprise Adif AV and, consequently, with the requirements of national accounting regulations.

More specifically, the additional provision states that:

- Adif AV, in accordance with the principle of financial sustainability, shall ensure that the coverage ratio of production costs with sales revenues, as set out in the regulations governing national accounts, allows for its classification as a public unit included in the segment “Non-Financial Enterprises”.
- The timing and amount of the investments budgeted for and effectively executed must never jeopardise Adif AV’s status as a non-financial enterprise for national accounting purposes.

By virtue of this additional provision, the value of the ESA 2010 coverage ratio is calculated as at 31 December 2022, taking into account the amendments proposed by the Comptroller General of the State (IGAE) in this respect::

- The information on finance income has been broken down to show separate figures on the returns earned on financial investments and the income recognised through capitalisation of borrowing costs, thus meeting the 50% ratio, without netting the income from capitalisation of the total borrowing costs. To compare the figures on a like-for-like basis, the same criterion has been applied to the scenarios based on which the split was decided.
- For the purposes of calculating the ratio, the amounts relating to Mode A, the Addition to Mode A and the Addition to Mode B have not been included in the revenues from charging

for infrastructure use, as they relate to commuter, city and intercity passenger services linked to Public Service Obligations that are not accepted by Eurostat as market revenues.

- An increase coefficient has been applied to the accounting depreciation under the terms proposed by the Financial Comptroller for adjustment to straight-line depreciation. The value of this coefficient for 2019 is 0.80, which has been provisionally applied to the 2022 amounts in line with the IGAE’s recommendation.
- Operating subsidies have not been taken into account in the calculation of income

The **resulting figures at 31 December** are as follows:

	2020	2021	2022
(€ thousand) Revenues under national accounts	612,485	845,754	1,321,224
(€ thousand) Expenses under national accounts	1,645,531	1,878,524	2,285,880
ESA Ratio – 2010	37.22%	45.02%	57.8%

9.1.8. Investments carried out during the year

The following tables show the investments carried out in 2022 (compared to the previous year), broken down **by type and by line**.

TYPES	2020 Amount in thousand € (including VAT)	2021 Amount in thousand € (including VAT)	2022 ¹ Amount in thousand € (including VAT)
Electrification and telecommunications	127,897	77,492	108,786
Platform	482,277	371,388	811,348
Signalling and safety installations	154,291	84,505	104,659
Equipment and other actions	195,804	251,101	301,466
Track	250,587	102,562	96,903
Stations and freight terminals	61,717	202,685	130,031
TOTAL	1,272,573	1,089,733	1,553,192

¹ In addition to the above investments by type and related lines, there were changes in 2022 in Adif AV's equity in relation to the assets listed below (**figures in € thousand, including VAT**): PARTICIPATING LOANS TO RAILWAY INTEGRATION COMPANIES 540 // ASSETS FROM SEITSA 100,418.

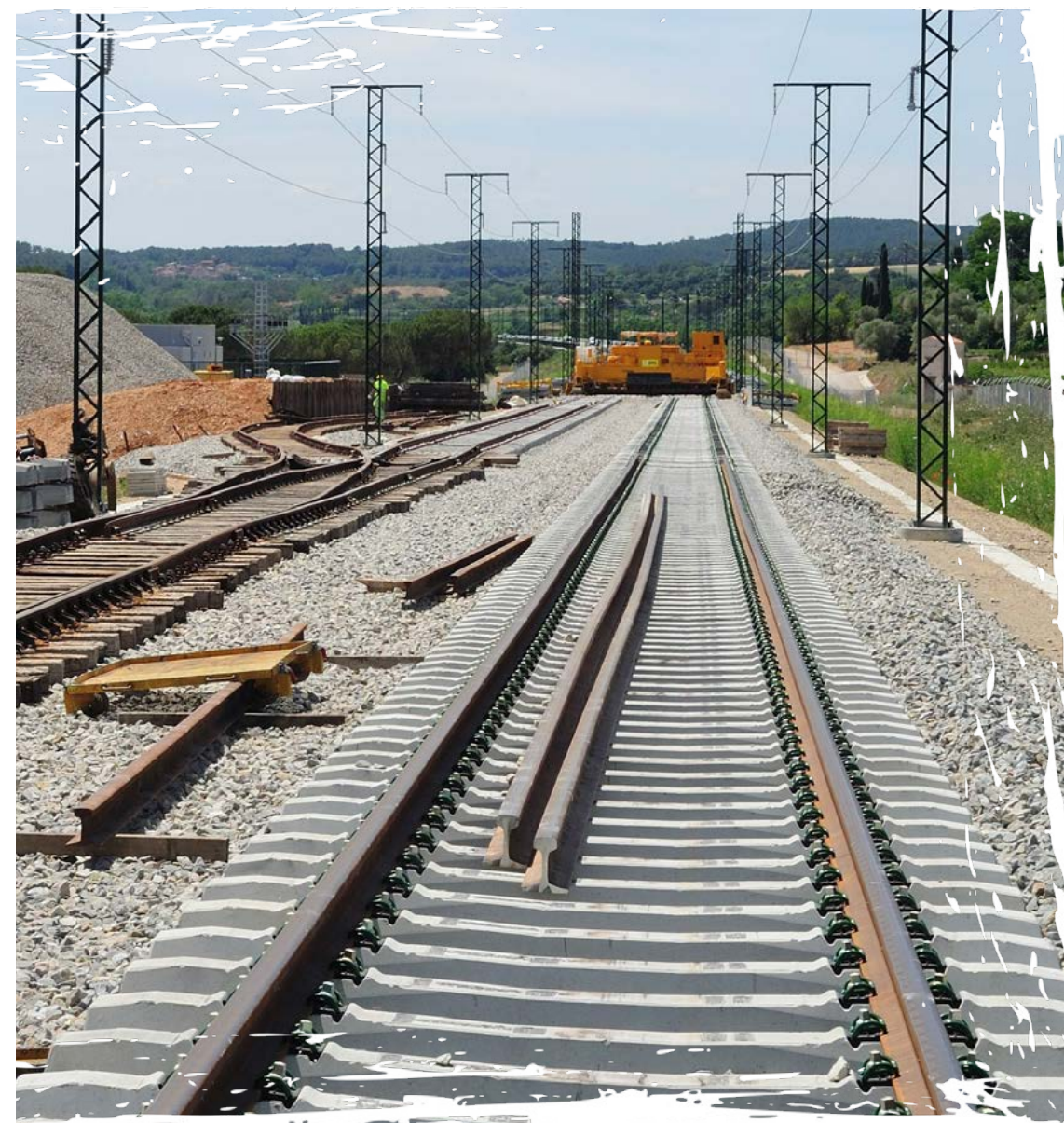
LINES	2020 Amount in thousand € (including VAT)	2021 Amount in thousand € (including VAT)	2022 ¹ Amount in thousand € (including VAT)
VANDELLÓS-VALENCIA	52,574	47,920	44,480
H-S LINE LEVANTE	80,641	29,476	48,298
H-S LINE ALMERIA-MURCIA	40,753	87,599	271,718
H-S LINE BOBADILLA-GRANADA	43,120	14,730	-5,036
VANDELLOS-TARRAGONA	20,825	8,504	-11,642
PALENCIA-AGUILAR DE CAMPOO	682	6,064	10,282
CABECERA NORTE DE CHAMARTIN	7,956	32,810	28,749
H-S LINE ASTURIAS (PAJARES BYPASS)	109,098	-2,226	42,709
H-S LINE VENTA DE BAÑOS-PALENCIA-LEÓN-ASTURIAS	30,384	24,684	9,569
H-S LINE VALLADOLID-BURGOS-VITORIA	24,614	17,168	15,095
L.A.V. VITORIA-BILBAO-SAN SEBASTIÁN	132,714	165,582	225,469

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LINES	2020 Amount in thousand € (including VAT)	2021 Amount in thousand € (including VAT)	2022 ¹ Amount in thousand € (including VAT)
H-S LINE MADRID-EXTREMADURA	140,760	146,903	90,290
H-S LINE GALICIA (OLMEDO-LUBIÁN-ORENSE)	277,829	63,251	24,860
H-S LINE ZARAGOZA-PAMPLONA (CASTEJÓN-PAMPLONA)	31,580	28,206	68,207
UIC CONNECTION, CHAMARTÍN- ATOCHA-TORREJÓN	27,731	42,853	13,377
ATLANTIC AXIS (CORUÑA-VIGO)	-34,485	116,815	5,474
ATTRIBUTABLE TO THE ENTIRE NETWORK	79,826	86,877	86,551
INVESTMENT IN OPERATING LINES	175,117	57,745	202,577
OURENSE BYPASS	4,752	5,631	-202
STATIONS AND OTHER ASSETS	26,105	109,141	382,369
TOTAL	1,272,573	1,089,733	1,553,192

¹ In addition to the above investments by type and related lines, there were changes in 2022 in Adif AV's equity in relation to the assets listed below (**figures in € thousand, including VAT**): PARTICIPATING LOANS TO RAILWAY INTEGRATION COMPANIES 540 // ASSETS FROM SEITSA 100,418



9.2. International projection¹



MILESTONES

- Further progress towards the **Communication Plan**, allowing for a smooth relationship with the media.
- Materialisation of the **strategic vision of the Office for the Mediterranean Corridor** as part of the **Company's Action Plan** and **Communication Plan**.
- Development of the GIS (**Geographic Information System**) for the **Mediterranean Corridor**.
- Management of **Adif's participation** in the European Atlantic and **Mediterranean freight corridors**.



COMMITMENTS

MEDITERRANEAN CORRIDOR

- **Deepen the European Commission's activities in the field of the TEN-T Network**, which means cutting the length of the Mediterranean Corridor by eliminating the section from Záhony (Hungary) to Zagreb (Croatia).
- **Build the through tunnel and the Valencia–Castellón double platform**; conduct a study of the Almería–Granada section; and continue to take part in the Working Group for the Capacity Study of the Algeciras–Bobadilla section.


¹ Content linked to Strategic Plan 2030, **Results-driven pillar, Objective 5 (PRED-SO5)**

Adif AV is a member of the following **major international associations and organisations**, among others: EIM (*European Infrastructure Managers*), UIC (*International Union of Railways*), RailNetEurope (RNE), PRIME (Platform of Rail Infrastructure Managers). Adif AV also takes part in the interoperability initiatives of the ERA, the ERTMS Users Group and the joint European research initiative Shift2Rail, among others¹.

Adif AV also takes part in several **European Economic Interest Groupings (EEIGs)** such as the TGC Pyrenees with France, AVEP with Portugal, Vitoria Dax with France and the Mediterranean and Atlantic freight rail corridors with various European countries. Measures are discussed and scrutinised at all of these associations to improve cross-border connections.



¹ Content related to **GRI 2-28: Membership of associations**
* Adif + Adif AV

	2020	2021	2022
Presence in international associations and organisations (number of meetings attended) *	224	331	143
 Presence in international projects and activities (no. of activities carried out) *	45	60	66

9.2.1.1. Mediterranean Corridor

The Mediterranean Corridor runs **through six European countries: Spain, France, Italy, Slovenia, Croatia and Hungary**, although according to the proposed amendments to Regulation (EU) 2021/1153, the corridor will end in Zagreb (Croatia) as opposed to Záhony (Hungary).

Notably, the **Mediterranean Corridor Office** takes part in the European Mediterranean Corridor Forums, the European Working Groups, the Spain-France cross-border summits and the summits on the new Lyon-Turin line.

The Office of the Government Commissioner for the Mediterranean Corridor also took part in **ConnectingEurope Days**, where it had its own representative stand for the MITMA Group, allowing it to showcase the size and scale of the Mediterranean Corridor along its entire route.

Adif is a member of the following international associations and organisations, among others: EIM (*European Infrastructure Managers*), UIC (*International Union of Railways*), RailNetEurope (*RNE*) and PRIME (*Platform of Rail Infrastructure Managers*).

Adif also takes part in the interoperability initiatives of the ERA, the ERTMS Users Group and the joint European research initiative Europe's Rail, among others.

A new development on the international stage is the proposed revision of the TEN-T regulation, which aims to get the Trans-European network ready for the future and align it with the objectives of the European Green Deal and the EU Climate Law.

The Mediterranean Rail Freight Corridor connects six countries of the Mediterranean and Eastern Europe with the ultimate aim of increasing international rail freight traffic. More precisely, it links Spain, France, Italy, Slovenia, Hungary and Croatia through more than **7,000 kilometres of track**. It also connects at various points to six other European Freight Corridors.

Adif is also part of the Vitoria Dax EEG, which manages the connection with France through the Basque Country; TGC Pyrenees, which conducts studies for a possible connection with France through the region of Aragon; and AVEP, through which Adif works to improve railway connections with Portugal.



The greatest contribution made by the **Mediterranean Corridor Office** is undoubtedly its dialogue with stakeholders, with **162 meetings** held over the course of 2022. Proper **coordination across the MITMA group** is also vital for the successful completion of the Mediterranean Corridor works.

	2020	2021	2022
Meetings related to EEIGs	65	52	87

9.2.1.2. Atlantic Corridor

The aim pursued by the Atlantic and Mediterranean Corridor EEIGs is to make freight transport by rail more competitive compared to other means of transport. These European freight corridors form the backbone of the Trans-European Transport Networks and have been up and running since 2013.

Both corridors have **One Stop Shops** located in Madrid for the Atlantic Corridor, and in Milan (Italy) for Corridor 6, in order to handle, process and coordinate requests for the

international freight paths managed by the corridors.

The corridor **connects four countries** that are represented in the EEIG through their main infrastructure managers: IP (Portugal), Adif (Spain), SNCF Réseau (France) and DB Netz (Germany). It aims to grow international rail freight traffic by developing competitive and efficient rail connections over the **6,200 kilometres** of rail infrastructure it covers.

Certain updates have also been made to clarify the scope of the actions to be carried out, to adapt them to regulatory documents or to come up with guides/catalogues that will allow for more structured completion of these procedures.



9.3. Consolidating successful partnerships¹

9.3.1. Property management and urban integration

Adif AV manages the property assets it owns with the ultimate aim of achieving a positive impact on the communities in which it is present and generating shared value that benefits society as a whole. In doing so, the Company contributes to the sustainable development of the rail system and its integration in the cities it passes through, in keeping with the policies set by the competent institutions.

The Madrid Nuevo Norte (MNN) Project will ultimately allow us to eliminate the urban barrier currently posed by the Chamartín marshalling yard, by covering the tracks and creating a new yard at urban level. This will ensure that the new Chamartín-Clara Campoamor station is fully and seamlessly integrated within its urban environment and improve accessibility to the station. It will also pave the way for various interchanges between different modes of transport, thus making the future station the driving force of the MNN Project.

Adif AV is the state-owned enterprise tasked with carrying out the project and constructing the New Chamartín-Clara Campoamor station, for which it has recently been awarded an international tender incorporating the highest sustainability standards.

The annual process of adding the land corresponding to high-speed lines to the Inventory of Real Estate Assets led to the creation of 45 new Inventory Units and the inclusion



of new documentation on 53 existing units, with a total of 19,567 properties, with 37,345 associated documents, representing a total of 23.2 million m².

Key projects in 2022::

- **Madrid Nuevo Norte:** the planning process for the MP sectors included in the PGOUM zoning instrument continued throughout the year in relation to the Madrid Nuevo Norte zone. On 28 April 2022, the parties signed an agreement to extend the term stipulated in Clause 7 of the Amendment to the Revised Text of the Contract, thus extending the term for the signing of the corresponding public deeds until 23 December 2022. On 11 May 2022, a Partnership Agreement was signed between the Department of Transport and Infrastructure of the Community of Madrid and the company Distrito Castellana Norte, S.A.

Meanwhile, the General Assembly of the “Centro de Negocios-Chamartín” Governing Board approved the award of a contract for the drafting and processing of the urban zoning project for the Central Park of the Business Centre, and also the contract for the drafting and processing of the construction drawings for the extension of the existing Mauricio Legendre Bridge and the construction of a new bridge at Antonio Cabezón.

The Technical Monitoring Committee of the collaboration agreement for the coordination, financing and construction of the specific work envisaged in the amended General Urban Zoning Plan of Madrid approved the Coordination and Execution Plan of the Framework Agreement.

¹ Content linked to Strategic Plan 2030, **Results-driven pillar, Objective 6 (PRED-SO6)**

The General Assembly of the “Centro de Negocios-Chamartín” Governing Board approved the award of a contract for the drafting and processing of the terms of reference and bylaws of the future Compensation Board and its subsequent incorporation and entry on the Register of Collaborating Urban Development Entities.

The Malmea-San Roque-Tres Olivos Governing Board publicly announced an initiative for the completion, through the compensation system, of the



Execution Unit pertaining to the APE (specific zoning area) 08.20 “Malmea-San Roque-Tres Olivos” of the PGOUM zoning instrument for the Community of Madrid, in compliance with Article 106(1)(e) of Law 9/2001, of 17 July, on Community of Madrid land.

The Council of Ministers, at its meeting of 27 September 2022, authorised Adif to enter into an agreement with Sociedad Estatal Correos y Telégrafos to delimit the area owned by both companies in the area surrounding Chamartín station.



On 7 November 2022, the ground-breaking ceremony was held ahead of the preliminary work on the Madrid Nuevo Norte urban development projects at Madrid Chamartín-Clara Campoamor station.

The General Assembly of the Governing Board “Malmea-San Roque-Tres Olivos” approved the award of a contract for the drafting and processing of the Urban Zoning Project of the APE 08.20 “Malmea-San Roque-Tres Olivos”.

On 08 November 2022, the parties signed an agreement to extend the term stipulated in Clause 7 of the Amendment to the Revised Text of the Contract, thus extending the term for the signing of the corresponding public deeds until 30 November 2023.

On 11 December 2022, the Ownership Agreement was signed between Adif and Correos y Telégrafos, SME, in order to ensure the proper filing at the Land Registry of the cadastral plot with reference number 2511102VK4821A0001ES.



On 12 December 2022, the majority owners of the land comprising APE 08.21 “Las Tablas Oeste” publicly announced plans to promote before Madrid City Council their private initiative for the urban development of this zone under the compensation system, in accordance with Article 106(1)(e) of Law 9/2001, of 17 July, on Community of Madrid land.

On 13 December 2022, the Appraisals Committee of Adif AV met in relation to the call for tenders for the tender process presided by a panel a judges for the award of the “Services contract for the transformation of Madrid-Chamartín Station and its urban integration. Drafting of preliminary projects, basic drawings and construction drawings.” The committee appraised and calculated all the bids received and concluded that the best bid had been submitted by the joint venture ESTEYCO-UNStudio-b720 ARQUITECTURA SLP, under the slogan “Chamartín, Ecosistema Abierto”.



- **New Atocha Railway Complex:** involvement in the process of revising the plans for the “New Railway Complex at Atocha station (Madrid). Draft plans for phase 3. High-capacity connection, extension of Cercanías (commuter) facilities and Atocha east lobbies”. Coordinating the working group set up with the Urban Development Area of Madrid City Council for the purpose of drafting and processing an amendment to the PGOUM (general urban planning instrument)
- **URBAN MANAGEMENT. Agreements and protocols:** In 2022, 5 agreements and protocols were signed, the DPU headed up the negotiation and processing of five of the agreements and protocols signed in 2022, namely: Granollers, Vigo, Lleida, Adenda Bajo de la Cabezucla en Puerto Real and Tortosa. For the remaining ten, including Reus, Partes del Vallés, Protocol and subsequent agreement in Cuenca and A Coruña, it took part as a Collaborating Unit advising other Adif and Adif AV departments on property, ownership and urban planning issues.
 - + 15 agreements and protocols were signed.
- **URBAN MANAGEMENT. Reports on planning, on property and ownership and on urban development:**
 - + Processing of 215 property/urban development reports.
 - + Issuance of 450 urban zoning reports, suggestions and/or claims relating to different planning instruments.
- **URBAN MANAGEMENT. Consulting and advice on property ownership and urban planning to other areas of the company:** Drawing up reports and taking part in a large number of meetings in order to advise other areas and departments, such as High-speed or Conventional Network Projects, in relation to urban planning and property solutions for achieving the urban integration of the railway within cities; or Logistics Services, in drafting and processing railway service delimitation projects and drawing up special plans needed for their processing by the local authorities, all with the aim of improving the management of their terminals.
- **URBAN MANAGEMENT. Oversight of joint ventures:** The urban development activities of ten Joint Ventures were closely monitored during the period and numerous projects and urban development plans scrutinised, resulting in more than 20 follow-up reports. All in

all, the Company attended more than 50 meetings of the various technical groups set up for this purpose and of the Monitoring Committees of those joint ventures.

- **ADMINISTRATIVE PROCEDURES. Procedure to reduce public domain land and building right boundaries:**
 - + A total of 98 reduction applications processed, of which 14 related to public domain and 84 to building right boundaries.
- **ADMINISTRATIVE PROCEDURES. Collaboration with MITMA on land reversion proceedings:** including reports on the exercise of this right in relation to major projects such as Madrid–Chamartín and Madrid–Fuencarral, or in municipalities such as Villodrigo, Paredes de Nava and Torquemada. A total of 165 land reversion proceedings are currently being processed.
- **ADMINISTRATIVE PROCEDURES. Proposals to the Management Committee and Board of Directors of Adif and Adif AV:** Highlights here the presentation to the Committee and the Board of the partnership agreement for the coordination, financing and execution of the specific actions envisioned in amended municipal zoning plan (PGOU) in and around the Madrid Nuevo Norte development. These actions may require sometimes generate the need to settle reversion rights. In such cases, the corresponding reversion right (right to reclaim expropriated land) must be offered to the expropriated parties or their assignees or successors, as happened in 2022 upon the release of land in the municipal districts of Villodrigo and Vega de los Infantes, with the corresponding notifications sent to the parties concerned.
- **ADMINISTRATIVE PROCEDURES. Cadastral amendment of land owned by Adif and Adif AV:** In 2022, a total surface area of 2,600,000 m² was filed with the registry or amended, including all land located within the Autonomous Community of Madrid.
- **ADMINISTRATIVE PROCEDURES. Filing and registration:** TVarious first registrations of land and other registry filings were presented to the competent Land Registries, using the different mechanisms provided for under the Mortgage Law. Highlights in 2022 included the filing of the assets and property owned by the various railway undertakings at Chamartín station and the de-assigned land in Fuencarral was likewise filed as belonging to Adif. First registrations of land owned by Adif and Adif AV in Murcia, Almería, Gijón, Alhama de Murcia, Ribarroja del Turia, Xàtiva and Paredes de Nava were also filed.

9.3.2. Urban integration joint ventures (JVs)


Through a mandate from Adif, Adif AV ensures coordination with the urban integration JVs in which the latter holds a stake and which are tasked with railway integration actions in cities. The following contributions are also made to make Adif AV a more economically sustainable enterprise:

- Support in controlling and monitoring the risk assumed by Adif AV in the financing, refinancing and/or bank restructuring operations of the urban integration JVs
- Closely tracking and overseeing the performance and current status of the agreements of the urban integration JVs and their contractual relations with Adif AV.
- Ensuring internal coordination with the urban integration JVs when analysing the economic and financial viability of the actions to be carried out at those companies.

Highlights in relation to the **actions, competencies and obligations acquired under the agreements signed:**

- The Company was involved in drafting the specifications for the projects to integrate the railway in the cities of Bilbao and Vitoria.
- It also took part in the development and execution of the construction work for the Phase 3 access canal into the city of Valencia.
- It likewise signed the participating loan agreement for 2022 under the Alicante integration plan.
- The maturities of loans granted to three urban integration enterprises (Palencia, Valencia and Logroño) were adjusted.
- The economic commitments made under the urban integration plans for Almeria, Murcia and Valladolid were formalised.




	2020	2021	2022
 Integration and other agreements and protocols with urban integration companies in which Adif AV participates ¹	56	62	71

¹ Cumulative figures. The calculation made in previous years may be raised in subsequent years once the terms of new agreements are finalised.

9.3.3. Corporate Group

The “**Corporate Group Positioning Plan**” put in place with the aim of establishing the role played by Adif AV in managing its investees, and analysing the competitive, economic, legal, operational, social, sustainability and environmental benefits and rewards of continuing to hold a stake in such companies, has given rise to a strategic initiative within the wider framework of the 2030 Strategic Plan known as:

“**Analysis and proposals for efficient participation of Adif and Adif AV in the companies belonging to their corporate groups**”. This initiative envisions various actions and aims to optimise the Company’s investments and presence that obtains the maximum social, economic and sustainable benefits and rewards.



The Company **continuously monitors the economic and financial position of Adif AV's** investees in order to detect any deviation that might compromise the stability of the companies concerned and therefore add further risk to the financial investments made.

We also work hard to coordinate and communicate with these companies and with the regional and local bodies that hold stakes in them, thus helping to protect the interests and ensure dialogue with Adif AV stakeholders, while mitigating the possibilities of reputational risks materialising.

Key actions here include:

- Valuation of the shares held by Renfe Operadora in the urban integration companies ahead of their purchase by Adif and Adif AV.
- Assessment of compliance with the resolutions passed by Boards of Directors, General Meetings and Executive and Audit Committees during the year.
- Tenders at Almería Alta Velocidad: Preliminary urban zoning project, assistance with the public sector procurement platform, implementation of regulatory compliance and preparation of tender documents for tax and accounting consultancy and statutory auditing services.
- Tenders at Palencia Alta Velocidad: Assistance with the Public Sector Procurement Platform, implementation of regulatory compliance and preparation of tender documents for tax and accounting consultancy and auditing services.
- Tenders at Vitoria Alta Velocidad: Assistance with the public sector procurement platform, implementation of regulatory compliance and preparation of tender documents for tax and accounting consultancy and statutory auditing services.
- Procurement processes at Adif/Adif AV: value updates for REDALSA shares.
- EMFESA Strategic Plan Approval by the Boards of Directors of Adif/Adif AV.
- EMFESA tariffs. Approval by the Boards of Directors of Adif/Adif AV.
- Amendment of EMFESA’S corporate objects. Approval by the Boards of Directors of Adif/Adif AV and subsequent approval of the resolution by the Council of Ministers.
- Liquidation of NECSA: verification of receivables and payables before drawing up the liquidation balance sheet and of the credit assignment contract between Adif and Adif AV.
- Adjustment of the corporate objects of the subsidiaries: the Council of Ministers approved the amendments made to the corporate object of EMFESA.

- Streamlining of the Corporate Group, following the necessary steps to sell those companies that do not contribute value to the state-owned enterprise. Work is currently under way to wind up and liquidate NECSA and a credit assignment contract has been signed between Adif and Adif AV.

Urban Integration Operations are currently ongoing in 13 cities around Spain, where they are managed through an urban integration company of which Adif AV owns between 30% and 40% of the share capital (depending on the company). The Corporate Group works towards the Sustainable Development Goals (SDGs) by encouraging and forging effective partnerships in the public, public/private and civil society realms by relying on the experience and resource-building strategies of the partnerships. The plan for 2023 is to create two companies alongside *Train Port* Barcelona and with the Valencian Community.

The greatest contribution made within the Corporate Group is the continuous monitoring of the financial position of Adif AV's investees, particularly subsidiaries and railway integration companies, in order to detect any significant deviation that could make the company unstable and, therefore, threaten the financial investments made by Adif AV and the sustainability of such investments.

- These corporations are the product of various **agreements to have been signed over the years between the Ministry of Public Works (currently MITMA) and its state-owned companies and regional and local government bodies**. These agreements set out all the necessary railway, integration and urban development actions, detailing all related costs and method of financing.
- In recent years, we have had to **review these urban integration operations** and take action accordingly by proposing new solutions, adapting the financing structure, eliminating external indebtedness, enhancing the value of disencumbered, etc. Along these lines, and within the framework of the 2030 Strategic Plan, an **Action Plan** is currently being developed with the primary aim of establishing the mechanisms and analyses necessary to improve and optimise the management of the urban integration operations carried out by the integration companies and proposing alternatives as and when needed to ensure the sound management of these operations. The ultimate objective is to improve the urban integration of the railway, thus improving the economic, social and environmental impact and the overall mobility and sustainability of the city.



To succeed, Adif AV **coordinates closely with the various urban integration companies** in which it holds a stake. Adif AV also heads up the process of coordinating and communicating with these companies and with the regional and local bodies that hold stakes in them, thus helping to protect the interests and ensure dialogue with Adif AV stakeholders, while mitigating the threat of reputational risks materialising.

The following contributions, among others, are also **made to make Adif AV a more economically sustainable enterprise:**

- Support in controlling and monitoring the risk assumed by Adif AV in the financing, refinancing and/or bank restructuring operations of the urban integration JVs
- Closely tracking and overseeing the performance and current status of the agreements of the urban integration JVs and their financial commitments and contractual relations with Adif AV.



Coordinating and monitoring these integration operations lets us **identify possible risks and make decisions** to adjust or rethink how best to proceed, with the aim of **reducing risks and contributing to Adif AV's economic sustainability**

- Ensuring internal coordination with the urban integration JVs when analysing the economic and financial viability of the actions to be carried out at those companies.
- Helping to implement railway infrastructure and integrate the railway in different urban environments by promoting this process and collaborating with institutions to ensure its success.

Notably, various **technical working groups** were set up and held meetings throughout 2022 within the framework of these urban integration joint ventures, and in collaboration with other areas of Adif, Adif AV, MITMA and the city councils and autonomous regions concerned. The groups drew up plans and projects, carried out urban planning and railway integration work and signed various documents, including the agreement for the construction of Phase 3 of the Valencia Access Channel and the protocols for the urban integration of the railway in Bilbao and Vitoria.

As a strategic initiative under the Action Plan to improve the coordination and control of urban integration operations, phase 4 of the “Study of the Impact of the Railway on Cities” was drawn up. The methodology was modified with respect to previous works, focusing this time on the merits of permeability solutions and alternatives to having the infrastructure run under the city.

Meanwhile, to ensure **good governance** and to make the necessary **adjustments to the financial structure of the urban integration joint ventures**, and as indicated earlier, contracts were drawn up and signed in 2022 in order for such companies to meet the financial commitments acquired under the new urban integration plans, the maturities of loans granted to various companies were adjusted and the financial commitments in several cities were likewise set straight.

9.4. Information on procurement

The following tables provide detailed information on **procurement activity** in 2022.

SUMMARY OF TENDER PROCESSES IN 2021		Amount in € million (excluding VAT)		
DIVISION	No. of orders – Own resources	Amount of contracts	Total no. of tenders	Total amount tendered
Construction Division	70	136.04	284	1,723.89
Energy and Fibre Optic Network Division	5	2.41	23	36.20
HS Projects and Stations Division	5	1.76	86	82.48
Other	0		3	0.03
Total	80	140.21	396	1,842.60

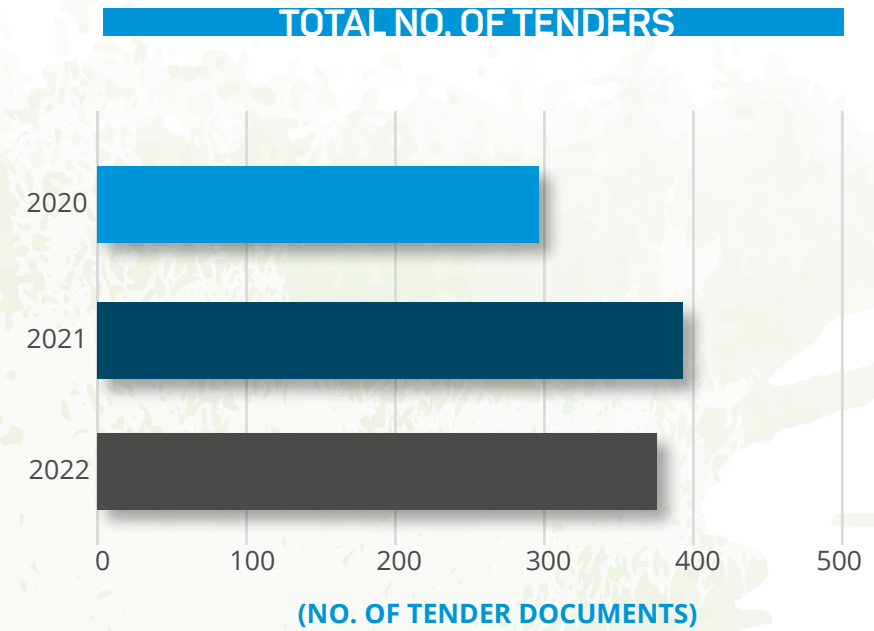
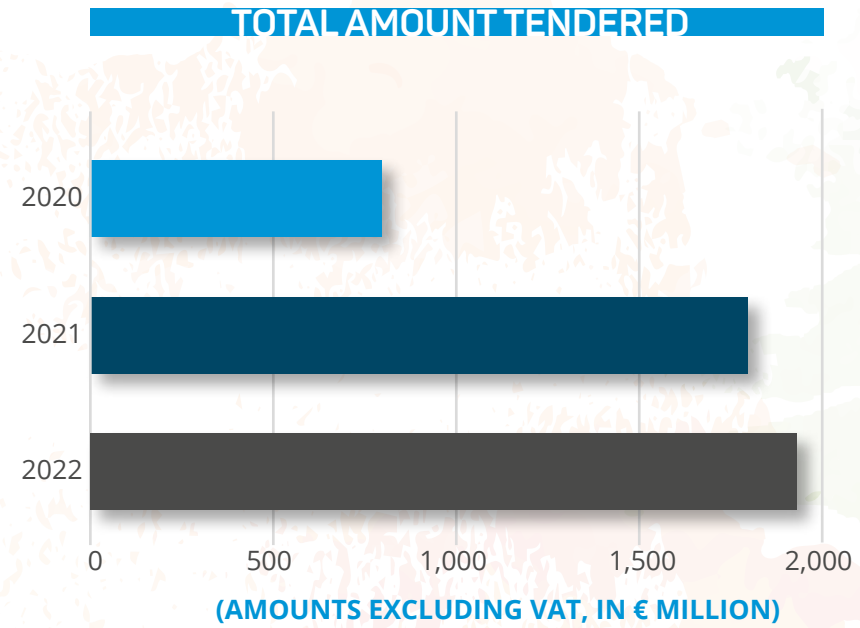
SUMMARY OF CONTRACTS AWARDED IN 2021		Amount in € million (excluding VAT)		
DIVISION	No. of orders – Own resources	Amount of contracts	Total no. of tenders	Total amount tendered
Construction Division	69	131.03	271	1,119.78
Energy and Fibre Optic Network Division	5	2.39	44	432.93
HS Projects and Stations Division	5	1.67	76	5.45
Other	0		3	0.03
Total	79	135.09	394	1,558.19

SUMMARY OF TENDER PROCESSES IN 2022					Amount in € million (excluding VAT)				
DIVISION	No. of orders – Own resources	Amount of contracts	Total no. of tenders	Total amount tendered					
Construction Division	76	95.73	273	2,000.99					
Energy and Fibre Optic Network Division	5	4.45	17	1,504.42					
HS Projects and Stations Division	4	0.75	89	67.45					
Other	1	0.15	5	0.25					
Total	86	101.08	384	3,573.11					

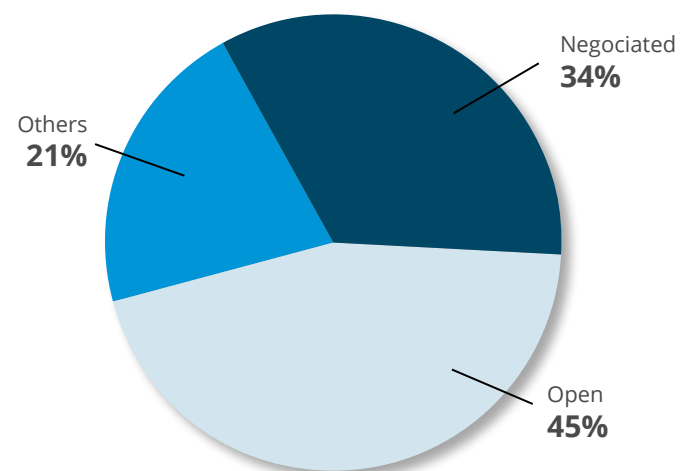
SUMMARY OF CONTRACTS AWARDED IN 2022					Amount in € million (excluding VAT)				
DIVISION	No. of orders – Own resources	Amount of contracts	Total no. of tenders	Total amount tendered					
Construction Division	77	96.41	303	1,814.75					
Energy and Fibre Optic Network Division	5	4.45	25	64.87					
HS Projects and Stations Division	4	0.75	94	97.87					
Other	1	0.15	5	0.24					
Total	87	101.76	427	1,977.73					

SUMMARY OF TENDER PROCESSES IN 2021 BY PROCEDURE TYPE		Amounts excluding VAT, in € million	
Procedure / Criteria	No. of tenders	Amount	% of amount
Open	176	1,645.78	89.3%
• Most advantageous tender (various criteria)	119	1,573.47	85.4%
• Price (one criterion)	57	72.31	3.9%
Restricted	1	0.60	0.0%
• Most advantageous tender (various criteria)	1	0.60	0.0%
• Price (one criterion)	-	-	-
Negotiated	136	55.96	3.0%
• With prior publication	1	12.65	0.7%
• Without prior publication	33	41.84	2.3%
- Emergencies	7	4.94	0.3%
- Technology related	24	36.56	2.0%
- Other causes	2	0.34	0.0%
• Minor contracts	102	1.47	0.0%
Orders against framework agreement	3	0.05	0.0%
Total – Tenders	316	1,702.39	92.4%
Internal works	80	140.22	7.6%
TOTAL	396	1,842.61	100.0%

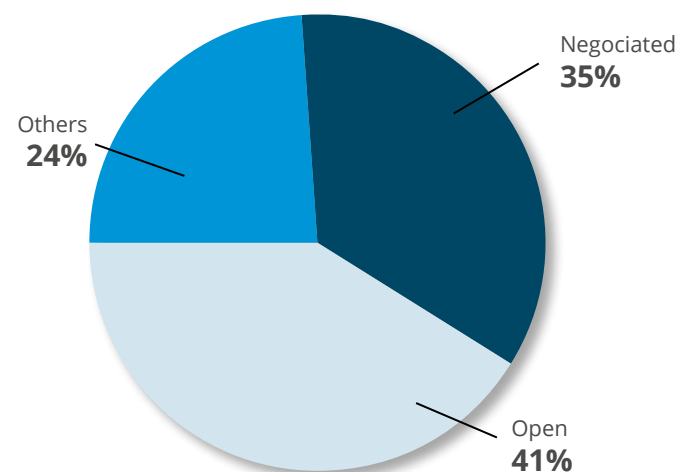
SUMMARY OF TENDER PROCESSES IN 2022 BY PROCEDURE TYPE		Amounts excluding VAT, in € million	
Procedure / Criteria	No. of tenders	Amount	% of amount
Open	156	1,958.29	54.8%
• Most advantageous tender (various criteria)	119	1,835.86	51.4%
• Price (one criterion)	37	122.43	3.4%
Restricted	0	0.00	0.0%
• Most advantageous tender (various criteria)	0	0.00	0.0%
• Price (one criterion)	-	-	-
Negotiated	136	1,501.39	42.0%
• With prior publication	2	1,438.98	40.3%
• Without prior publication	26	60.58	1.7%
- Emergencies	1	3.44	0.1%
- Technology related	20	53.01	1.5%
- Other causes	5	13	0.1%
• Minor contracts	108	1.83	0.1%
Orders against framework agreement	6	12.34	0.3%
Total – Tenders	298	3,472.02	97.2%
Internal works	86	101.09	2.8%
TOTAL	384	3,573.11	100.0%



TOTAL NO. OF TENDER DOCUMENTS 2021

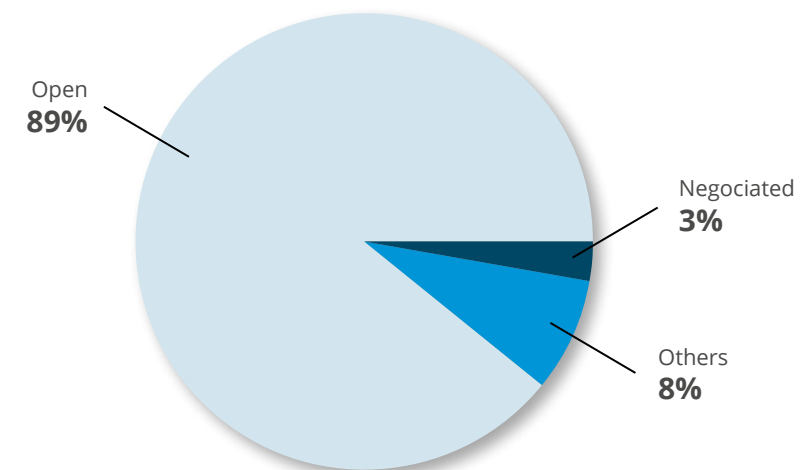


TOTAL NO. OF TENDER DOCUMENTS 2022



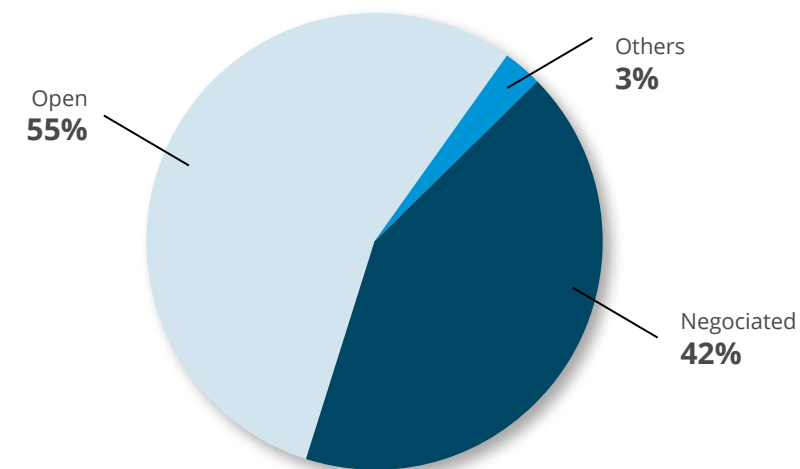
TOTAL AMOUNT TENDERED 2021

(€ MILLION EXCLUDING VAT)



IMPORTE TOTAL LICITADO 2022

(€ MILLION EXCLUDING VAT)



9.5. Information on RRF funds for sustainable projects¹



MILESTONES

- Contribute to **sustainable financing**. To direct the management of Community funds and Community financial aid for investment projects in the investment projects in the field of Trans-European Rail Transport Networks: the European European Regional Development Fund (ERDF), the Connecting Europe Facility (CEF) and the Connecting Europe Facility (CEF) and the Resilience and Recovery Mechanism (RRM). Recovery and Resilience Mechanism (RRM), mainly.
 - + CEF financing, a subsidy has been obtained in 2022 for €145.4 million in Adif AV for the Bergara - San Sebastián - Bayonne (Atlantic corridor) works. Sebastian - Bayonne (Atlantic corridor).
- **Monitor the execution of the Recovery, Transformation and Resilience Plan (PRTR)** of both Adif and Adif AV, Transformation and Resilience Plan (PRTR) of both Adif and Adif AV, for a total amount of non-refundable transfers of €5,974 billion (includes only direct execution investment and not other channels through which Adif / Adif AV other ways through which Adif / Adif AV could obtain MRR financing), subject to compliance with the Milestones and Targets set

until June 2026, according to Annex I of the Operational Agreement between the European Commission and the Kingdom of Spain by virtue of Regulation (EU) 2021/241, of the Components (two: C1 and C6), Investment Lines (four: C1I3, C6I1, C6I2 and C6I3) and Projects (seven) in which it is participating

+ **COMPONENT C1:** "Safe, sustainable and connected mobility in urban and metropolitan environments", sustainable and connected mobility in urban and metropolitan environments", with a total allocation of €1,501.5 billion. Investments in infrastructure investments in the commuter rail network, including track renewal, upgrading of stations and improvement of the electrification and upgrading of the electrification system and signalling.

+ **COMPONENT C6:** "Safe, sustainable and connected mobility". with a total allocation of €4,472.5 billion.

¹ Content linked to Strategic Plan 2030, **Results-driven pillar, Objective 2 (PRED-SO2)**



COMMITMENTS

- **Contribute to sustainable financing** for the period 2021- 2027, further progress on the priorities of each of the European funds (ERDF and CEF).
- **Continue monitoring the implementation of the Recovery, Transformation and Resilience Plan (PRTR).** European Next Generation EU funds, specifically through the RRM.

In 2023, the main Milestones and Targets concern Component C1, investment line I3 (Suburban and Urban Mobility: Action to Improve the Improvement of Quality and Reliability in the Suburban Service).

From an economic point of view, the first half of 2023 should close with €1,160 billion of contract awards under this measure (Milestone and Objective 17.1).

In terms of physical Milestones and Targets, **200 km of line completed and 20 stations upgraded** respectively (Milestones and Targets 14 and 16) are to be met by the end of the year.

- **Manage RRF funds** in those components affecting stations.

In 2022, Adif and Adif AV continued along the same lines as in 2021 by investing directly in the railway system through **NextGenerationEU funds** and, more precisely, through the RRF, thus undertaking various projects and boosting the positive impact on society by supporting the ecological transition and ensuring social and territorial cohesion through the efficient management and use of railway infrastructure.

The Company manages and monitors actions financed or co-financed with European funds, focusing on **eco-labelling** and the principle of “Do No Significant Harm” (DNSH), especially in relation to RRF funds. Therefore, Adif AV's is not only concerned about obtaining effective and efficient sources of financing, but also ensuring that the financing meets certain criteria in order to qualify as sustainable. This clearly contributes to, e.g. SDG 13: Climate action and SDG 15 Life on land.


Another relevant support factor is the design and development of a sound management and monitoring information system, known as the **Balanced Scorecard**, and the development of

tools and interfaces for connecting to applications so as to build a “**data driven**” enterprise and not have to rely on various sources of information to arrive at the same figure.

Essentially, we are helping to establish and strengthen the existence of a common or shared database. We are also working hard to deliver technological solutions that will ultimately optimise our efforts and improve the productivity of the team, focusing on activities that provide greater added value for making sustainable decisions.

The following chart shows achievement of **milestones and objectives for 2022 for monitoring of the use of RRF funds** (linked to sustainability projects), focused on amounts, kilometres or stations awarded:

Promoting the vocation of service to our stakeholders; Adif and Adif AV areas, ministerial bodies, control authorities authorities and European bodies, in order to promote mutual and social benefit

<div> DIRECTORATE OF EUROPEAN FUNDS AND PROJECT FINANCE SUB-DIRECTORATE FOR EUROPEAN FUNDS</div>		ACHIEVEMENT OF MILESTONES AND OBJECTIVES AND DEC, ADIF + ADIF AV		
Figures in € thousand (excl. VAT)		C6.I1	C6.I2	C6.I3
MILESTONE		85	88	95
TARGET DATE		31/12/2022	31/12/2022	31/12/2022
TARGET VALUE		1,400,000	690,800	191,000
ACTUAL VALUE		1,484,727	733,449	304,305
LEVEL OF COMPLIANC		106.05%	106.17%	159.32%

9.6. Innovation and development¹



MILESTONES

- Receipt and opening of bids for the **tender of the Integrated Corporate Solution for Physical Asset Management**.
- Continuation of the contract for the development and **implementation of the Asset Management system at Adif AV**.
- Development of the necessary information for **use cases**.
- Award of **two major contracts financed with RRF funds**.



COMMITMENTS

- Partially implement the **future integrated asset management system**.
- First **steps and tools associated with the implementation and governance** of an **information security model** in a framework of IT and OT convergence.
- **Define the concept of work station**, build the **workplace** and launch tenders for first initiatives.

¹ Content linked to Strategic Plan 2030, **Results-driven pillar, Objective 7 (PRED-S07)**

TRANSFORMATION DRIVERS

	2020	2021	2022
Closed-out procedures (settlements through Contracts SAP)*	0.201	35.75	30.44
Collaboration and open innovation (% of ideas and projects implemented)*	48	40	85.42
Digital strategy (% adaptation to Office 365 of corporate mailboxes and videoconferencing rooms)*	100	64.61	74.48

9.6.1. RD&I management

Adif AV has a lengthy track record in innovation that began in 2006 it was the first large public company in Spain to be certified under **UNE 166002** in 2008 based on an **RD&I Management System**. In the 16 years that have since passed, the Company has been constantly seeking to develop and grow its RD&I activity, always in accordance with corporate and stakeholder expectations.

The RD&I management system was built into the wider management system of Adif and Adif AV, considering its specific processes, within the first level Strategic Process PR-105 — Technological Innovation. These are essentially the processes governing the management of RD&I: planning of RD&I projects and the selection of ideas and solutions, project monitoring, protection and exploitation of results/outcomes, technology watch and competitive intelligence. The system also features the Adif and Adif AV RD&I Management Handbook, specific procedures (**Management of the Improvement Suggestions Mailbox**) evaluation of industrial property assets protected by Adif AV to decide upon their renewal or withdrawal; authorisation to seek protection of industrial and intellectual property and arranging technology transfers of intangible assets generated from innovation projects; and management of financial aid for RD&I), and the general challenge management and preliminary market consultation procedures of Adif AV. A number of guidelines, protocols and instructions have also been developed. In 2022, the **RD&I Policy was updated and edited**.

* Adif + Adif AV

A **RD&I Committee** oversees the whole process and a Strategic Innovation Plan has been created for the years 2022 to 2025. During these years, RD&I activity at Adif and Adif AV will be undertaken around the six strategic RD&I initiatives envisioned in the 2030 Strategic Plan. A particular highlight will be the activities to be carried out within the framework of the Europe’s Rail programme, not only from an administrative or clerical side but also in drawing up and launching the first technological projects under this programme. These activities will necessarily overlap with work already in progress or in the start-up phase, largely related to the development of other own-investment RD&I projects.

Aside from the work involved in carrying out the various RD&I projects, the strategy put in place should enable progress to be made in relation to the other activities entrusted, including: strategic monitoring and identification of Adif and Adif AV’s RD&I needs, management of innovation challenges, running of the Railway Technology Centre, management of intangible assets and technology transfers, development of the intrapreneurship plan, communication and dissemination of the activity, and the administrative, economic and legal management of *Europe’s Rail Joint Undertaking (EU-Rail JU)*. 2022 witnessed the official launch of EU-Rail JU partnership, with Adif taking part as a founding member and submitting proposals for flagship (and other minor) projects.

The chosen strategy must invariably involve a working methodology that allows us to strike the right balance between the use of existing resources and new resources.

PROJECTS IN PROGRESS AT THE COMPANY

	2020	2021	2022
RD&I projects in progress	36	16	8
RD&I projects completed	109	46	2
Completed projects	5	1	2
Projects started	17	1	1

9.6.1.1. Intangible assets and Technology transfer

The innovation cycle does not end upon completion of a project, as it is equally important to **protect and transfer the results or outcomes**. The process becomes efficient when the results of the innovation are protected in accordance with Spanish and international legislation:



industrial property for patents, utility models, industrial designs and trade marks; and intellectual property for software developments and publications in any format. In some cases, we may rely on alternative forms of legal protection, such as trade secrets.

The Railway Technology Centre sees to it that results are protected across all areas of activity of Adif and Adif AV. This means coordinating and managing all the steps involved in achieving effective protection of the assets, keeping close track of expenses and income, processing contract documentation, settlements and extensions of protection validity periods, and also reporting on the portfolio of protected assets.

It is always a priority for these results and outcomes to be initially transferred to Adif and Adif AV production. They may then be transferred to third parties if considered necessary or desirable. Operating licences to third parties must be granted via one or other of the contractual formulas permitted in accordance with the law and in accordance with Adif's internal regulations.

Adif AV's portfolio of intangible assets in 2022 comprised 37 patents, 5 utility models, 10 exclusive licences, 2 industrial designs, 9 items of software, and 58 trade mark filings (two trademarks and two patents more than in the previous year).

9.6.1.2. Collaborative innovation

In 2022, the Company took part in the **Transfiere trade fair**, the **Rail Live trade fair**, the **Startup Olé congress** and the **Jornadas de Ingeniería de Alta Velocidad** conference. It also attended the annual meetings of the **Railway Technology Platform** and the **Construction Technology Platform**. The Company also held further meetings with **Fundación COTEC** para la Innovación.

It also continued to collaborate with the **Railway Innovation Hub** (RIH) RD&I cluster at the Railway Technology Centre.

9.6.1.3. Open innovation and entrepreneurship



The technological strategy of Adif and Adif AV includes a strategic initiative that seeks to promote the **open innovation model**. The aim is to develop and implement a better model of open innovation built around internal and external collaboration and strategic alliances. Through **technology watch and communication**, it aims to enhance the value of human capital and foster an ecosystem conducive to the development of RD&I so that Adif can grow with the times.

The **Railway Technology Centre** will work alongside the Competitive Surveillance and Entrepreneurship area in promoting the open innovation model, not only by getting new companies and organisations to adhere to the Railway Technology Centre (which is in itself a fine example of a working open innovation structure) but also by building new external alliances by harnessing its technological and geostrategic position. The Railway Technology Centre area is also tasked with managing and monitoring agreements and protocols with other organisations in the field of RD&I and takes part in innovation-related trade fairs and congresses.

The open innovation model is allowing Adif and Adif AV to make their innovative process more efficient by streamlining their typically more rigid and bureaucratic structure, while simultaneously paving the way for projects and activities to develop novel products and processes.

Technological entrepreneurship, whether channelled through the organisation’s own employees or perhaps through technology startups, has a positive impact on corporate open innovation processes, and both lines of work should be strengthened in the years ahead. **The aims of the entrepreneurship actions** to be carried out at Adif and Adif AV are as follows:

- Internal:** Drive the organisation’s open innovation model by harnessing the talent and creativity of employees, getting them involved in intrapreneurship actions and promoting a corporate culture of support for new ideas. To succeed, it is vital to have tools that encourage creativity and mechanisms to recognise individual and collective contributions. At Adif and Adif AV this tool is known as **Adif Talento**, which is the main programme **for promoting new RD&I ideas within the organisation**.
- External:** Promote the organisation’s open innovation model by building ties and interactions with different technology-based companies, as discussed earlier, such as by **generating co-creation spaces to disseminate Adif and Adif AV’s challenges** with this type of organisation. Here we promote a tool known as Business Radar, which allows for regular interaction with these organisations.

OPEN INNOVATION AND ENTREPRENEURSHIP

	2020	2021	2022*
Detecting opportunities through the Business Radar	N/A	N/A	31
Number of entrepreneurship project proposals	N/A	N/A	53
Open innovation alliances (collaboration protocols, agreements, test and trial contracts, new memberships of the Railway Technology Centre, etc.)	N/A	N/A	8

* Adif + Adif AV

9.6.1.4. Railway Technology Centre



The Railway Technology Centre is an open innovation centre within the railway sector at which Adif centralises most of its RD&I resources. Aside from its numerous laboratories and other spaces, the Railway Technology Centre is an innovation ecosystem in which the interests and needs of Adif and Adif AV are aligned with the resources of other organisations as we look to undertake joint and coordinated activities.

The Railway Technology Centre is located at the



companies as we pursue the dual objective of promoting the open innovation model and guaranteeing the economic sustainability of the centre.

- Planning and managing the RD&I budget.
- Overseeing the RD&I management system for Adif and Adif AV based on the UNE 166002 standard.

- Managing part of the external entrepreneurship process, more precisely the innovation challenges, by periodically updating their content.
- Managing the portfolio of Adif and Adif AV intangible assets and ensuring the effective protection of the results obtained.
- Managing the technology transfer of these results and outcomes. This particular aspect is essential, as the aim is to obtain an economic and social return from the innovative activity by offering the RD&I results obtained to third parties.
- Managing all actions associated with SIE (initiate tender request) procurement, most notably the public procurement of innovation processes launched.

Málaga Tech Park in Andalusia, thus ensuring closer interaction with innovation ecosystems and companies that add genuine value to the technologies that will later be integrated into the infrastructure. Notably, this tech park plays home to many digital-based companies, which provides an excellent synergy for the coming years as we look to pursue and achieve our digital technological objectives.

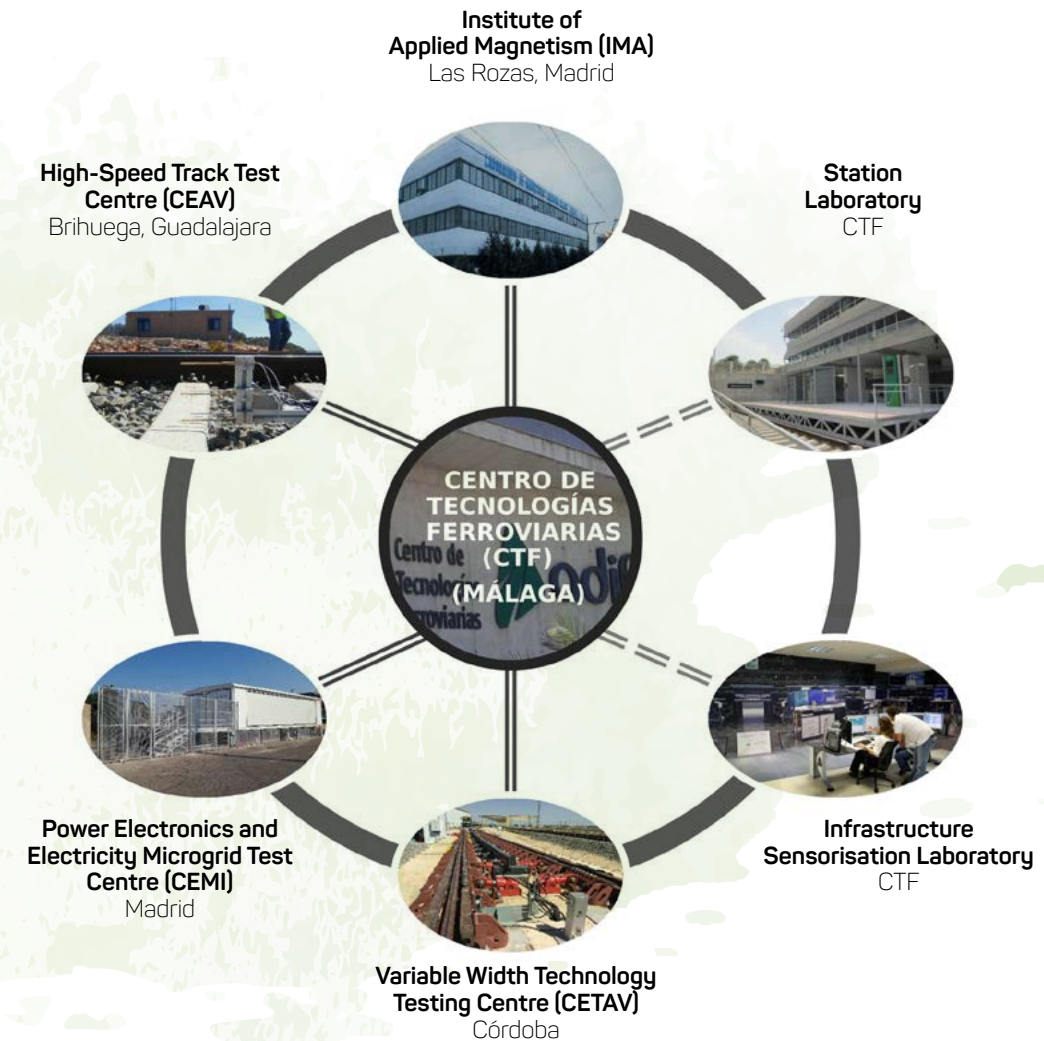
The Railway Technology Centre will now be focusing its attention on the following **specific lines of work**:

- Ensuring the sound management of the centre and growing it by attracting new railway technology-based



In 2022, our own **research and development resources** were as follows (three new laboratory centres were created and improved):

- **The Station Laboratory**, for testing new elements on platforms (train access, signalling, guidance or safety elements, among others).
- The **new Infrastructure Sensor Laboratory**, to monitor the various types of sensor installed along the General Interest Railway (RFIG) infrastructure, all of which relate to the ongoing process of infrastructure digitalisation.
- The **Institute of Applied Magnetism (known as IMA)**, located in Las Rozas (Madrid) and run through an agreement with the Complutense University of Madrid. The centre specialises in physical sciences and conducts research in the fields of electrical energy and new materials.
- The **High-Speed Track Test Centre (known as CEAV)** located at kilometre 64+900 of the Madrid-Barcelona high-speed line, in the vicinity of Brihuega, where high-speed train-track interaction tests are carried out.
- The **new Power Electronics and Electricity Microgrid Test Centre (known as CEMI)**, located next to Madrid Atocha station, where tests are conducted on power electronic converters for connection to the direct current power transmission line and other elements associated with new smart grids.
- The **new Variable Width Technology Testing Centre (known as CETAV)**, located in Cordoba and currently under construction. Once up and running, this centre will be able to carry out tests associated with the new variable gauge system for freight vehicles. The centre will have a test track which can also run spot checks of different equipment and/or vehicles.



9.6.2. Digital Transformation



MILESTONES

- Deployment of **collaborative tools** to make the necessary leap towards the digital workplace for employees.
- Definition and approval of **Adif AV's digital transformation strategy and programme**.
- Official launch of the **freight transport transformation plan**.



COMMITMENTS

- Award and signing of the contract to create a **shared technology platform (known as EAM)** as an end-to-end corporate solution for managing physical assets.
- Start of implementation of the **digital transformation framework agreement** with specialist resources in place for the effective implementation of the strategy and programme.
- Launch of the **data governance office** and **implementation of first use cases**.
- Implementation of a **video surveillance solution** based on video streaming at the first passenger stations.
- Deployment of a **hot desking model** as part of the digital workplace concept.
- **Tender for the migration of the backup data centre** to cloud services, aligned with cloud first strategies.
- **Tender for a contract to migrate to SAP HANA**.
- Deployment of the **process automation and deployment office**.
- Start of the project to **implement a technology platform for managing physical assets**.
- Start of the **analysis and definition phase of the digital transformation plan** for freight transport.
- Deployment of a **new travel expense management solution** under a software as a service (SaaS) model and a **new solution for modernising the ACER system**.

¹ Content linked to Strategic Plan 2030, **Results-driven pillar, Objective 7 (PRED-S07)**

Adif AV is working towards digital transformation as it streamlines technological resources by relying on software as a service, shared technological platforms and centralisation of contracts. It is also firmly committed to cloud strategies as it seeks to further streamline resources, become more agile and reduce response time to business needs.

The Company has been promoting **collaborative work models** based on **multidisciplinary and multi-area** teams, thus increasing efficiency, creativity and use of synergies and bringing **technology closer to all areas of the organisation**

The Company detects the **needs and opportunities arising from digitalisation** as a key lever in achieving digital transformation. This enables the organisation to optimise its business processes, manage risks, make more efficient use of resources and ultimately provide better services to citizens and partner organisations. The Company is also able to offer services linked to the governance of complex digital initiatives and digital transformation plans across various areas of the organisation

It takes the following approaches to **achieve** this:

- Streamlining technological resources by relying on software as a service, shared technological platforms and centralisation of contracts.
- Embracing cloud strategies as it seeks to further streamline resources, become more agile and reduce response time to business needs.

- Promoting collaborative work models based on multidisciplinary and multi-area teams, thus increasing efficiency and creativity and unlocking synergies across different areas of the organisation.
- Bringing the technologies closer to all areas of the organisation. Offering equality services to citizens thanks to the digital services deployed.

Adif AV believes that the digital transformation of the organisation should rest on two broad concepts:

- **Process automation**
- **Data governance**

With this in mind, work is under way to deliver technological solutions that will allow for the further development of these concepts so as to help Adif and Adif AV optimise the efforts of their partners and collaborators by steering them towards activities that provide genuine value and lead the strategy of data-based decision making. This will include the ability to predict future situations so that sustainable decisions can be made at both production and consumption levels

The effective implementation of the new asset management model and the development of the **Single Asset Management Platform** will ultimately improve Adif AV's technological capabilities through innovation and digital transformation. In addition, the close control and renewal of the Company's assets helps to ensure the construction of resilient infrastructure and is conducive to inclusive industrialisation and innovation.

Adif AV's **digital transformation strategy and programme** were **formally defined and approved** in 2022

Our teams have been readying themselves for the official launch and start-up of the Company's **digital transformation office**, slated for the first quarter of 2023. They have made significant progress in defining the governance and relationship models, the methodological framework, the catalogue of services, the communication plan, and the metrics and reporting model, among other aspects. Meanwhile, a framework agreement is about to be awarded in order to provide greater assurance of success in achieving the goal of digital transformation.

In tandem, work continued with those areas and departments that are already in **process of digital transformation**:

- In the case of passenger stations, we supported the **implementation of the lost property** solution and the first results are already being seen. Further progress was made in deploying the Adif AV space at various stations and the on-platform coach information solution in Madrid and Barcelona.
- We also helped to draw up and **define innovative projects, such as QR** code readers, so that users can view the passenger information system on their mobile phones, or the Adif AV public address system at passenger stations.
- Further highlights included the **setting up of an ideas incubator** to encourage collaboration in detecting workable use cases that can be included in the transformation plan.
- Support in **designing and preparing the tender dossier for the CRM (Customer Relationship Management)** project, to ensure better management of relations with station users, both direct and indirect. The project is due to begin in the first half of 2023.
- Creation of an **ICT project office** to promote digitalisation projects.



- Formal launch of the **immersion phase of the freight transformation plan** to begin in 2023.
- Consolidation of the Adif Artificial Intelligence group tasked with **identifying business use cases and ensuring the progressive integration of an AI-based culture across the organisation**. This will ultimately enable data-driven decision-making that will make Adif AV more efficient and ensure better use of the related resources.
- Design of the future back-up data centre of Adif and Adif AV to be tendered in 2023, with all the necessary services to start implementing the **cloud-first strategy** defined in 2022.
- Start of the project to implement a complete video surveillance **solution at Adif and Adif AV passenger stations**. The project is currently being staked out and specific projects are being drawn up for the different stations.
- Pre-project phase to tender out the **creation of a data office**, the acquisition of a technology platform and the implementation of business data analysis use cases, with work due to begin in early 2023.
- Pre-project phase to tender out the **implementation and governance of an information security model** within the framework of IT/OT convergence. This process will begin in the first quarter of 2023 and will ultimately deliver greater efficiency in management while minimising reputational risks and the possible threat of human rights abuses and breaches of employee rights.
- Formalisation and start-up of projects to implement **new solutions for the management of travel expenses and construction work certifications (ACER)**.

10

APPENDIX

10. APPENDIX

APPENDIX 1. MATERIALITY ASSESSMENT – 2022

APPENDIX 2. ABOUT THIS REPORT

APPENDIX 3. CONTRIBUTION TO SOCIAL AND ECONOMIC DEVELOPMENT

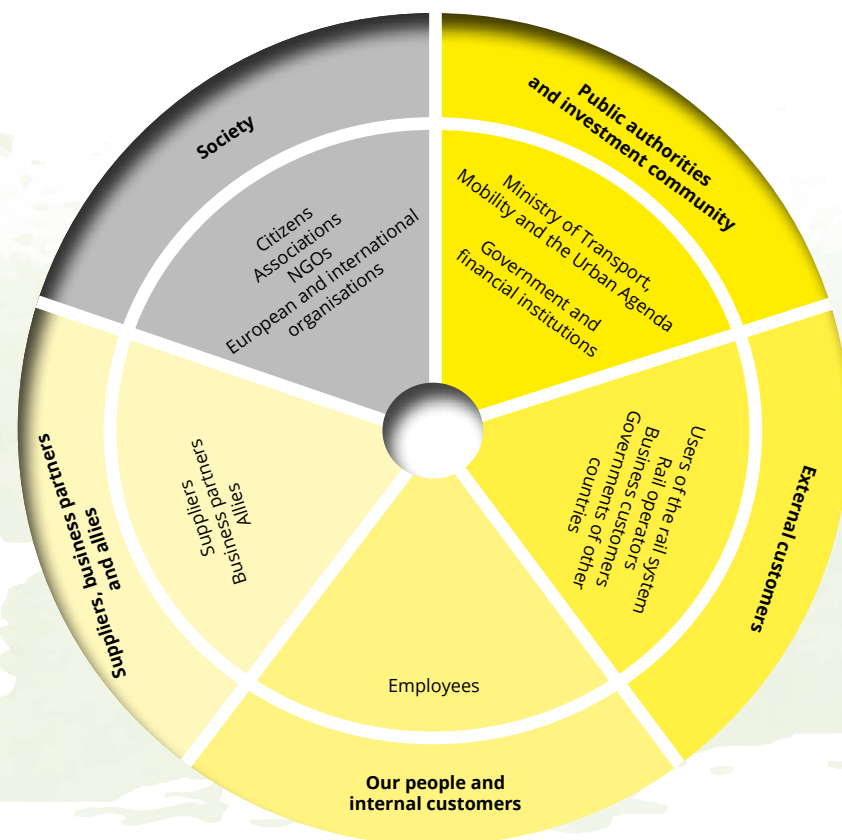
APPENDIX 4. ENVIRONMENTAL TAXONOMY

APPENDIX 5. ENVIRONMENTAL DISCLOSURES

APPENDIX 6. GRI INDICATORS AND NON-FINANCIAL INDICATORS

APPENDIX1 Materiality assessment – 2022^{1,2}

Adif AV, as a further show of its commitment to stakeholders, seeks to achieve a management approach based on responsibility towards society. The Company defines its stakeholders as any segment of society that could be affected by the organisation's activities and/or could influence its activities. They are identified in the SP 2030.



A **new materiality analysis was** carried out in 2022 in response to regulatory developments, following a new approach and assessing a new universe of material topics.

First and foremost, we drew up a list of material topics to be assessed, based on an exhaustive analysis of various external sources of information, including reporting frameworks such as the GRI, Spanish Law 11/2018 and sector-specific papers. We also relied on sources of information from the public sector and the railway sector. We approached the concept of double materiality on this basis, addressing concepts such as financial materiality and impact materiality by asking our different stakeholders to complete surveys. This exercise will serve to identify the material topics and contextualise the information to be included in this Management Report, while also allowing us to spot potential risks and opportunities for Adif AV.

The resulting list has been broken down into the Environmental, Social and Governance domains and comprises **11 blocks encompassing 29 material topics**. The main differences with respect to the 2020 analysis are a result of the gradual disappearance of the COVID-19 health crisis.

¹ Content related to disclosure **GRI 3-1**: Process of determining material topics

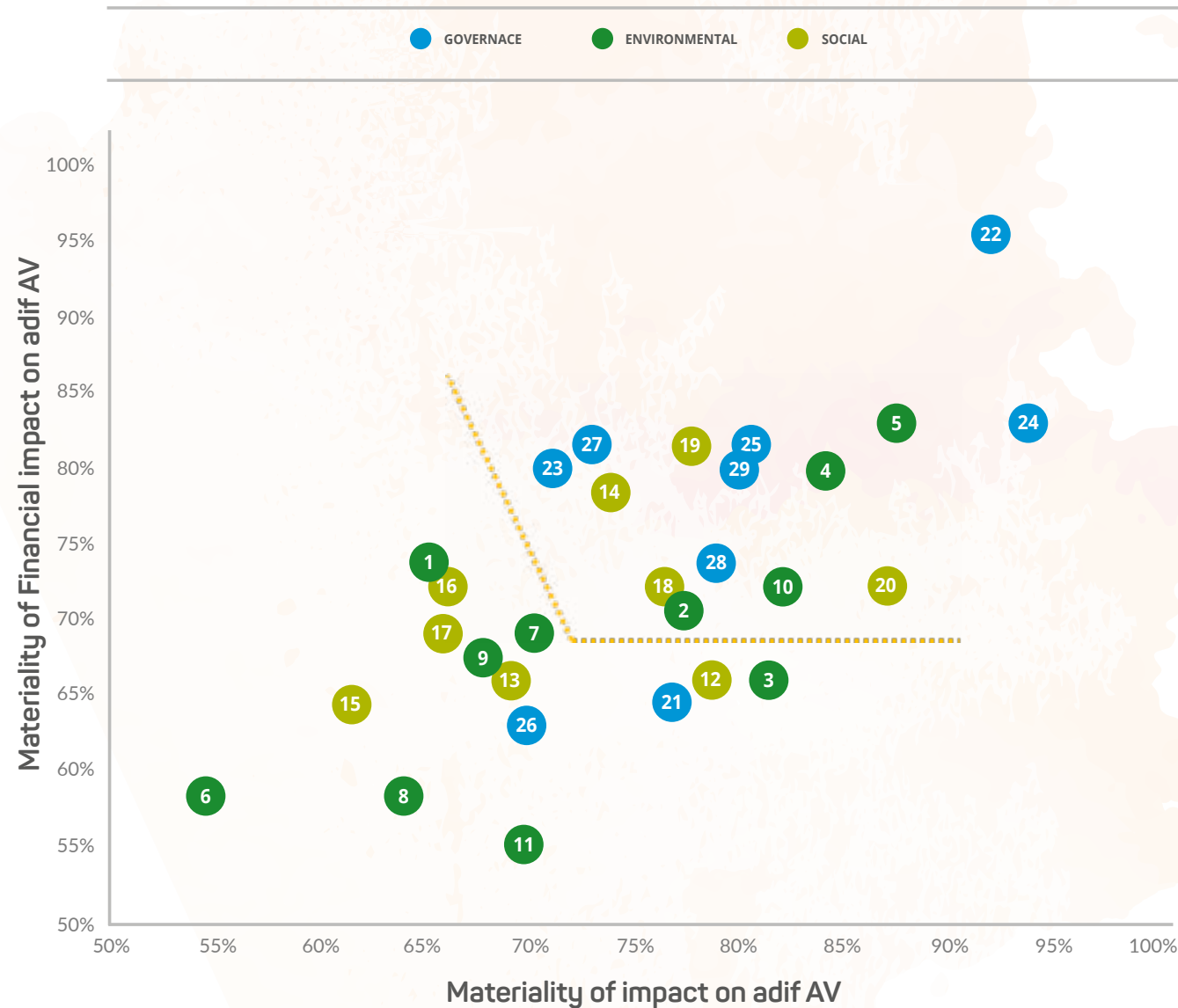
² Content related to disclosure **GRI 3-2**: List of material topics

HIGH MATERIALITY	
22	PASSENGER TRANSPORT DEREGULATION PROCESS
24	INFRASTRUCTURE DEVELOPMENT
5	SUSTAINABLE MOBILITY
4	DEVELOPING SUSTAINABLE CITIES AND COMMUNITIES
25	STAKEHOLDER ENGAGEMENT
29	COMPLIANCE AND TRANSPARENCY
19	CUSTOMER RELATIONS
20	ACCESSIBILITY OF FACILITIES/PREMISES
27	STRATEGY AND GOVERNANCE
10	ENERGY CONSUMPTION

AVERAGE MATERIALITY	
28	ETHICS AND ANTI-CORRUPTION
14	EMPLOYEE TRAINING
23	RESPONSIBLE SUPPLY CHAIN MANAGEMENT
18	IMPACT ON THE COMMUNITY
2	EMISSIONS MITIGATION
3	ENVIRONMENTAL PROTECTION
12	OCCUPATIONAL HEALTH AND SAFETY
21	CYBERSECURITY AND DATA PROTECTION
7	BIODIVERSITY PROTECTION
1	EMISSIONS OF GREENHOUSE GASES AND OTHER POLLUTING GASES
16	WORK-LIFE BALANCE AND RIGHT TO DISCONNECT

LOW MATERIALITY	
9	RAW MATERIALS
13	REDUCING INEQUALITY AND DISCRIMINATION
17	RESPECT FOR AND PROMOTION OF HUMAN RIGHTS
26	CLIMATE-RELATED RISKS AND OPPORTUNITIES
15	FREEDOM OF ASSOCIATION
11	CONSUMPTION AND WASTE MANAGEMENT
8	CIRCULAR ECONOMY
6	WATER CONSUMPTION AND MANAGEMENT

GOVERNANCE
 ENVIRONMENTAL
 SOCIAL



The concerns relating to COVID-19 were plain to see in the **2020 materiality analysis**, where social issues were more prominent. However, the analysis carried out for 2022 shows a greater and more balanced awareness across the three pillars of Environmental, Social and Governance, with a particular **focus on governance and environmental issues**.

This can be seen in the Integrated Security topic, which has shifted from being high materiality towards an intermediate degree of materiality. Notably, the most material **social issues** for the year were the **accessibility of buildings and facilities** and **customer relations**.

In the 2022 analysis, the three issues that show a significantly higher materiality than the rest, both separately at impact and financial level, and jointly, are the **deregulation of passenger transport, infrastructure development**, and **sustainable mobility**.

Environmental issues such as **sustainable mobility**, the **development of sustainable communities and cities** and **energy consumption** gained in materiality compared to 2020, in line with the current regulatory trend.

Last but not least, **infrastructure development** and the **deregulation process** maintain a high degree of materiality, in line with the previous materiality analysis.

APPENDIX 2 About this report

SCOPE

Adif has been preparing a Sustainability Report since 2006. In the 2022 report, Adif AV describes its financial and non-financial commitments and performance between **1 January and 31 December 2022**. The scope of the report extends to all of Adif AV's activities in the countries in which it operates.

For reasons of business transparency and strategic consistency, Adif has, since 2017, chosen to publish an Integrated Management Report, which includes the non-financial statement and is subject to the same requirements of approval, filing and publication as the management report and the notes within the process of drawing up and issuing the financial statements.

As a state-owned enterprise that operates in the public interest and for the benefit of society, Adif AV is concerned to display exemplary management, guided by principles of transparency, strategic consistency and good governance.

With the non-financial reporting model now in place at Adif AV, the Company is seeking to become a benchmark for Spanish public utilities in the field of non-financial and diversity reporting and to raise the bar when it comes to transparency and reliability in this realm, with new improvements every year.

Adif AV discloses non-financial information in its Management Report in accordance with the requirements of **Spanish Law 11/2018, on non-financial and diversity information**.

Non-financial reporting, involving more than 70 indicators, is intended to inform and engage our key stakeholders regarding the Company's management, performance and impacts through materiality analysis, taking into consideration the core areas of activity across four domains (business, corporate governance, social, environmental). We make special reference to information related to the Company's contribution to **the Sustainable Development Goals of the United Nations and the 2030 Agenda**.

Adif AV aims, through non-financial reporting, to increase the transparency and reliability of its information as a **"best practice"**, using the most advanced reporting techniques

This information is published annually and is there to further **strengthen the relationship** of trust with the stakeholders impacted by the Company's activities

The information is also disclosed in accordance with the **guidelines of the Global Reporting Initiative (GRI)**, as updated each year (currently G4 GRI). In addition, it links the G4 GRI standards with the Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda that might be impacted by the reporting entity's activities. This provides a global framework for organisations and stakeholders to assess local, regional and global impacts. First, therefore, we prioritised goals according to the Company's sector and type of business to identify the key areas where the organisation can contribute and then embed the relevant goals within our corporate strategy
















In line with our commitment to **reliability in reporting**, the content of the non-financial statement in the management report was subject to an assurance review by an independent external auditor, as required by legislation, with the related level of assurance.

The **Spanish Association for Standardisation and Certification (AENOR)** issued its limited review assurance report on the content of non-financial and diversity information required by Law 11/2018 and included in the consolidated management report. The work was performed in accordance with best practices as set out in the International Standard on Assurance Engagements (ISAE) 3000 (Revised), Assurance Engagements other than Audits or Reviews of Historical Financial Information and **UNE-EN ISO/IEC international standards**.













APPENDIX 3 Contribution to social and economic development

GENERATION OF WEALTH

			2020	2021	2022
 	Generation of wealth	 Expenditure on personnel (wages) (thousands of euros)	16,752	15,016	15,888
		 Contribution to stakeholders (economic value distributed ¹) (€ million)	1,015.2	1,257.2	1,560.1
	Taxes paid	 Payment of employee taxes (Social Security) (€ thousand)	3,120	3,114	3,364
		 Payment of employee taxes (personal income tax) (€ thousand)	2,682	2,697	2,800
	Promoting economic activity	 Use of EU funds (%)	111.8	16.5	90.4
		 Amount awarded for construction work (€M) (excluding VAT)	340.39	1,045.92	1,313.08
		 Amount awarded for maintenance work (awarded by Adif on behalf of Adif AV) (€M) (excluding VAT)	118.98	63.156	65.40
		 Amount allocated to maintenance work on behalf of Adif AV (€M) (excluding VAT)	9.64	46.97	9.31
		 Expenses incurred on high-speed network maintenance work (€M) (excluding VAT)	301.7	336.1	368.1
		 Expenses incurred in high-speed network operations (€M) (excluding VAT) (in reference to traffic management)	27.2	29.0	31.5
		 Revenues from commercial operation of the Fibre Optic Network (€ million) (not including VAT)	19.93	21.66	24.50
















¹ Content related to **GRI 201-1**: Direct economic value generated and distributed

SOCIAL CONTRIBUTION

		2020	2021	2022
<div> <div>4</div> <div>QUALITY EDUCATION</div> <div>5</div> <div>GENDER EQUALITY</div> <div>8</div> <div>DECENT WORK AND ECONOMIC GROWTH</div> </div> <div>Employment</div>	 Number of direct jobs created	218	216	257
	 % permanent jobs	95.87	95.37	82.10
	 Training hours (total)	20,113	13,990	42,646
	 Hours of training (total) among men	N/A	N/A	39,177
	 Hours of training (total) among women	N/A	N/A	3,469
	 Investment in training (€)	3,082,230*	683,176	7,504,089*
	 Social aid supplement (€ in medical costs per employee)	0	167	1,556.00
	 Average hours of training per year and per employee	92.3	59.3	199.0
	 Average number of hours of training per year per male employee	N/A	N/A	259.45
	 Average number of hours of training per year per female employee	N/A	N/A	55.06

* Adif + Adif AV



















SOCIAL CONTRIBUTION

		2020	2021	2022
<div> <div>8 DECENT WORK AND ECONOMIC GROWTH</div> <div>9 INDUSTRY INNOVATION AND INFRASTRUCTURE</div> <div>11 SUSTAINABLE CITIES AND COMMUNITIES</div> <div>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</div> <div>17 PARTNERSHIPS FOR THE GOALS</div> </div> <div>Service</div>	 Investment in replacing and improving assets in operation (€M) (excluding VAT)	186.80	270.30	202.57
	 Investment in developing the high-speed network (€M) (excluding VAT)	1,062.51	1,006.78	1,333.47
	 Investment in drafting projects and carrying out works at stations (€M) (excluding VAT)	23.56*	23.9*	2.80
	 Km of total network under management	3,622	3,762	3,926
	 Km commissioned in high-speed lines	123.6	162.6	269.0
	 Lines electrified in km	3,275.5	3,429.7	3,497.4
	 Train-km (total)	38,392,375	46,837,143	61,824,519
	 Train traffic (daily average)	691	783	946
	 Traffic (total)	252,998	285,854	345,228
	 Train-km (daily average)	104,897	128,321	169,382
	 Number of stations owned by Adif AV	42	46	46
	 Number of passenger station users	71,551,281	98,371,997	152,863,819
	 No. of companies operating on the Adif AV network (liberalised business) ¹	15	12	18
	 Standard gauge (UIC) high-speed	2,782	2,926	3,027
	 Number of stations with Adif ACERCA support service	-	43	43

* Adif + Adif AV









¹ Ouigo, which was already running on the Madrid-Barcelona line (May 2021), started operating from Madrid-Valencia in October 2022; Ilsa-Iryo started operating from Madrid-Barcelona November in November 2022 and from Madrid-Valencia in December 2022

SOCIAL CONTRIBUTION

			2020	2021	2022
 	Accessibility	 Passengers boarding / alighting at accessible stations (% passengers) *	85.45	85.94	86.88
		 Investment in accessibility improvement work (€M) (excluding VAT) *	7.92	5.8	4.86
		 Investment in drafting projects and carrying out works at stations (€M) (excluding VAT)	23.56*	23.9*	2.80
		 Number of activities under the Open Station Programme	197*	171	259
   	Social action/ contribution to the community	 Contributions to foundations and non-profit organisations (€)	311,602	596,129	1,337,588
		 Percentage of purchasing with responsible criteria	100	100	100
		 Number of non-profit organisations with which the Company collaborates*	71	62	62
		 Investment in the community (loss of profit – Open Station Programme)	267,269	248,595	455,878
		 Urban integration agreements, addenda, and so forth, signed and managed within the framework of the urban integration JVs in which Adif AV holds a stake	56	62	71
		 Urban integration (€M in cumulative investment made) (excluding VAT)*	4,230.36	4,408.51	4,555.28
		 Percentage of requests for information from the press and media answered on time or within seven days*	95	95	96.1
		 Sponsorship agreements signed with non-profit organisations*	2	2	3







* Adif + Adif AV

SOCIAL CONTRIBUTION

		2020	2021	2022
<div> <div>8</div> <div>DECENT WORK AND ECONOMIC GROWTH</div> </div> <div> <div>9</div> <div>INDUSTRY, INNOVATION AND INFRASTRUCTURE</div> </div> <div> <div>11</div> <div>SUSTAINABLE CITIES AND COMMUNITIES</div> </div> <div> <div>17</div> <div>PARTNERSHIPS FOR THE GOALS</div> </div> <div>Knowledge and research</div>	 Involvement in international associations and organisations*	224	331	143
	 Involvement in international projects and activities*	45	60	66
	 No. of RD&I projects completed	41	46	2
	 Investment in RD&I (€M)	0.596	3.187	2.155
	 Open innovation and entrepreneurship (Number of entrepreneurship project proposals)	N/A	N/A	53*
	 Open innovation and entrepreneurship (Open innovation alliances: collaboration protocols, agreements, test and trial contracts, new memberships of the Railway Technology Centre, etc.)	N/A	N/A	8*
	 Number of companies based at the Centre for Railway Technologies*	21	24	25
	 Number of companies taking part in the initiative launched by Adif AV and The Railway Innovation Hub Spain association*	80	90	83
	 Number of digital transformation initiatives in progress*	23	25	20
	 Investment in digital transformation (€M)*	5.1	5.9	6.0

* Dato integrado Adif y Adif AV

ENVIRONMENTAL CONTRIBUTION

		2020	2021	2022
   	Climate change policy			
	Reduction in GHG emissions (t of CO _{2eq})	13,028	15,016	15,426
	Improvement in energy efficiency (GWh _{eq})	104.18	120.56	123.60
	Estimated cumulative reduction in energy consumption for the period 2018–2030 (Gwh _{eq})*	2,900	2,900	2,900
	Cumulative emissions reduction for the Plan horizon through to 2030 (ktCO _{2eq})* (according to electricity mix)	3,700	3,700	3,700
	Carbon footprint reduction target by 2030 (%)*	86% based on electricity mix (GoO) 25% based on mainland electricity mix	86% based on electricity mix (GoO) 25% based on mainland electricity mix	86% based on electricity mix (GoO) 25% based on mainland electricity mix
	Percentage of electricity purchased with GoO certification*	100	100	100
	Resources deployed for environmental protection (investment + operation) (€M)	43 (figure at year-end 2019)	47.91 (figure at year-end 2020)	47.01 (figure at year-end 2021)
 	Minimisation of impacts			
	Issuances of green bonds (€M)	600	600	500
	Expenditure on fire prevention (€M)	2.89	3.08	3.08** (figure at year-end 2021)
	Number of environmental review reports (projects)	207	225	296
	Number of environmental monitoring reports for construction work not subject to environmental impact statement (EIS)	190	285	317
	Number of regulatory reports related with environmental monitoring of works subject to environmental impact statement (EIS)	412	241	286
	Hazardous waste generated (t)	0.69	3.76	3.76** (figure at year-end 2021)
	Waste directed to recovery (%)	100	100	100

* Adif + Adif AV

** Latest available data. Figure updated at year-end 2022 with the publication in May 2023 of the environmental report

APPENDIX 4 Enviromental Taxonomy

When applying the European Taxonomy, Adif AV assessed the information available in its economic-financial systems, with the same scope and breakdown as that used in the preparation of the company's separate financial statements.



Due to the nature of its competences and functions (e.g., construction of high-speed rail infrastructure, management of owned infrastructure, control and inspection of rail infrastructure, high-speed stations business, procurement of electricity to power the railway system and telecommunications and energy activities), the eligible activity identified is **Activity 6.14 Infrastructure for rail transport**, as listed in Annexes I and II of Commission Delegated Regulation (EU) 2021/2139 on disclosure.

The Taxonomy regulation describes this activity as the construction, modernisation, operation and maintenance of railways and subways as well as bridges and tunnels, stations, terminals, rail service facilities¹, safety and traffic management

systems including the provision of architectural services, engineering services, drafting services, building inspection services and surveying and mapping services and the like as well as the performance of physical, chemical and other analytical testing of all types of materials and products.

The economic activities in this category could be associated with several **NACE codes**, in particular F42.12, F42.13, M71.12, M71.20, F43.21, and H52.21 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

An activity in 6.14 is an **enabling activity** in accordance with Article 10(1), point (i), of Regulation (EU) 2020/852 where it complies with the technical screening criteria set out in

this Section. Enabling activities are those that directly enable others to make a substantial contribution to one or more of the six environmental objectives.

METHODOLOGY AND RESULTS

Adif AV analysed the information on turnover, CapEx and OpEx to identify those items corresponding to activity 6.14 Infrastructure for rail transport.

To this end, the following tasks were addressed:

- Identification of the concepts to be included in the denominators for each of the key performance indicators (KPIs).
- Analysis of the items corresponding to those concepts included in the denominators.
- Identification of eligible items to be included in the numerator.

GENERAL CONSIDERATIONS

Adif AV considered as eligible its **activity related to the administration and operation of the railway network**, while also including in the scope the operation and maintenance of passenger and freight stations, infrastructure maintenance activity, and the management of passenger and freight traffic.

Throughout the entire process, **it took care to avoid double counting by:**

- Using a single source of information (the company's economic and financial systems).
- Verifying the completeness of the information considered and reconciliation with the information included in the annual financial statements.

¹ In accordance with Article 3 (11) of Directive 34/2012/EU

PROPORTION OF TAXONOMY-ELIGIBLE TURNOVER

This KPI shows the relative weight of the net turnover derived from products or services associated with Taxonomy-aligned economic activities over the **company's total turnover**.

The following elements were considered for the denominator:

- **Net turnover:** includes charges for the use of railway infrastructure, stations and other railway facilities.
- **Other operating revenues:** includes revenues from subsidies provided for in the State Budget to finance the shortfall in the tariffs charged to operators and management of the conventional network; revenues from the rental of commercial premises at stations, of land and rolling stock and of station car parks; and other revenues associated, for example, with services provided to operators. It excludes revenue from intra-administrator agreements (management entrustment agreements between Adif and Adif AV).

Revenues from charges and subsidies for network administration have been considered eligible and therefore included in the numerator, as both items are directly linked to the operation of railway infrastructure. The other items mentioned have been excluded from the numerator as they are not considered eligible.

The **proportion of Taxonomy-eligible turnover** is as follows:

	2021	2022
A. TAXONOMY-ELIGIBLE ECONOMIC ACTIVITIES		
6.14 Infrastructure for rail transport	76%	72.9%
B. TAXONOMY NON-ELIGIBLE ECONOMIC ACTIVITIES		
Revenues from Taxonomy-non-eligible economic activities	24%	27.1%
Total (A + B)	100%	100%

PROPORTION OF TAXONOMY-ELIGIBLE CAPITAL EXPENDITURE (CAPEX)

This indicator shows the proportion of **capital expenditure (CapEx)** relating to assets or processes associated with economic activities covered by the Taxonomy.

The following items have been considered in the denominator, excluding amortisation and depreciation:

- Additions to intangible and tangible assets in financial year 2022.
- Additions to investment properties in financial year 2022.

All these investments have been considered eligible as they are directly related to rail infrastructure.

The **proportion of Taxonomy-eligible CapEx** for 2022 is as follows:

	2021	2022
A. TAXONOMY-ELIGIBLE ECONOMIC ACTIVITIES		
6.14 Infrastructure for rail transport	100%	100%
B. TAXONOMY NON-ELIGIBLE ECONOMIC ACTIVITIES		
CapEx from Taxonomy-non-eligible economic activities	0%	0%
Total (A + B)	100%	100%

PROPORTION OF TAXONOMY-ELIGIBLE OPERATING EXPENDITURE (OPEX)

This indicator shows the proportion of **operating expenditure (OpEx)** derived from infrastructure maintenance activities related to assets or processes associated with economic activities covered by the Taxonomy.

The denominator includes OpEx after eliminating the structural costs not directly linked to the maintenance of the infrastructure. In other words, it includes the costs associated with repairs and maintenance of infrastructure (track bed, bridges, tunnels, catenary and electric tracks, signalling, etc.).

All these expenditures have been considered eligible as they are directly related to rail infrastructure.

Following is an executive summary of the overall Taxonomy eligibility results obtained in the current period:

	2021	2022
A. TAXONOMY-ELIGIBLE ECONOMIC ACTIVITIES		
6.14 Infrastructure for rail transport	100%	100%
B. TAXONOMY NON-ELIGIBLE ECONOMIC ACTIVITIES		
OpEx from Taxonomy-non-eligible economic activities	0%	0%
Total (A + B)	100%	100%



OVERALL TAXONOMY ELIGIBILITY RESULTS

Following is an **executive summary of the overall Taxonomy** eligibility results obtained in the current period:

	Turnover (€M)	CapEx (€M)	OpEx (€M)
A. TAXONOMY-ELIGIBLE ECONOMIC ACTIVITIES	563.5	1,367.8	577.2
6.14 Infrastructure for rail transport	72.9%	100.0%	100.0%
TAXONOMY NON-ELIGIBLE ECONOMIC ACTIVITIES	209.6	-	-
Total (A + B)	773.1	1,367.8	577.2
Proportion of eligibility (A)/ (A+B)	72.9%	100.0%	100.0%

ALIGNMENT

In accordance with the Taxonomy Regulation, in the alignment phase economic activities previously identified as Taxonomy-eligible are assessed for each of the six environmental objectives.

Below we justify compliance by activity 6.14 Infrastructure for rail transport with the technical screening criteria of the climate change mitigation environmental objective based on compliance with the following requirements:

1.

The **criteria for substantial contribution** to the objective for which the activity or project is being assessed.
2.

For the requirements of **do no significant harm ("DNSH")** for the other environmental objectives see:

+ Climate change adaptation.

+ Sustainable use and protection of water and marine resources.

- + Circular economy.

+ Pollution prevention and control.

+ Protection and restoration of biodiversity and ecosystems.

3.

Compliance with the **minimum safeguards** established in the Taxonomy Regulation.

Substantial contribution to climate change mitigation. An economic activity shall qualify as contributing substantially to climate change mitigation where that activity contributes substantially to the stabilisation of greenhouse gas concentration in the atmosphere at a level which prevents dangerous anthropogenic interference with the climate system consistent with the long-term temperature goal of the Paris Agreement.

All activities carried out in electrified line tracks comply with one of the Taxonomy criteria i) and ii) of substantial contribution to climate change mitigation of activity 6.14 Infrastructure for rail transport, which state:

"the infrastructure (as defined in Annex II.2 to Directive (EU) 2016/797 of the European Parliament and of the Council") is either:

- i)

electrified trackside infrastructure and associated subsystems: infrastructure, energy, on-board control-command and signalling, and trackside control-command and signalling subsystems as defined in Annex II.2 to Directive (EU)2016/797.
- ii)

new and existing trackside infrastructure and associated subsystems where there is a plan for electrification as regards line tracks, and, to the extent necessary for electric train operations, as regards sidings, or where the infrastructure will be fit for use by zero tailpipe CO2 emission trains within 10 years from the beginning of the activity: infrastructure, energy, on-board control-command and signalling, and trackside control-command and signalling subsystems as defined in Annex II.2 to Directive (EU)2016/797

¹ **Directive (EU) 2016/797** of the European Parliament and of the Council of 11 May 2016 on the interoperability of the rail system within the European Union (OJ L 138, 26.5.2016, p. 44)



These actions are designed to reduce greenhouse gas emissions that cause climate change, promote a modal shift to rail and encourage the use of electric public transport over private transport, which mostly uses fossil fuels.

For actions carried out on electrified line tracks, neither Regulation (EU) 2020/852 nor Spain's National Recovery and Resilience Plan (NRRP) require performing a substantive assessment of this objective.

Therefore, given that planned actions may fall under intervention field 64 (Newly built or upgraded railways - TEN-T core network) of the Regulation's annex regarding the Recovery and Resilience Facility (RRF) with a climate change coefficient of 100% and that the objective of the measure and nature of the intervention field to which they belong directly contribute to climate change mitigation and adaptation objectives, a substantive assessment need not be performed for these two objectives (as explained in the factsheets of components 1² and 6³ of Spain's NRRP).

DO NO SIGNIFICANT HARM ('DNSH')

To be Taxonomy-aligned for climate change mitigation, following is justification of compliance with the technical screening criteria of do no significant harm ('DNSH') of the rest of the objectives:

1. Climate change adaptation.
2. Sustainable use and protection of water and marine resources.
3. Transition to a circular economy.
4. Pollution prevention and control.
5. Protection and restoration of biodiversity and ecosystems.

¹ Regulation (EU) 2021/241 of the European Parliament and of the Council of 12 February 2021 establishing the Recovery and Resilience Facility

² Component 1 (NRRP): Sustainable, safe and connected mobility shock plan in urban and metropolitan environments.

³ Component 6 (NRRP): Sustainable, safe and connected mobility

For justification of DNSH compliance and to ensure appropriate compliance in carrying out the actions, Adif and Adif AV drew up and approved Guidelines for DNSH assessment and justification in all projects carried out under the NRRP and financed by the RRF for which no environmental oversight report has been issued yet. These Guidelines include a specific section on the Project report with reference to DNSH compliance assessments.

Adif and Adif AV avail themselves of the RRF to finance different activities; e.g., works contracts, project drafting contracts, technical assistance services, supply and/or assembly contracts. Specific evidence refers solely to works execution contracts whereby there is physical intervention in the field.

For each objective, this section discloses the various DNSH compliance assessments and the project documents and sections where there is evidence of them, which should include a responsible declaration signed by the author.

Following is an in-depth explanation of the DNSH compliance justification of each environmental objective.

CLIMATE CHANGE ADAPTATION

The technical screening criteria for DNSH to climate change adaptation are met by preparing global studies on adaptation to the effects of climate change for Adif's and Adif AV's railway infrastructure projects with RRF financing.

These studies were conducted considering implementation of the methodology developed by Adif and Adif AV to assess risk and adaptation to the effects of climate change in projects **(internal standard NAG 4-0-0-0.0)**. The risk assessment methodology entails the following

- **Identifying the main potential threats attributable to variability and climate change** by considering the potential impacts on components of rail infrastructure and on rail service.
- **Analysing which climate change projections, data source**, variables and scenarios to use, and downloading and processing data from the Adapteca platform's climate change scenario viewer¹.

- **Deciding which category of climate risk fits the integrity of railway infrastructure and railway service.** Severity of the impact and probability are assessed for each and the risk level obtained is noted, distinguishing between current risk, the risk 30 years from now and the risk 80 years from now.

The findings are used to prepare a risk assessment report highlighting the impacts associated with climate events, the climate change projections considered for the assessment and the results obtained upon its completion.

Where a risk is found that is unacceptable, an adaptation plan must be devised that outlines the measures chosen to reduce the associated effects of that risk.

This analysis helps to prevent impacts, where possible, or achieve adaptation where the situation is irreversible by identifying and recommending implementation of the necessary steps to minimise their effects over time.

Adif and Adif AV have set themselves a goal of preparing **global studies on adaptation** to the adverse effects of climate change throughout the rail network by 2030, in line with **Spain's National Climate Change Adaptation Plan (NCCAP) and Law 7/2021 on Climate Change and Energy Transition**.

Compliance with DNSH criteria for climate change adaptation in works execution contracts will be justified on completion of the works through the physical milestone of receipt.

¹ Emissions under the intermediate scenario (RCP4.5) of the Intergovernmental Panel on Climate Change

SUSTAINABLE USE AND PROTECTION OF WATER AND MARINE RESOURCES

Compliance with DNSH for sustainable use and protection of water and marine resources is confirmed by carrying out the following actions:

- Where appropriate, assessing the environmental impact, including the impact on water, and implementing the required mitigation steps for protecting water resources.
- Identifying and analysing environmental degradation risks related to preserving water quality and avoiding water stress in accordance with Directive 2000/60/EC (Water Framework Directive), Directive 2008/56/EC (Marine Strategy Framework Directive) and Directive 2006/118/EC on the protection of groundwater against pollution and deterioration, as well as river basin management plans. This may be done by referring to the hydrological and hydrogeological environmental analysis conducted in the project (and any specific supplementary studies) and, as appropriate, the analysis of the effects caused by the action (either on the project itself or during the environmental impact assessment).
- In the case of actions in the coastal and marine environment, not precluding or compromising the achievement of good environmental status as defined under the Marine Strategy Framework Directive at the level of the marine region or sub-region concerned or in the marine waters of other States.

- Not having a significant impact on: i) affected water bodies or ii) protected habitats and species directly dependent on water. This may be done by referring to the hydrological and hydrogeological environmental analysis conducted in the project (and any specific supplementary studies) and, as appropriate, the analysis of the effects caused by the action (either on the project itself or during the environmental impact assessment).
- Determining the appropriate preventive and corrective measures to protect water quality and the water system as outlined in Adif's internal standard NAG 3-0-1.0. They should include, as necessary, location of the areas of occupation, waterproofing of machinery areas, prevention and control of discharges, design of crossings over water sources, etc.
- Respecting the mitigation hierarchy and other relevant requirements under the Directive on the conservation of natural habitats and of wild fauna and flora.
- Identifying and correctly managing the associated risks and water demand at each level of action. Steps will be taken to ensure implementation of the water resource usage and conservation management plans drawn up with other stakeholders.



TRANSITION TO A CIRCULAR ECONOMY

Justification of DNSH compliance in the project reports also assesses the transition to a circular economy objective by the following:



- Where appropriate, **carrying out an environmental impact assessment** including an assessment of the impact caused by the use of natural resources and waste generation, and drawing up and implementing the necessary preventive and corrective measures.

- **Justifying the European objective of ensuring that at least 70% (by weight) of the non-hazardous construction and demolition waste** (excluding naturally occurring material referred to in category 17 05 04 in the European List of Waste) generated will be prepared for reuse, recycling and other material recovery, including backfilling operations using waste to substitute other materials, in accordance with the waste hierarchy and the EU Construction and Demolition Waste Management Protocol. On this front, Adif has adapted its internal operations to Spain's law on waste and contaminated soil for a circular economy (Ley 7/2022, de 8 de abril, de residuos y suelos contaminantes para una economía circular). Article 26 of this law states:
 - + 1. *To comply with the objectives of the law and contribute to a European circular economy with a high level of resource efficiency, competent authorities must take the necessary steps, through waste management plans and programmes, to ensure the achievement of the following objectives:*
 - + b) *The amount of non-hazardous construction and demolition waste destined to be prepared for reuse, recycling and other material recovery, including backfilling operations and excluding naturally occurring material defined in category 17 05 04 in the European List of Waste, should reach at least 70% by weight.*
- In **electrification projects**, complying with the guidelines set out in Directive 2012/19/EU on waste electrical and electronic equipment (WEEE) from design of the transformers and other possible electrical and electronic equipment to the end of their useful life.
- Considering the **impacts related to resource consumption and waste generation from platform projects**, taking steps that facilitate the transition to a circular economy, relying primarily on the principle of the waste hierarchy, prioritising prevention, preparing for reuse, recovery or recycling, and, lastly, wherever environmentally possible, disposal; as set out in the EU Construction and Demolition Waste Protocol, and taking into account the best techniques available for efficient waste management.

- Defining the project of the **preventive and corrective measures required to reduce resource consumption and waste generation** in Adif's internal standard NAG 3-0-1.0.
- **For construction and demolition waste (CDW) management**, applying the provisions of Royal Decree 105/2008, of 1 February, on CDW production and management from design of the actions, whereby projects consider a CDW management study that includes the related objectives that must be met by companies awarded the works contracts.
- For **all other types of waste**, applying the provisions of Law 7/2022, of 8 April, on waste and contaminated soil for a circular economy, especially as regards hazardous waste, and Law 21/2013 on environmental assessment for non-hazardous materials from excavations not considered CDW.
- Applying Adif's **specific procedures regarding treatment of rail material from dismantling and disassembly**. Regarding rail material from dismantling and disassembly and subsequent management for reuse (as second-hand or disposable material) or management as waste (if the waste cannot be directed to reuse), the project must:
 - a) identify and estimate all material eligible to be directed for reuse (for second-hand or disposal -including the location of storage or collection-), in accordance with the criteria laid down by the Adif's Technical Office / Maintenance Department of Adif's D.G: Conservation and Maintenance;
 - b) based on the findings, the project must include the necessary budget items for transport, collection and appropriate management of materials directed to reuse (second-hand or disposal);
 - c) all other materials dismantled or disassembled that are not directed to reuse must be considered project waste;
 - d) the project waste management study must clearly state the above (i.e. material from dismantling and disassembly qualifying to be directed to reuse; material that does not meet the criteria must be treated as waste) and outline the appropriate and complete management of all waste identified.
- **Applying the measures in Spain's 1st Circular Economy Action Plan 2021-2023:**
 1. Effective management of surplus land to allow for the environmental recovery of degraded environments or their reuse in other projects.
 2. Improvement in the reuse of

topsoil on construction sites for landscape restoration and integration. 3. Promotion of the use of sustainable materials and management techniques in projects.

- Ensuring the **effective and efficient separate collection of waste at source** and the preparation of source-segregated fractions for reuse or recycling. To do so, it may refer to the measures included in the project and directed to the collection, sorting, storage and delivery of the waste generated to the waste manager, in accordance with Adif's internal standard NAG 3-0-1.0.
- Complying with the requirements of Spain's law on waste and **contaminated soil for a circular economy**. **Article 30 of** this law states: "1. As of 1 July 2022, non-hazardous construction and demolition waste must be classified, at least, into the following fractions: wood, mineral fractions (concrete, brick, tile, ceramic and stone), metals, glass, plastic and plaster. In addition, elements eligible for reuse must also be classified as roof tiles, sanitary ware or structural elements. Preferably, this classification be done at the site where the waste is generated, without prejudice to all other waste for which there is mandatory separate collection. 2. Demolition shall be carried out selectively and, as of 1 January 2024, is compulsory. Removal of at least the material fractions described in the previous section must be guaranteed, based on a study identifying the amounts expected to be generated of each fraction where there is no obligation to have a waste management study and before treatment in accordance with the hierarchy outlined in article 8".
- Taking into account in the **construction of new stations and refurbishment of existing stations** the guidelines set out in Directive (EU) 2018/844 on the energy performance of buildings so that they can become nearly zero-energy buildings.
- **Designing buildings and construction techniques** that support circularity and in particular demonstrate, with reference to ISO 20887 or other standards, a design that is resource efficient, adaptable, flexible and dismantlable to enable reuse and recycling, using available sorting systems for construction and demolition waste.
- Adif and Adif AV has drawn up a **guide for on-site waste management document control** with a view to:
 - a) Offering specific advice regarding control of on-site waste management documents as provided for in a range of prevailing laws to waste management operators for waste produced within the areas of sites. These are the operators awarded the contracts.

- b) Reporting to and involving site managers in the process for controlling the management of waste from works.
- c) Setting up document control for works covered by the EU's RRF to accredit compliance with construction and demolition waste management objectives.

Adif and Adif AV are also laying the foundations for **a new waste management model**, which include:

- A specific historical waste management procedure¹ for managing hazardous and non-hazardous waste (including construction and demolition waste) generated before July 2020.
- Contract for the management of historical waste.
- Contract for the management of waste from projects and investment works completed between July 2020 and July 2022.
- Contract for the management of maintenance and operation waste generated as of July 2020. Approved in February 2023.

Compliance with DNSH criteria for transition to a circular economy in works execution contracts will be justified on completion of the works through the physical milestone of receipt.



¹ **Historical waste:** waste from materials with no net storage value at stockpiles held for other two years as of the start-up of this new model not generated for execution of any ongoing or recently executed work that Adif intends to dispose of. When these materials are available for management, they are considered waste.

POLLUTION PREVENTION AND CONTROL

Similar to the climate change mitigation objective, the projects are not expected to generate a significant increase in the emissions of pollutants into air, since this measure is designed to reduce emissions via a modal shift towards low-emission transport. It must also consider emissions (not proportionally significant) generated during terminal assembly and construction and conform to prevailing environmental regulations, especially regarding waste management and impacts on water courses/reserves/aquifers.

For **DNSH compliance in pollution prevention and control**, the project reports must be justified by:

- Where appropriate, carrying out an **environmental impact assessment**, including an assessment of the impact caused by the emission of pollutants into air, water or land, and defining and implementing the necessary preventive and corrective measures.
- **Complying with emission regulations**, including steps to prevent the generation of dust (irrigation, truck box covers, etc.), speed limits, control over proper vehicle and construction machinery maintenance to ensure correct emissions and gases and particles from engines, in accordance with the Adif internal standard NAG 3-0-1.0.



- Assessing associated risks and determining **preventive and corrective measures** to prevent discharges into water and/or bare soil.
- Ensuring the measure is in line with existing **global, national, regional or local plans for pollution reduction**.
- Complying with relevant **Best Available Techniques** (BAT) conclusions or with the Best Available Techniques Reference Documents (BREFs) in the sector.
- Implementing **alternative solutions to the use of hazardous substances**.
- Ensuring the measure is in line **with the sustainable use of pesticides**.
- Ensuring the measure is **in line with best practices to combat antimicrobial resistance**.
- Justifying the type of actions considered **to promote the use of electricity over fossil fuels**, with a clear reduction of emissions of atmospheric pollutants.
- Including an **assessment of the impacts of noise emissions and vibrations during construction and consideration of the necessary corrective measures** to reduce them (e.g. time limits, route plans, use of low-noise machinery and machinery maintenance), in accordance with the Adif internal standard NAG 3-0-1.0.
- **Assessing the impacts generated by noise and vibrations during operations** and, where applicable, mitigating them by introducing **corrective measures** in compliance with Directive 2002/49/EC. As appropriate, the project must include a specific noise and vibration study in accordance with a standardised approach (as provided for in Order PCM/80/2022, of 7 February) that allows for an adequate assessment of the noise and vibration impact and a precise definition of the steps to be taken to reduce it.

PROTECTION AND RESTORATION OF BIODIVERSITY AND ECOSYSTEMS

For **justification of DNSH of protection and restoration of biodiversity and ecosystems**, project reports must assess the following:

- Where appropriate, **carrying out an environmental impact assessment** must be carried out in accordance with Directive 2011/92/EU and Directive 92/43/EEC and applying the required mitigation steps for reducing land fragmentation and degradation, in particular green corridors and other habitat connectivity measures, as well as the relevant protected animal species listed in Annex IV of Directive 92/43/EEC, have been implemented and based on established conservation objectives.
- Analysing the impacts generated **by project actions on wild fauna, vegetation and natural spaces**, in accordance with Adif internal standard NAG 3-0-1.0. Performance, where appropriate, of specific botanical/faunistic/natural space impact assessments.
- Determining in the project of **the preventive and corrective measures required to ensure the integrity of the vegetation, fauna and natural spaces**, in accordance with Adfi's internal standard NAG 3-0-1.0. This includes: delimitation of surfaces on which actions are taken and physical protection of vegetation; fire prevention and extinguishment plans; space and timing restrictions implementation; infrastructure water-proofing measures; anti-collision/anti-electrocution measures for fauna; and ecological and landscape integration and restoration measures.
- **Accrediting, where required, that no registered natural space has been impacted via report** from the body managing the related space.
- Respecting **the mitigation hierarchy and other relevant requirements** under the Habitats and Birds Directives.
- Abiding by **Spanish Law 42/2007 on Natural Heritage and Biodiversity** and all other applicable national norms and regulations.



MINIMUM SAFEGUARDS

Compliance with the minimum social safeguards in accordance with the EU regulatory framework; the minimum safeguards are based on norms and regulations that, given the company's legal status as a state-owned enterprise, cover social obligations required of both contractors and subcontractors:

- a) **Law 9/2017, on Public Procurement**, and **Royal Decree 3/ 2020, of 4 February**, on urgent measures incorporating into Spanish law various European Union Directives in the field of public procurement in certain sectors, namely private insurance, pension plans and funds, taxation and tax litigation. It is also subject to Additional Provision 8 of Law 9/2017, on public sector procurement, transposing into Spanish law the Directives of the European Parliament and of the Council 2014/23/EU and 2014/24/EU, of 26 February 2014.
- b) **OECD Guidelines** for Multinational Enterprises.
- c) **UN Guiding Principles** on Business and Human Rights.
- d) The **principles and rights set out in the declaration and fundamental conventions in the Declaration of the ILO on Fundamental Principles and Rights at Work**, specifically ILO Convention 29 on forced labour, ILO Convention 105 on abolition of forced labour, ILO Convention 111 on discrimination (employment and occupation), ILO Convention 100 on equal remuneration, and ILO Convention 182 on worst forms of child labour.
- e) The **International Human Rights Letter**.

This is all reinforced by the **Socially Responsible Procurement Plan** applicable to Adif and partially to procurement at Adif AV (contracts under the threshold stipulated in article 1 of Royal Decree Law 3/2020 of 4 February).

Adif also has its corporate procedures and rules of conduct, anti-corruption policies and other anti-corruption and anti-bribery measures, and mechanisms outlining what illegal conduct is within the organisation or in its dealings with others (business partners and other stakeholders)

and explaining compliance with them. These include the Code of Ethics and Conduct, the Policy on Conflicts of Interest, the Corporate Anti-Fraud Policy, the Policy on Business Courtesies and Gifts, the Policy on the Use of Technological Resources, Policy on the use of technological means, and the Whistleblower Protection Policy

As for **applying human rights due diligence procedures in monitoring**, managing and mitigating labour, human rights and, in general, social risks, human rights risk is very low at Adif, as a public entity, as the business is carried out in Spain, where there are strict regulations to ensure absolute respect for human rights (i.e., we do not have any operations in developing countries).

Precisely because of this status as a state-owned enterprise, **Due Diligence** in all procurement process means applying the provisions of Law 9/2017 on Public Sector Contracts, which sets out all the requirements in relation to the tax aspects, guarantees or collateral, social or environmental conditions and other safeguards that bidders must comply with strictly to be eligible to participate in the public tender/calls for projects. Precisely in the audit of the fraud risk management system, the public nature of Adif and application of Law 9/2017 is a form of due diligence in itself; i.e. it is the due diligence for arranging the services of suppliers and ensuring compliance with labour, tax and criminal law regulations, thus ultimately helping to uphold human rights.

The Company has a **Code of Ethics** and Conduct applicable to all employees that oversees respect of human rights. The entire ethics management model is essentially a compendium of measures for preventing, detecting and correcting any activity considered irregular or contrary to ethical principles, including respect for human rights. It also includes a whistleblower channel for reporting possible breaches.



Following are the results of **the eligibility and alignment assessment for climate change mitigation** based on the calculation of the KPIs and compliance with the technical screening criteria required and justified in previous sections to facilitate completion of the official templates presented in section 3. Disclosure of KPIs.

DISCLOSURE OF KPIS

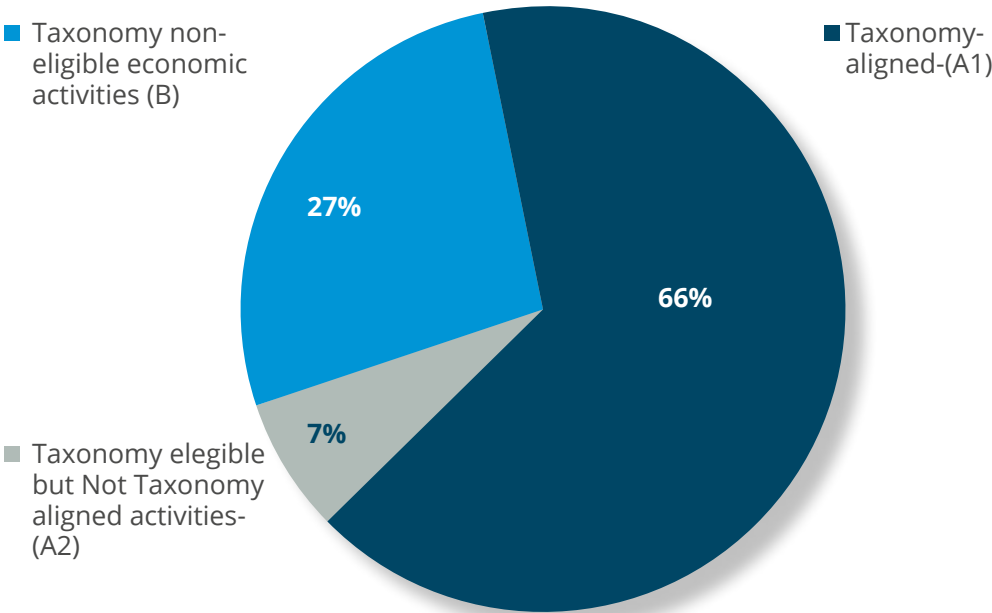
The following tables include completion of the official templates for financial disclosures based on the eligibility and alignment of activities determining the three key performance indicators (KPIs):

- Turnover
- CapEx
- OpEx

For turnover, the disclosure must include *the proportion of turnover referred to in Article 8(2), point (a), of Regulation (EU) 2020/852 shall be calculated as the part of the net turnover derived from products or services, including intangibles, associated with Taxonomy-aligned economic activities (numerator), divided by the net turnover (denominator) as defined in Article 2, point (5), of Directive 2013/34/EU. The turnover shall cover the revenue recognised pursuant to International Accounting Standard (IAS) 1, paragraph 82(a), as adopted by Commission Regulation (EC) No 1126/2008.*

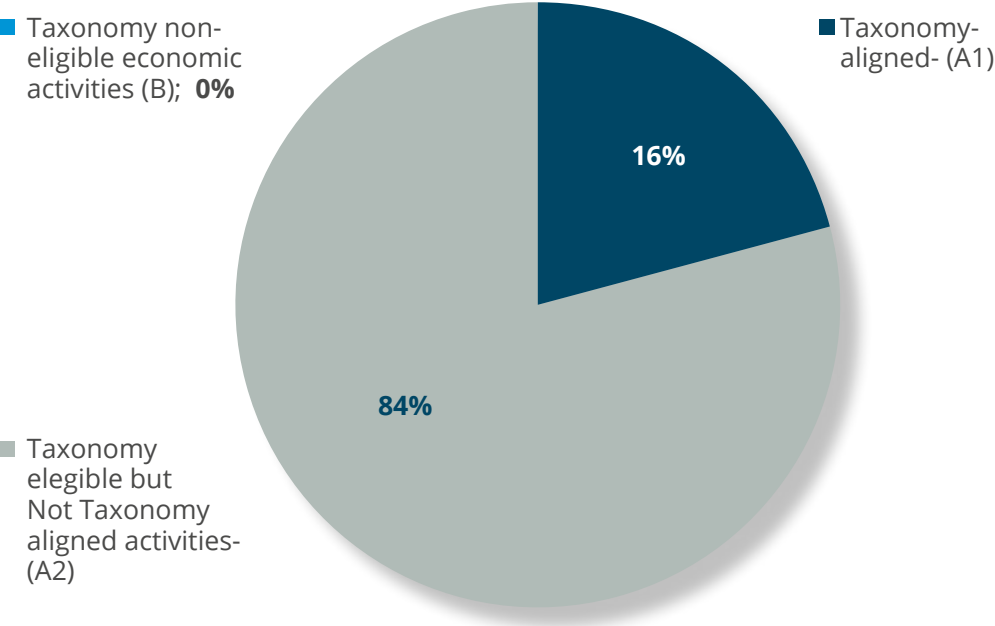
	Absolute turnover (€M)	% of total
Taxonomy-aligned (A1)	506.0	66%
Taxonomy eligible but Not Taxonomy aligned activities- (A2)	57.6	7%
Taxonomy-non-eligible activities (B))	209.6	27%
Total	773.1	100%

KPI-ELIGIBILITY AND ALIGNMENT-VOL-TURNOVER



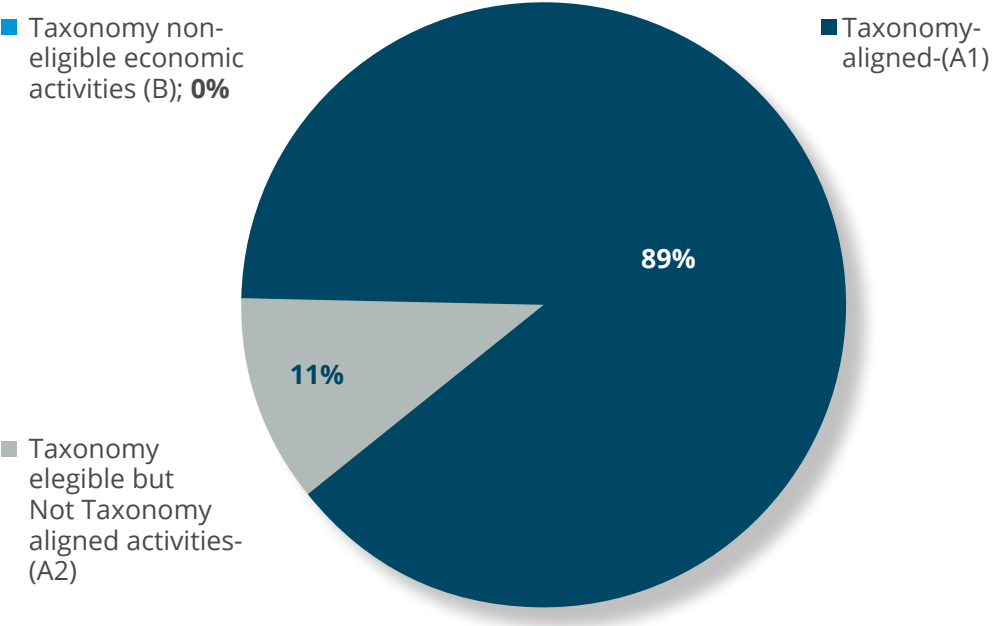
	Absolute CapEx (€M)	% of total
Taxonomy-aligned (A1)	217.03	16%
Taxonomy eligible but Not Taxonomy aligned activities- (A2)	1,150.77	84%
Taxonomy-non-eligible activities (B)	0,0	0%
Total	1,367.80	100%

KPI-ELIGIBILITY AND ALIGNMENT-CAPEX



	OpEx (€M)	% of total
Taxonomy-aligned (A1)	511.3	89%
Taxonomy eligible but Not Taxonomy aligned activities- (A2)	65.9	11%
Taxonomy-non-eligible activities (B)	0,0	0%
Total	577.2	100%

KPI-ELIGIBILITY AND ALIGNMENT-OPEX



¹ CapEx shows less alignment as the evaluation criterion used in this first implementation exercise has been linked to compliance with the DNSH required for funding through MRR funds.

TURNOVER

		Substantial contribution criteria			DNSH criteria									
Economic activities (TURNOVER)	Code(s)	Absolute turnover (€M)	Proportion of turnover	CC mitigation	CC adaptation	Water and marine resources	Circular economy Pollution	Biodiversity and ecosystems	Water and marine resources	Minimum safeguards	Taxonomy-aligned proportion of turnover (%), 2022	Taxonomy-aligned proportion of turnover (%), 2021	Category (enabling activity) E	Category (transitional activity) T
A. TAXONOMY-ELIGIBLE ECONOMIC ACTIVITIES														
A.1. Taxonomy-aligned activities														
Infrastructure for rail transport	6.14	506.0	65.4%	65.4%	Y	Y	Y	Y	Y	Y	65.4%	N/A	E	
Turnover of environmentally sustainable activities (Taxonomy-aligned) (A.1)		506.0	65.4%											
A.2. Taxonomy-eligible but not taxonomy-aligned activities														
Infrastructure for rail transport	6.14	57.6	7.4%	7.4%	S	S	S	S	S	S	7.4%	N/A	F	
Turnover from activities A.2		57.6	7.4%											
TOTAL (A.1 + A.2)		563.5	72.9%											
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES														
Turnover from Taxonomy-non-eligible activities (B)		209.6	27.1%											
TOTAL (A+B)		773.1	100.0%											

CAPEX

		Substantial contribution criteria			DNSH criteria									
Economic activities (CapEx)	Code(s)	Absolute CapEx (€M)	Proportion of CapEx (%)	CC mitigation	CC adaptation	Water and marine resources	Circular economy Pollution	Biodiversity and ecosystems	Water and marine resources	Minimum safeguards	Taxonomy-aligned proportion of CapEx (%), 2022	Taxonomy-aligned proportion of CapEx (%), 2021	Category (enabling activity) E	Category (transitional activity) T
A. TAXONOMY-ELIGIBLE ECONOMIC ACTIVITIES														
A.1. Taxonomy-aligned activities														
Infrastructure for rail transport	6.14	217.0	15.9%	15.9%	Y	Y	Y	Y	Y	Y	15.9%	N/A	E	
CapEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		217.0	15.9%											
A.2. Taxonomy-eligible but not taxonomy-aligned activities														
Infrastructure for rail transport	6.14	1,150.8	84.1%	84.1%	S	S	S	S	S	S	84.1%	N/A	F	
CapEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		1,150.8	84.1%											
TOTAL (A.1 + A.2)		1,367.8	100%											
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES														
CapEx of Taxonomy-non-eligible activities (B)		-	0.0%											
TOTAL (A+B)		1,367.8	100.0%											

OPEX

Economic activities (OpEx)	Code(s)	Substantial contribution criteria			DNSH criteria					Garantias mínimas	Taxonomy- aligned proportion of OpEx (%), 2022	Taxonomy- aligned proportion of OpEx (%), 2021	Category (enabling activity) E	Category (transitional activity) T
		OpEx (€M)	Proportion of OpEx (%)	CC mitigation	CC adaptation	Water and marine resources	Circular economy Pollution	Biodiversity and ecosystems	Water and marine resources					
A. ACTIVIDADES ELEGIBLES SEGÚN LA TAXONOMÍA														
A.1. Actividades alineadas con la taxonomía														
Infrastructure for rail transport	6.14	511.3	88.6%	88.6%	Y	Y	Y	Y	Y	Y	88.6%	N/A	E	
OpEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		511.3	88.6%											
A.2. Taxonomy-eligible but not taxonomy-aligned activities														
Infrastructure for rail transport	6.14	65.9	11.4%	11.4%	S	S	S	S	S	S	11.4%	N/A	F	
OpEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		65.9	11.4%											
TOTAL (A.1 + A.2)		577.2	100%											
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES														
OpEx of Taxonomy-non-eligible activities (B)		-	0,0%											
TOTAL (A+B)		577.2	100.0%											

APPENDIX 5 Environmental Disclosures

Below we describe our **environmental performance in 2022** and provide a comparison with the two previous years. This information has been included in accordance with the guidelines of the GRI Sustainability Reporting Standards.

GRI 301: MATERIALS

GRI 301-1: Materials used by weight or volume.

RAIL MATERIAL (T)

	2020	2021	2022 ¹
Rail	26,049	6,327	6,327
Wooden sleepers	0	0	0
Concrete sleepers	32,736	17,437	17,437
Ballast	453,026	67,444	67,444

GRI 301-2: Recycled input materials used

GRI 301-3: Reclaimed products and their packaging materials

¹ Latest figure available for 2021. Figure updated at year-end 2022 with the publication in May 2023 of the environmental report.

GRI 302: ENERGY

GRI 302-1: Energy consumption within the organization

GRI 302-2: Energy consumption outside of the organization

GRI 302-4: Reduction of energy consumption

GRI 302-5: Reductions in energy requirements of products and services

ENERGY CONSUMPTION

	2020	2021	2022
Electrical energy (TJ/year)	554.57	551.87	652.62
Traction uses (TU)	261.55	264.95	230.51
Non-traction uses (NTU)	293.02	286.92	422.11
Diesel fuel (TJ/year)	24.93	26.13	27.92
Diesel A – Automotive	0.70	0.78	0.46
Diesel B – Track maintenance	7.08	8.25	10.29
Diesel B – Workshop shunting	0	0	0
Diesel B – Aux. operations at terminals	0	0	0
Diesel B – Station shunting	17.17	17.10	17.16
Diesel C – Heating	0	0	0
Petrol (TJ/year)	0.57	0.69	0.88
Natural gas (TJ/year)	34.12	35.54	31.81

SOURCES OF PRIMARY ENERGY (TJ/YEAR)


	2020	2021	2022
Coal	39.89	41.84	66.45
Natural gas and fuel	-	-	-
Combined cycle	386.22	318.18	523.59
Nuclear	462.56	457.52	484.01
Cogeneration and non-renewable waste	240.45	238.39	168.52
Turbine pumping	22.51	22.43	32.64
Fossil fuels	1,083.63	1,078.36	1,275.22
Hydro	64.55	56.61	42.16
Wind	133.27	113.25	141.18
Solar (photovoltaic and solar thermal)	41.01	48.17	74.14
Other renewables ¹	10.75	10.45	12.71
Renewable resources	229.59	228.48	270.18

¹ Biogas, biomass, marine hydro and geothermal



GRI 302-3: Energy intensity

FINAL AND PRIMARY ENERGY INTENSITY

	2020	2021	2022
 Km-train managed (km-train/year)	38,392,375	46,837,143	61,824,519
Final energy intensity (MJ/km-train)	15.99	13.11	11.54
Primary energy intensity (MJ/km-train)	35.76	29.23	25.98

(GRI 303: WATER

- GRI 303-1: Interactions with water as a shared resource
- GRI 303-2: Management of water discharge-related impacts
- GRI 303-3: Water withdrawal
- GRI 303-4: Water discharge
- GRI 303-5: Water consumption

WATER CONSUMPTION (m³)

	2020	2021	2022
m³	15,697	15,422	12,379

Given that all consumption comes from municipal networks, there is no significant direct impact on water sources through withdrawal, nor are there any water recycling or reuse activities.

There is also relatively little consumption from wells, for which no quantitative information is available.

All legally established authorisations are in place for the withdrawal of water from these sources. The statutory water consumption charges are also paid.

The main discharges caused by Adif AV activities are sanitary wastewater from public toilets at stations.

Furthermore, as the wastewater is discharged into municipal treatment systems, there is no direct impact on water bodies through discharges or runoff.


The legally established authorisations for the discharge of wastewater are in place and the regular analyses established in these authorisations are performed in due course. All applicable rates for sewerage, sanitation and wastewater treatment are paid.




(GRI 304: BIODIVERSITY

- GRI 304-1:** Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas
GRI 304-2: Significant impacts of activities, products, and services on biodiversity
GRI 304-3: Habitats protected or restored

REGULATORY REPORTS RELATED TO ENVIRONMENTAL OVERSIGHT OF WORKS SUBJECT TO ENVIRONMENTAL IMPACT ASSESSMENT

	2020	2021	2022
Before start of works	39	29	46
Parallel to record of substantiation of changes	26	37	44
Before completion/delivery of works	50	46	25
 Ongoing	412	241	286

ENVIRONMENTAL MONITORING OF WORKS NOT SUBJECT TO ENVIRONMENTAL IMPACT ASSESSMENT

	2020	2021	2022
Number of current works with environmental monitoring	37	23	43
 Follow-up reports	190	285	317



COMPLIANCE WITH ENVIRONMENTAL LEGISLATION

		2020	2021	2022
Design phase	Project environmental review reports	207	225	296
	Certification of compliance with project environmental impact statements	18	12	12
	Environmental impact statement alignment reports	13	28	30
	Project environmental stipulations alignment reports	18	22	11
	Documents substantiating waiver from environmental impact assessment requirement	18	22	11
Construction phase	Environmental review reports	42	56	50
	Environmental impact statement alignment reports of modified projects	33	47	41
	Complementary environmental impact statement alignment reports	2	1	0
	Emergency works	3	6	3
	Documents substantiating waiver from environmental impact assessment requirement	6	8	4
	Environmental suitability reports	4	2	4

IMPACTS CAUSED BY ACTIVITIES OR OPERATIONS ON PROTECTED AREAS

	2020	2021	2022
Length of the active rail network (km)	3,622	3,762	3,956
Area occupied by the active railway network (km²)	11,591	12,040	12,658
Estimated area affected (km²)	33,593	35,044	36,615

KEY FIRE PREVENTION MEASURES AND ACTIONS

	2020	2021	2022
 Resources earmarked for fire prevention (€)	2,897,854	3,088,059	3,088,059 ¹
 Fires (No.)	0	0	0




¹ Latest figure available for 2021. Figure updated at year-end 2022 with the publication in May 2023 of the environmental report.



(GRI 305: EMISSIONS

- GRI 305-1:** Direct (Scope 1) greenhouse gas emissions
- GRI 305-2:** Direct (Scope 2) greenhouse gas emissions
- GRI 305-4:** Greenhouse gas (GHG) emissions intensity
- GRI 305-5:** Reduction of greenhouse gas (GHG) emissions

CLIMATE CHANGE POLICY

	2020	2021	2022
 Reduction in GHG emissions (t of CO ₂)	13,028	15,016	15,426
 Improvement in energy efficiency (GWh equivalent)	104.18	120.56	123.60
Carbon footprint reduction target by 2030 (%) *	86% based on electricity mix (GoO) 25% based on mainland electricity mix	86% based on electricity mix (GoO) 25% based on mainland electricity mix	86% based on electricity mix (GoO) 25% based on mainland electricity mix
 Percentage of electricity purchased with GoO certification *	100	100	100
Share of renewable energy (electricity with GoO as a percentage of total energy consumed)	90.30	89.80	91.05

* Adif + Adif AV

TONNES OF CO_{2EQ} EMITTED / RAIL TRACTION FROM INFRASTRUCTURE

	2020	2021	2022
Tonnes of CO _{2eq} emitted as a result of electric traction	82,020	90,886	144,548



SCOPES

		2020	%	2021	%	2022	%
Scope 1	Combustion plants	1,926	51.5	1,799	46.5	1,610	41.9
	Track maintenance, shunting and ancillary operations	1,724	46.1	1,922	49.6	2,133	55.0
	Vehicles	89	2.4	150	3.9	121	3.1
	Total Scope 1	3,739	100	3,871	100	3,843	100
Scope 2	Electricity consumption	19,040	-	18,089	-	25,923,5	-
Total (tCO₂eq) Mainland electricity mix		22,779	-	21,960	-	29.766	-
Total (tCO₂eq) Electricity market		3,739	-	3,871	-	3,843	-

(GRI 306: WASTE

GRI 306-1: Waste generation and significant waste-related impacts



GRI 306-2: Management of significant waste-related impacts

GRI 306-3: Waste generated

GRI 306-4: Waste diverted from disposal

GRI 306-5: Waste directed to disposal

WASTE GENERATED

	2020	2021	2022*
 Hazardous waste generated during infrastructure operation and maintenance (t)	0.69	3.76	3.76
Hazardous waste generation intensity (t waste/million train-km)	0.018	0.081	0.081
 Waste directed to recovery (%)	100	100	100

DISTRIBUTION BY WASTE CATEGORY

	2020	2021	2022*
Batteries, cells and accumulators	8	1.83	1.83
Electrical and electronic equipment	17.3	56.97	56.97
Remnants of water separators	72.8	39.84	39.84
Gases in pressure vessels	0.1	0	0
Packaging waste	1.5	1.09	1.09
Oils and fats	-	0.27	0.27
Paint	0.3	0	0

* Latest figure available for 2021. Figure updated at year-end 2022 with the publication in May 2023 of the environmental report.

APPENDIX 6 GRI Indicators and non-financial indicators

GENERAL DISCLOSURES

GRI INDICATOR		Reference/page
1. The organization and its reporting practices		
2-1	Organizational details	Location of headquarters: C/ Sor Ángela de la Cruz 3-3º, 28020 (Madrid)
2-2	Entities included in the organization's sustainability reporting	Administrador de infraestructuras ferroviarias de alta velocidad – Adif AV
2-3	Reporting period, frequency and contact point	1 January 2022 to 31 December 2022, annual, contact: rsc@adif.es
2-4	Restatements of information	Throughout the report
2-5	External assurance	Assurance report
2. Activities and workers		
2-6	Activities, value chain and other business relationships	17-18; 22-25; 214-217
2-7	Employees	107-114
3. Governance		
2-9	Governance structure and composition	28
2-10	Nomination and selection of the highest governance body	28

GRI INDICATOR		Reference/page
2-11	Chair of the highest governance body	29
2-12	Role of the highest governance body in overseeing the management of impacts	27-50
2-13	Delegation of responsibility for managing impacts	27-50
2-14	Role of the highest governance body in sustainability reporting	27-50
2-15	Conflicts of interest	37
2-16	Communication of critical concerns	Statement from the chair-woman of Adif and Adif AV
2-17	Collective knowledge of highest governance body	27-50
2-18	Evaluation of the performance of the highest governance body	27-50
2-19	Remuneration policies	29
2-20	Process to determine remuneration	113-114
2-21	Annual total compensation ratio	113-114
4. Strategy, policies and practices		
2-22	Statement on sustainable development strategy	80-91
2-23	Policy commitments	15

GENERAL DISCLOSURES

GRI INDICATOR		Reference/page
2-24	Embedding policy commitments	34; 232
2-25	Processes to remediate negative impacts	Throughout the report
2-26	Mechanisms for seeking advice and raising concerns	Throughout the report
2-27	Compliance with laws and regulations	25; 36-37
2-28	Membership of associations	133; 222; 264
5. Stakeholder engagement		
2-29	Approach to stakeholder engagement	69-76
2-30	Collective bargaining agreements	133

MANAGEMENT APPROACH

GRI INDICATOR		Reference/page
103-1	Explanation of the material topic and its boundary	The aspects reported on relate to the activities carried out by the Company and any direct impacts they may have
103-2	The management approach and its components	Throughout the report

ECONOMIC PERFORMANCE INDICATORS

GRI INDICATOR		Reference/page
201-1	Direct economic value generated and distributed	242; 298
201-4	Financial assistance received from government	240

ANTI-COMPETITIVE BEHAVIOR

GRI INDICATOR		Reference/page
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	In 2022, there was no legal action regarding anti-competitive behaviour, or anti-trust or monopoly practices

MATERIALS

GRI INDICATOR		Reference/page
301-1	Materials used by weight or volume	197; 322
301-2	Recycled materials used	197; 322

ENERGY

GRI INDICATOR		Reference/page
302-1	Energy consumption within the organization	197; 322-323
302-3	Energy intensity	197; 323
302-4	Reduction of energy consumption	197; 323

WATER

GRI INDICATOR		Reference/page
303-1	Interactions with water as a shared resource	197; 324
303-2	Management of water discharge-related impacts	324
303-3	Water withdrawal	324
303-4	Water discharge	324
303-5	Water consumption	197; 324

BIODIVERSITY

GRI INDICATOR		Reference/page
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	325-326
304-2	Significant impacts of activities, products, and services on biodiversity	325-326

EMISSIONS

GRI INDICATOR		Reference/page
305-1	Total direct greenhouse gas (GHG) emissions (scope 1)	328
305-2	Total indirect greenhouse gas (GHG) emissions (scope 2) (generated off site during combustion of the energy source)	328
305-4	Greenhouse gas (GHG) emissions intensity	327
305-5	Reduction of greenhouse gas (GHG) emissions	327

WASTE

GRI INDICATOR		Reference/page
306-1	Waste generation and significant waste-related impacts	213; 329
306-2	Management of significant waste-related impacts	329
306-3	Waste generated	329
306-4	Wastes diverted from disposal	329



ENVIRONMENTAL COMPLIANCE

GRI INDICATOR		Reference/page
307-1	Non-compliance with environmental laws and regulations	104; 233

EMPLOYMENT

GRI INDICATOR		Reference/page
401-1	New employee hires and employee turnover	109; 125
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	130-131
401-3	Parental leave	131

OCCUPATIONAL HEALTH AND SAFETY

GRI INDICATOR		Reference/page
403-1	Occupational health and safety management system	162
403-2	Hazard identification, risk assessment, and incident investigation	164
403-3	Occupational health services	162
403-4	Worker participation, consultation, and communication on occupational health and safety	162-163; 165
403-5	Worker training on occupational health and safety	162-163; 165
403-6	Promotion of worker health	162-163
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	162
403-8	Workers covered by an occupational health and safety management system	162
403-9	Work-related injuries	164
403-10	Work-related ill health	165

TRAINING AND EDUCATION

GRI INDICATOR		Reference/page
404-1	Average hours of training per year per employee	99; 124; 299
404-2	Programs for upgrading employee skills and transition assistance programs	121-125
404-3	Percentage of employees receiving regular performance and career development reviews	128

DIVERSITY AND EQUAL OPPORTUNITIES

GRI INDICATOR		Reference/page
405-1	Diversity of governance bodies and employees	30-32
405-2	Ratio of basic salary and remuneration of women to men	114

NON-DISCRIMINATION

GRI INDICATOR		Reference/page
406-1	Incidents of discrimination and corrective actions taken	137-138

FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING

GRI INDICATOR		Reference/page
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	In 2022, no significant centres or suppliers were detected in which the right to freedom of association and collective bargaining may be breached or at risk

LOCAL COMMUNITIES

GRI INDICATOR		Reference/page
413-1	Operations with local community engagement, impact assessments, and development programs	219

CUSTOMER HEALTH AND SAFETYKL

GRI INDICATOR		Reference/page
416-1	Assessment of the health and safety impacts of product and service categories	155; 215

MARKETING AND LABELING

GRI INDICATOR		Reference/page
417-3	Incidents of non-compliance concerning marketing communications	In 2022, there were no incidents of non-compliance with regulations or voluntary codes concerning marketing communications

CUSTOMER PRIVACY

GRI INDICATOR		Reference/page
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	174

SOCIOECONOMIC COMPLIANCE

GRI INDICATOR		Reference/page
419-1	Non-compliance with laws and regulations in the social and economic area	In 2022, Adif AV was not handed any significant sanctions or fines due to non-compliance with regulations in the social and economic area (same as in 2021)



CONTENT INDEX

ASPECT		REPORTING FRAMEWORK	Reference/ page	COMMENTS/REASON FOR OMISSION
BUSINESS MODEL	BUSINESS MODEL	2-1 Organizational details Activities, brands, products, and services 2-6 Activities, value chain and other business relationships	15-68	
	BUSINESS ENVIRONMENT	2-7 Employees 2-8 Workers who are not employees		
	ORGANISATION AND STRUCTURE	2-9 Governance structure and composition 2-10 Nomination and selection of the highest governance body		
	MARKETS SERVED			
	OBJECTIVES AND STRATEGIES	2-24 Embedding policy commitments		
	FACTORS AND TRENDS THAT MAY AFFECT THE FUTURE DEVELOPMENT	2-16 Communication of critical concerns		
KEY RISKS AND IMPACTS IDENTIFIED	RISK MANAGEMENT	2-25 Processes to remediate negative impacts	40-50	
	ANALYSIS OF RISKS AND IMPACTS RELATED TO KEY TOPICS	2-15 Conflicts of interest	40-50	

ASPECT		REPORTING FRAMEWORK	Reference/ page	COMMENTS/REASON FOR OMISSION
ENVIRONMENTAL MATTERS				
ENVIRONMENTAL MANAGEMENT	CURRENT AND FORESEEABLE EFFECTS OF THE COMPANY'S ACTIVITIES	2-15 Conflicts of interest 2-16 Communication of critical concerns	197; 229-236	
	ENVIRONMENTAL ASSESSMENT OR CERTIFICATION PROCEDURES	2-27 Compliance with laws and regulations	177; 229-236	
	RESOURCES DEDICATED TO ENVIRONMENTAL RISK PREVENTION	2-25 Processes to remediate negative impacts	197	
	APPLICATION OF THE PRECAUTIONARY PRINCIPLE	2-24 Embedding policy commitments	n/a	Based on the documented procedures relating to “Action in the event of emergencies affecting the environment” and “Action in the event of minor environmental incidents”, through which the organisation has a set of common guidelines for action and analysis, in order to prevent or mitigate potential adverse environmental impacts and provide an adequate and effective response.
	AMOUNT OF PROVISIONS AND SAFEGUARDS FOR ENVIRONMENTAL RISKS	Qualitative description of provisions for environmental risks	n/a	Adif AV keeps no such accounting record
POLLUTION	MEASURES TO PREVENT, REDUCE OR REPAIR CARBON EMISSIONS THAT SERIOUSLY AFFECT THE ENVIRONMENT	Qualitative description of measures to prevent, reduce or repair carbon emissions	181-183; 202-208	

ASPECT		REPORTING FRAMEWORK	Reference/ page	COMMENTS/REASON FOR OMISSION
ENVIRONMENTAL MATTERS				
CIRCULAR ECONOMY AND WASTE PREVENTION AND MANAGEMENT	WASTE PREVENTION, RECYCLING AND REUSE MEASURES AND OTHER FORMS OF RECOVERY AND DISPOSAL	GRI 306-1 Waste generation and significant waste related impacts GRI 306-2 Management of significant waste-related impacts GRI 306-3 Waste generated GRI 306-4 Waste not destined for disposal GRI 306-5 Waste directed to disposal	212-213; 329	
	ACTIONS TO COMBAT FOOD WASTE		n/a	This indicator is not considered material given the company's activities
SUSTAINABLE USE OF RESOURCES	RESPONSIBLE WATER CONSUMPTION AND SUPPLY BASED ON LOCAL RESTRICTIONS	GRI 303-5 Water consumption	324	
	CONSUMPTION OF RAW MATERIALS	GRI 301-1 Materials used by weight or volume	322	
	MEASURES TAKEN TO IMPROVE THE EFFICIENCY OF RAW MATERIAL USE	GRI 301-1 Materials used by weight or volume	212-213	
	DIRECT AND INDIRECT ENERGY CONSUMPTION	GRI 302-1 Energy consumption within the organization GRI 302-3 Energy intensity	322-323	
	MEASURES IN PLACE TO IMPROVE ENERGY EFFICIENCY	GRI 302-4 Reduction of energy consumption	198-201; 206-208	
	USE OF RENEWABLE ENERGIES	GRI 302-1 Energy consumption within the organization	198-201; 322-323	

ASPECT		REPORTING FRAMEWORK	Reference/ page	COMMENTS/REASON FOR OMISSION
ENVIRONMENTAL MATTERS				
CLIMATE CHANGE	MATERIAL ASPECTS RELATING TO GREENHOUSE GAS EMISSIONS GENERATED AS A RESULT OF THE COMPANY'S ACTIVITIES	GRI 305-1 Direct (Scope 1) GHG emissions GRI 305-2 Energy indirect (Scope 2) GHG emissions GRI 305-4 GHG emissions intensity	212-213; 329	
	MEASURES IN PLACE TO ADAPT TO THE CONSEQUENCES OF CLIMATE CHANGE	Qualitative description of measures taken to adapt to the consequences of climate change	202-208	
	GHG EMISSION-CUTTING TARGETS VOLUNTARILY ADHERED TO	GRI 305-4 Reduction of GHG emissions	207-208	
BIODIVERSITY	MEASURES IN PLACE TO PRESERVE OR RESTORE BIODIVERSITY	GRI 304-3 Habitats protected or restored	209-211; 325-326	
	IMPACTS CAUSED BY ACTIVITIES OR OPERATIONS IN PROTECTED AREAS	GRI 304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas GRI 306-5 Waste directed to disposal	325-326	
SOCIAL AND EMPLOYEE-RELATED MATTERS				
EMPLOYMENT	TOTAL NUMBER AND BREAKDOWN OF EMPLOYEES BY GENDER, AGE, COUNTRY AND OCCUPATIONAL CATEGORY	2-7 Employees	108	All Adif AV employees are located in Spain
	TOTAL NUMBER OF DISTRIBUTION OF TYPES OF EMPLOYMENT CONTRACT	2-7 Employees	109	
	AVERAGE ANNUAL NUMBER OF PERMANENT, TEMPORARY AND PART-TIME CONTRACTS BY GENDER, AGE AND OCCUPATIONAL CATEGORY	2-7 Employees GRI 401-1 New employees hires and employee turnover	111-112	

ASPECT		REPORTING FRAMEWORK	Reference/ page	COMMENTS/REASON FOR OMISSION
SOCIAL AND EMPLOYEE-RELATED MATTERS				
EMPLOYMENT	NUMBER OF DISMISSALS BY GENDER, AGE AND EMPLOYEE CATEGORY	Qualitative description of the number of dismissals	n/a	There were no dismissals in 2022 (the same as in 2021 and 2020).
	GENDER PAY GAP	GRI 405-2 Ratio of basic salary and remuneration of women to men	114	
	AVERAGE PAY AND TREND BROKEN DOWN BY GENDER, AGE, OCCUPATIONAL CATEGORY OR EQUIVALENT METRIC	Quantitative description of average employee remuneration by gender, age and professional category	113	
	AVERAGE REMUNERATION OF DIRECTORS AND EXECUTIVES	Quantitative description of average remuneration of directors by gender Quantitative description of average remuneration of executive officers by gender	n/a	The members of the Board of Directors did not receive any remuneration for attendance at meetings of the Board of Directors or any other fees (same as in 2021 and 2020).
	WORK DISCONNECT POLICIES		115-118	
	EMPLOYEES WITH DISABILITIES ORGANIZATION OF WORKING HOURS	GRI 405-1 Diversity of governance bodies and employees Qualitative description of the organisation of working hours	n/a	There were no employees with disabilities in 2022 (one in 2021 and 2020)
ORGANIZATION OF WORK	ORGANIZATION OF WORKING HOURS	Qualitative description of the organisation of working hours	115-118	
	ABSENTEEISM IN HOURS	GRI 403-2 Hazard identification, risk assessment, and incident investigation and the number of fatalities due to work-related injury or ill health	164	
	MEASURES IN PLACE TO IMPROVE THE WORK/ LIFE BALANCE	GRI 401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees GRI 401-3 Parental leave	130-131	

ASPECT		REPORTING FRAMEWORK	Reference/ page	COMMENTS/REASON FOR OMISSION
SOCIAL AND EMPLOYEE-RELATED MATTERS				
HEALTH & SAFETY	HEALTH AND SAFETY CONDITIONS IN THE WORKPLACE	GRI 403-2 Hazard identification, risk assessment, and incident investigation	162-164	
	WORKPLACE ACCIDENTS, IN PARTICULAR THEIR FREQUENCY AND SEVERITY, AND OCCUPATIONAL DISEASES, BROKEN DOWN BY GENDER		164-165	
EMPLOYEE RELATIONS	ORGANISATION OF DIALOGUE WITH EMPLOYEES	GRI 403-1 Workers covered by an occupational health and safety management system	132	
	PERCENTAGE OF EMPLOYEES COVERED BY COLLECTIVE BARGAINING AGREEMENTS, BY COUNTRY	2-26 Mechanisms for seeking advice and raising concerns	n/a	57.98% of employees are covered by collective bargaining agreements, all of them in Spain (50.93% in 2021 and 52.75% in 2020). In 2022, a total of 108 people included in the management structure were no covered by a collective bargaining agreement.
	DESCRIPTION OF COLLECTIVE BARGAINING AGREEMENTS IN THE FIELD OF OCCUPATIONAL HEALTH AND SAFETY	2-30 Convenios de negociación colectiva	133	
	MECHANISMS AND PROCEDURES IN PLACT AT THE COMPANY TO ENCOURAGE EMPLOYEE INVOLVEMENT IN MANAGING THE COMPANY IN TERMS OF INFORMATION, CONSULTATION AND PARTICIPATION.	2-26 Mechanisms for seeking advice and raising concerns	n/a	
FORMACIÓN	POLICIES IMPLEMENTED IN THE AREA OF TRAINING	GRI 404-2 Programs for upgrading employee skills and transition assistance programs	125-129	
	TOTAL TRAINING HOURS BY OCCUPATIONAL CATEGORY	GRI 404-1 Average hours of training per year and per employee	99; 124; 299	
	MEASURES TAKEN TO PROMOTE EMPLOYMENT AND PROTOCOLS AGAINST SEXUAL AND GENDER-BASED HARASSMENT	GRI 405-2 Ratio of basic salary and remuneration of women to men	114	

ASPECT		REPORTING FRAMEWORK	Reference/ page	COMMENTS/REASON FOR OMISSION
SOCIAL AND EMPLOYEE-RELATED MATTERS				
UNIVERSAL ACCESSIBILITY OF PEOPLE WITH DISABILITIES	EQUALITY PLANS	GRI 405-1 Diversity of governance bodies and employees	135	
	INTEGRATION IN THE WORKPLACE AND ACCESSIBILITY FOR PERSONS WITH DISABILITIES	GRI 405-1 Diversity of governance bodies and employees	188-190	
	ANTI-DISCRIMINATION POLICY AND, WHERE APPLICABLE, DIVERSITY MANAGEMENT POLICY	GRI 406-1 Incidents of discrimination and corrective actions taken	130-133; 138	
HUMAN RIGHTS				
HUMAN RIGHTS	HUMAN RIGHTS DUE DILIGENCE PROCESSES	2-27 Compliance with laws and regulations	132	
	PROCESSES AND ARRANGEMENTS FOR PREVENTING HUMAN RIGHTS ABUSES AND ANY MEASURES TAKEN TO MITIGATE, MANAGE AND REPAIR POSSIBLE ABUSES THAT HAVE MATERIALIZED	Qualitative description of measures to prevent risks of human rights violations	39	
	CLAIMS OF HUMAN RIGHTS ABUSES	GRI 407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	39	
	PROMOTION OF AND COMPLIANCE WITH THE ILO'S FUNDAMENTAL CONVENTIONS ON THE FREEDOM OF ASSOCIATION, THE RIGHT TO COLLECTIVE BARGAINING, THE ELIMINATION OF WORKPLACE DISCRIMINATION AND OF ALL FORMS OF FORCED OR COMPULSORY LABOR AND THE ABOLITION OF CHILD LABOR	GRI 407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	39	
CORRUPTION AND BRIBERY				
CORRUPTION AND BRIBERY	MEASURES IN PLACE TO PREVENT CORRUPTION AND BRIBERY	2-25 Processes to remediate negative impacts	34-39	Code of Ethics and Conduct
	MEASURES TO COMBAT MONEY LAUNDERING	Qualitative description of anti-money laundering measures	34-39	
	CONTRIBUTIONS TO FOUNDATIONS AND NON- PROFIT ORGANISATIONS	GRI 201-1 Direct economic value generated and distributed	218	

ASPECT		REPORTING FRAMEWORK	Reference/ page	COMMENTS/REASON FOR OMISSION
SOCIETY				
COMMITMENT OF THE COMPANY TO SUSTAINABLE DEVELOPMENT	IMPACT OF THE COMPANY'S ACTIVITIES ON EMPLOYMENT AND LOCAL DEVELOPMENT	GRI 413-1 Operations with local community engagement, impact assessments, and development programs	218-222	
	IMPACT OF THE COMPANY'S ACTIVITIES ON LOCAL POPULATIONS AND TERRITORIES	2-28 Membership of associations	218-222	
	ENGAGEMENT WITH LOCAL COMMUNITY REPRESENTATIVES; COMMUNICATION CHANNELS IN PLACE	2-29 Approach to stakeholder engagement	218-222	
	MEMBERSHIP OF ASSOCIATIONS AND SPONSORSHIPS	2-28 Membership of associations	71-76; 222-223	
SUBCONTRACTING AND SUPPLIERS	INCLUSION IN THE PURCHASING POLICY OF SOCIAL, GENDER EQUALITY AND ENVIRONMENTAL MATTERS	2-6 Activities, value chain and other business relationships	214-217	
	CONTEMPLATION IN RELATIONS WITH SUPPLIERS AND SUBCONTRACTORS OF THEIR SOCIAL AND ENVIRONMENTAL RECORDS	2-6 Activities, value chain and other business relationships	214-217	
	SUPERVISION AND AUDIT SYSTEMS AND THEIR OUTCOMES	2-25 Processes to remediate negative impacts 2-27 Compliance with laws and regulations	214-217	
CONSUMERS	CONSUMER HEALTH AND SAFETY MEASURES	GRI 416-1 Assessment of the health and safety impacts of product and service categories	141-168	
	GRIEVANCE MANAGEMENT SYSTEMS	Qualitative description of complaints and claims systems	173-174	
	COMPLAINTS RECEIVED AND THE SOLUTION OR RESPONSE GIVEN	GRI 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	174	
TAX INFORMATION	COUNTRY-BY-COUNTRY PROFITS	GRI 201-1 Direct economic value generated and distributed	242; 298	Adif AV pays taxes in Spain only
	CORPORATE INCOME TAX PAID	Quantitative description of profit before and after tax	240	Adif AV pays taxes in Spain only
	PUBLIC SUBSIDIES RECEIVED	GRI 201-4 Financial assistance received from government	240	

ENVIRONMENTAL TAXONOMY

ASPECT		REPORTING FRAMEWORK	Reference/ page	COMMENTS/REASON FOR OMISSION
TAXONOMY	ENVIRONMENTAL TAXONOMY (Technical screening criteria for sustainable economic activities)		304-321	



