

**ENTIDAD PÚBLICA EMPRESARIAL  
ADIF ALTA VELOCIDAD**

# **MANAGEMENT REPORT 2019**

**(Includes Non-Financial Information)**

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## **1. NON-FINANCIAL INFORMATION (aspects to be included according to law 11/2018 of December 28)**

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On December 29, 2018, the new Law 11/2018, of December 28, on non-financial information and diversity, through which the Commercial Code is modified, was published in the Official State Gazette. The text Consolidated the Capital Companies Act approved by Royal Legislative Decree 1/2010, of July 2, and Law 22/2015, of July 20, on Audit of Accounts, in the area of non-financial information and diversity (from of Royal Decree-Law 18/2017). This new legislation replaces the current Royal Decree-Law 18/2017, of 24 November, which allowed transposing the EU Directive 2014/95/EU on the disclosure of non-financial information and diversity to certain state levels with varying degrees of demand for large companies and groups, containing important novelties, raising the levels of demand in terms of transparency and reliability in the reporting of non-financial information and diversity.

Over the past few years, there has been a clear tendency for companies to publish more information on sustainability, motivated mainly by the demand for transparent, comparable and accurate information from investors and society in general. Without doubt, it is a fundamental practice on the road to achieving the Sustainable Development Goals (SDG) of the UN 2030 Agenda or the Paris Agreement on climate change.

In 2019, In line with this, ADIF-Alta Velocidad (hereinafter Adif - AV) has prepared a non-financial information statement adapted to the provisions established in the aforementioned Law 11/2018, which constitutes the best practice in this matter, whose presentation has been done since 2018. Since 2018, ADIF-Alta Velocidad has opted for the presentation of the Integrated Management Report, including the non-financial information status, subject to the same approval, deposit and publication criteria as the Management Report.

Regarding the reporting framework, it has been based on the Global Reporting Initiative (G4GRI) standards with the objective of identifying, compiling and reporting information on the impacts linked to environmental, social and economic issues, as well as their management in a clear and comparable manner, providing a complete and balanced image of the material issues of our organization. The report is supplemented by establishing a correlation between the G4GRI standards and the Sustainable Development Goals (SDGs) on which the activity of the entity impacts, providing a global framework for organizations and stakeholders to evaluate its local, regional and global impact. For this, firstly, these objectives have been prioritized according to the sector and type of business of the entity in order to identify the most relevant areas in which the organization can contribute and integrate these objectives into the corporate strategy.

In 2018, Adif - AV submitted the report of the non-financial status of the entity to external analysis, based on the methodology Making the Connection - Using GRI's Guidelines to Create a COP being carried out by the association Red Española de Pacto Mundial, REPM, as part of its commitment to sustainable development, with the aim of detecting the strengths and areas of improvement both in the level of transparency of the entities, and in the level of implementation of each of the four blocks of the United Nations Global Compact; as well as measuring the level of integration of the Sustainable Development Goals (SDAs) within the organization.

With the reporting model for which ADIF-Alta Velocidad has opted, it intends to become a benchmark for public companies at the national level in the field of disclosure of non-financial information and diversity, raising the levels of demand in terms of transparency and reliability in the reporting of this data.

## 2. WHO WE ARE

*At Adif-AV we know the important role we play as managers and promoters of the country's railway sector. For this reason, part of our responsibility is based on the search for effective formulas to guarantee that the sector is one of the main socio-economic engines of the country, working day by day to offer a safe, reliable and efficient railway service, continuously adapting to the new challenges of the environment.*

The Public Entity ADIF-Alta Velocidad was created on December 31, 2013, after the approval of Royal Decree Law on the restructuring of the Public Entity Administrador de Infraestructuras Ferroviarias (hereinafter Adif) and other urgent measures in the economic order.

ADIF-Alta Velocidad was created with the aim of developing and managing a high performance, economically sustainable, safe, efficient and quality railway infrastructure system, under the premise of a strategic orientation guided by sustainable development.

This sustainable approach implies that the Adif-AV strategy integrates the economic, social and environmental fields, taking as a high-level reference the United Nations Sustainable Development Goals.



The main function of Adif-AV is to provide a **safe, reliable and efficient railway network**, generating added value and with sustainability as one of our fundamental pillars.

Adif-AV aims, in addition to providing a reliable and safe infrastructure, to increase the share of rail transport and generate added value through collaboration with other entities, institutions and companies. In its commitment to high speed, the entity has radically transformed the railway network, maintaining a significant difference in travel times with respect to other high-speed lines in the world.

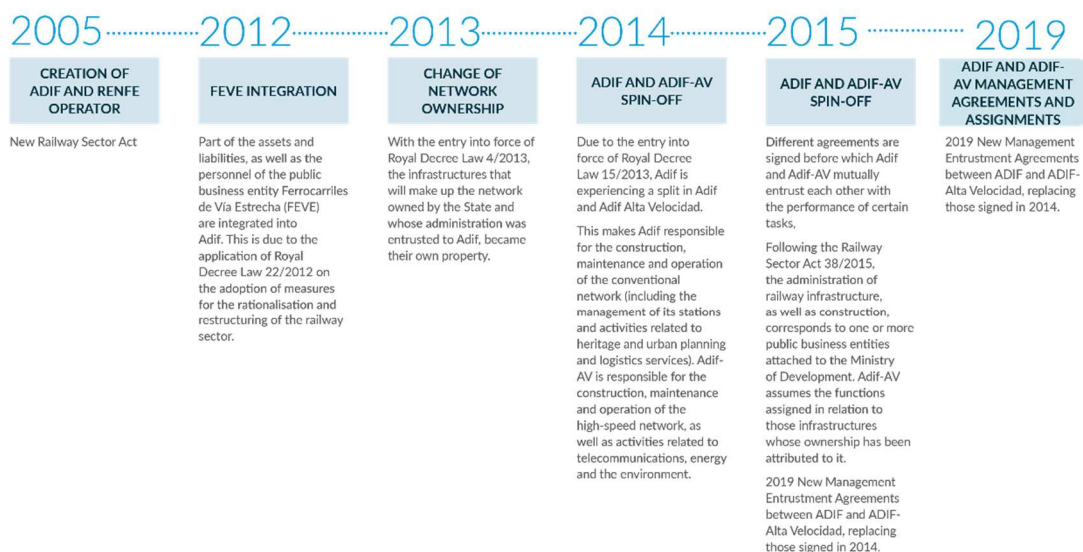
The Adif-AV network is mainly built with UIC width (1,435 mm), double track, 25KV electrified and following the European technical specifications for interoperability (TSI). The progressive implementation of TSI allows the provision of rail services seamlessly to/from our country, with origin/destination to the rest of the European rail network. The competences and functions of ADIF-Alta Velocidad are set out in its own statute regulated by Royal Decree 1044/2013, of December 27. The main competences of ADIF-Alta Velocidad are, in summary, the following:

- Construction of high-speed railway infrastructures that form part of the RFIG, charged to its own resources and in accordance with the provisions of the Ministry of Public Works and Transport.
- Construction of high-speed railway infrastructures, with resources from a third party, in accordance with the corresponding agreement.
- Administration of the infrastructure of its ownership.
- Control and inspection of the railway infrastructure, its protection zones and its railway traffic.
- Adjudication of capacity to railway companies that request it.
- Exploitation of the property of its ownership.
- Business of high-speed stations.

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- Acquisition of electric power for the supply of current service to the railway system.
- Provision of additional services and, where appropriate, complementary and auxiliary services to the rail transport service in infrastructure of its ownership.
- Telecommunications and energy activities





Since its creation in 2005 as the public entity in charge of providing the rail transport service, there have been several key milestones in Adif's progress towards the entity it has become today. One of the most important milestones is the entry into force of Royal Decree Law 15/2013, by which Adif was split into Adif and Adif-AV.



The main rules that regulate the activity of Adif -AV are the following

- Law 40/2015, of 1 October, on the legal regime of the public sector.
- Law 39/2015, of 1 October, on the common administrative procedure for public administrations.
- Law 38/2015, of 29 September, on the railway sector.
- Royal Decree-Law 15/2013 on the restructuring of Adif and other urgent measures in the economic order; this Royal Decree-Law creates the new public business entity Adif Alta Velocidad.
- Royal Decree-Law 4/2013 on measures to support entrepreneurs and stimulate growth and job creation: transfer to ADIF of ownership of the State railway network it was responsible for administering.
- Royal Decree-Law 22/2012, adopting measures to rationalize and restructure the rail sector: integration of part of the Public Business Entity for Narrow Width Railways (FEVE) into Adif.
- Law 47/2003, of 26 November, General Budgetary Law.
- Royal Decree 1044/2013, of 27 December, approving the Statute of the Public Business Entity ADIF- Alta Velocidad

## 2.1. Main Figures: ADIF-AV at a Glance

 BUSINESS	 GOOD GOVERNANCE	 EMPLOYEES	 ECONOMIC
<b>865.9</b> Millions of Passengers	<b>9</b> Board Members	<b>218</b> Employees	Amount of debt at face value <b>16,085.65 M€</b>
<b>952</b> Average number of trains running per day	<b>13</b> Board meetings	<b>97.57%</b> Indefinite contracts	Operating income <b>1,168.7 M€</b>
<b>1,800 M€</b> Green Bonds Value	<b>27.7%</b> Women on the Board	<b>+20</b> Reconciliation measures	Year's result <b>-179.2 M€</b>
<b>3,456 KM</b> Managed rail network	<b>398</b> Ethical training	<b>50.96%</b> Covered by award	EBITDA <b>280.6 M€</b>

## 2.2. Mission, vision and values

Adif-AV is aware of the need to integrate the circular economy, social cohesion, the climate emergency, equality and diversity in the management of railway infrastructures, equating each of these dimensions in rank of importance. This is why the starting point for its business strategy is the need to contribute to socio-economic development by providing actions that mitigate the effects of climate change.

With this approach and with a defined corporate purpose, Adif-AV in its Strategic Plan 2030, PE2030, maintains the Vision, Mission and Values of the Entity, where the Vision reflects the aspiration for the future, the Mission, for its part, addresses the actions that Adif must carry out to fulfil its responsibility and, finally, the Values stand as the pillars on which the actions of the different professionals of the Entity must be oriented to successfully achieve the defined mission.



Adif-AV's corporate purpose is to contribute to **"improving people's lives"** through business management based on good governance, transparency, equality and people-oriented well-being.

### VISION

The entire organization is moving towards sustainable infrastructure development so that both current and future generations can enjoy a better life.

### MISSION

design, build and manage railway infrastructures to contribute to the well-being of people, generating value for our stakeholders through all our areas of activity.

### VALUES

The qualities needed to successfully achieve Adif's mission are summarized in 4 words:

commitment  
service  
Integrity  
Professionalism

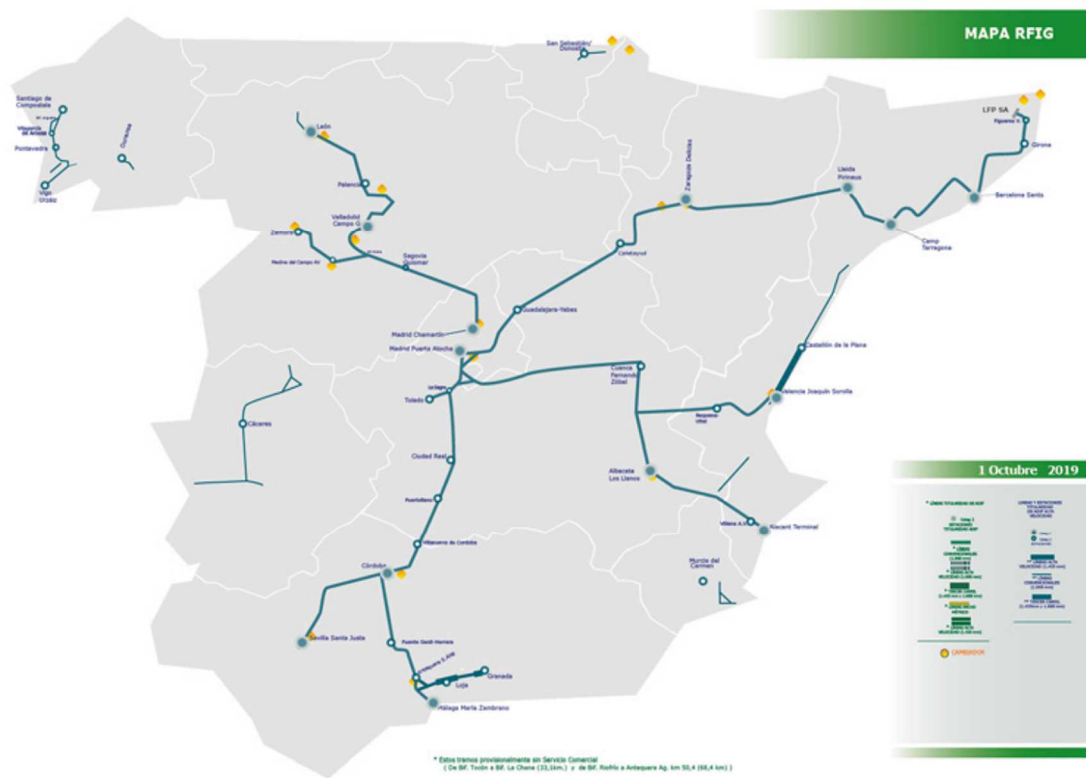
## 2.3. Business model

Adif-AV focuses its business model on creating and managing infrastructures with sustainable, quality, resilient and safe features, committing itself to innovation and modernisation of the transport system. In addition to the construction and management of high-speed lines, the entity is responsible for the following activities:

- Management of the telecommunications infrastructure.
- Management of energy supply to railway operators.
- Advice and supervision of Adif's environmental and energy efficiency actions.

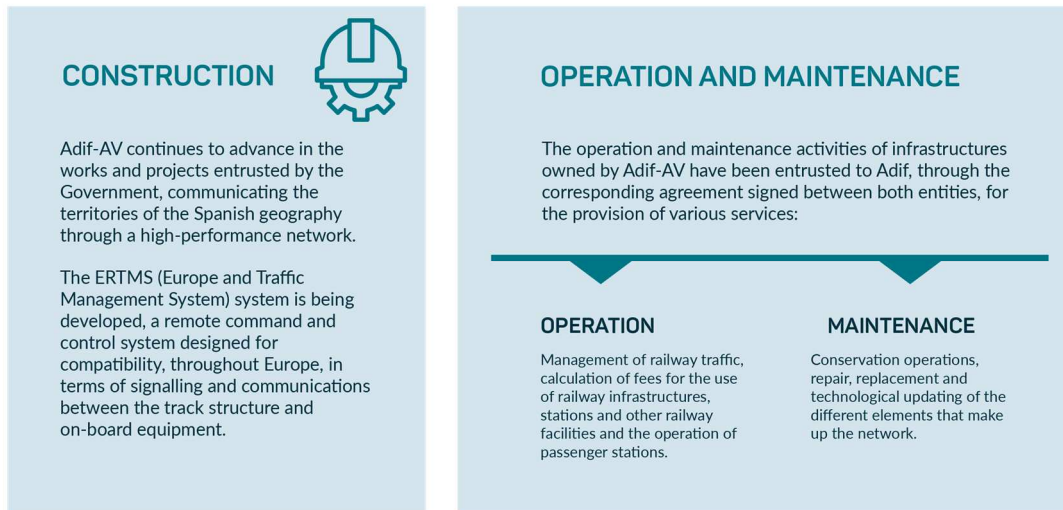


The network owned by Adif-AV reaches **3,455.70 km (total network managed)**, of which **2,618.50 km are High Speed Standard Width (UIC)**.





### 2.3.1. Main activities performed by Adif-AV



#### Integral Safety of the Railway System

The safety culture of ADIF-Alta Velocidad is based on the evaluation of risks in order to apply the preventive, corrective and improvement measures necessary to minimize these risks.

- Protection and Safety: Safety in infrastructures and installations of the company through the implementation of the systems and appropriate protocols in cases of incidents or emergencies, in collaboration with the competent public entities.
- Railway traffic safety: Control of the inherent risks in the circulation of trains, derived from the activity of ADIF-Alta Velocidad and Operating Companies, giving users confidence in the network through which they transit.
- Prevention of Occupational Risks: Commitment to the safety and health of our own employees, collaborating with other companies to understand and control the risks arising from the interaction with contractors and suppliers, as well as from anyone who performs a punctual or long-term job for Adif-AV.
- Cybersecurity: Protection of Adif-AV's management information or operational systems against intrusions, aggression, undue access to information and/or damage to the organization's assets.

### 2.3.2. Other areas of the business

Similarly, Adif-AV deploys its activity in other business areas that are summarized below:



**TELECOMMUNICATIONS AND ENERGY**

Adif-AV acts as manager of the telecommunications infrastructure, the fiber optic network that extends along the railway lines and that supports the network services and offers a service to different operators to optimize the surplus capacity of their network.

In addition, it is responsible for the management of the electricity supply consumed by ADIF and ADIF-AV and the energy for traction and other uses consumed by RENFE Operadora; and in its case, by the rest of the operators that use electric traction material in the transport of goods. In addition, it advises and supervises the actions regarding energy efficiency at ADIF and ADIF-AV.

**TECHNICAL ASSISTANCE AND COLLABORATION**

In the international sense, Adif-AV works on the basis of defending its interests, and to achieve a return on its knowledge and experience, through the achievement of technical assistance and contracts in foreign markets.

In this sense, the entity participates in different international initiatives such as the development of the trans-European network and the development of international regulations on security and interoperability, among others.

**HERITAGE AND URBANISM**

Adif-AV is in charge of the management and administration of the assets it owns.

Always in line with the policies set out by the competent institutions, Adif-AV contributes to the sustainable development of the railway system and its urban-railway integration in the cities (sometimes through Integration Societies).

**INTEGRATION COMPANIES, SUBSIDIARIES AND INVESTEEES**

Adif-AV carries out the control and economic monitoring of all its subsidiaries and investee companies and the tasks of coordinating, controlling and monitoring the actions of integrating the railway into the cities (sometimes through Integration Companies).

**2.3.3. International business. Adif Alta Velocidad in the world**

2019 has seen a clear advance in the world's railway sector. Adif-AV has strengthened and improved its position in the international arena through participation in international organisations and initiatives, participating in missions abroad and receiving delegations from the five continents.

With regard to missions, we can list those related to countries that are strategic for their foreign business and that have important investment programs in railway infrastructure, such as Norway (where a Memorandum of Understanding has been signed with the railway infrastructure manager Bane NOR), Great Britain (HS2 project, new high-speed line London-Birmingham-Leeds/Manchester), Sweden, Bosnia, Croatia, Ukraine, Israel, United States, India, etc.

In this year, the technical assistance work to India, Sweden and Israel or the collaboration work with Renfe-Operadora in the development of the High-Speed project in Texas (USA) should be highlighted.

Adif-AV has also continued its participation in the Twinning Project, financed by the European Union, with the aim of supporting the Ministry of Transport and Infrastructure of Ukraine in the creation of a more efficient railway network for both freight and passengers. To this end, experts

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from Adif, Adif-AV, Renfe and the Ministry of Public Works and Transport have worked with their Ukrainian counterparts to adapt to the European regulatory framework

It is worth noting that during 2019, work continued to identify new business opportunities in countries such as Korea, Argentina, Uruguay, Colombia, Peru, the Czech Republic, Bulgaria, India and Saudi Arabia. In the latter, the participation of Adif/Adif-AV in the Haramain Project, which is being explained below, stands out. In addition, a Memorandum of Understanding was signed with the Saudi Railway Polytechnic (SRP).

In addition, in 2019 Adif-AV, together with Adif, has advised on 15 international projects.

The entity is represented in the main international organizations: EIM, UIC (in which it maintains outstanding experts), EEIGs, RailNetEurope (RNE), with 34 European Infrastructure Managers and 10 associate members and the PRIME Platform of railway infrastructure managers promoted by the European Commission. It also collaborates with and follows the interoperability initiatives of the ERA, the ERTMS Users Group and the joint European research initiative Shift2Rail, S2R.

Participation in the aforementioned forums gives Adif-AV the opportunity to establish bilateral technical groups, mainly with the Infrastructure Managers of France and Portugal, through which it promotes coordination in the planning, design and execution of improvement work on conventional lines that form part of the European Freight Corridors, as well as aspects of capacity management and international traffic linked to the borders with these countries.

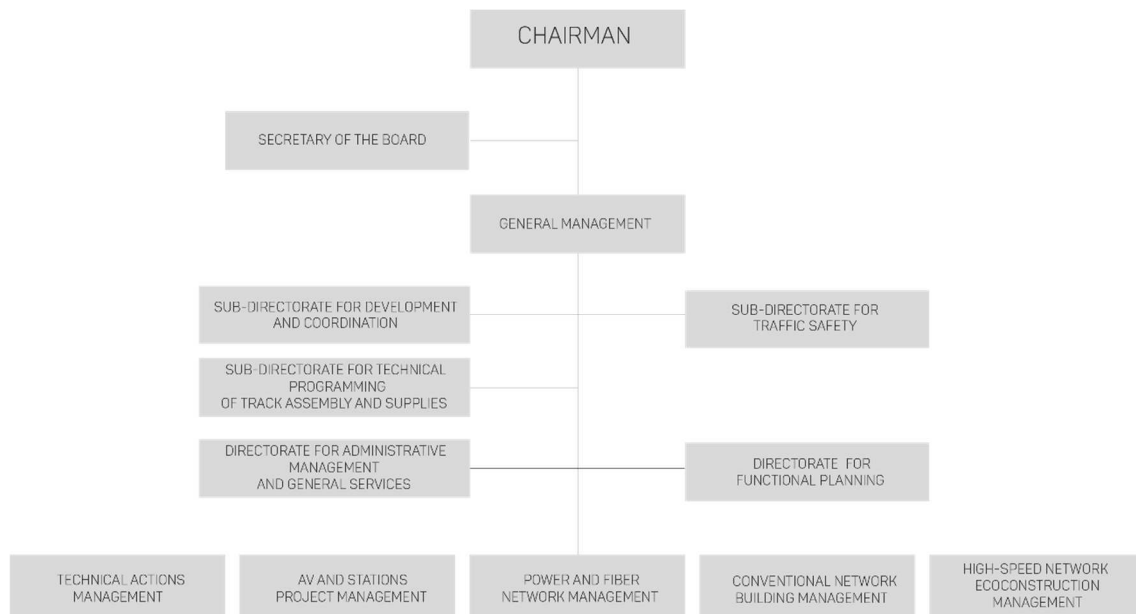
	Indicator description	Units	2017	2018	2019
Information on performance in society and product responsibility	Presence in international associations and organizations ( <i>integrated Adif and Adif-AV</i> )	N.º	184	218	224
	Presence in international projects and activities ( <i>integrated Adif and Adif-AV</i> )	N.º	145	158	98



*Presence of Adif/Adif-AV in the world*

## 2.4. Organisational structure

The organisational chart below shows the organisational structure of Adif-AV for 2019, as of December of that year:



### 3. STRATEGIC FOCUS

*Adif-AV focuses its business strategy on Sustainable Development, with the firm conviction that all its activity has a relevant impact on society. In this way, it has become a benchmark within its sector in the area of Corporate Responsibility.*

#### 3.1. Business strategy

In 2019, a process of reviewing and updating the Strategic Plan has been carried out with the aim of aligning the time horizon with the United Nations' Agenda 2030, focusing it more on our core business and the fourth intelligent industrial revolution, in order to respond to the challenges the company faces.

## CHALLENGES

**SECURITY**  
TRANSPPOSITION AND DEVELOPMENT OF THE NEW E.R.A. SAFETY AND INTEROPERABILITY DIRECTIVES IN AN ENVIRONMENT THAT ENHANCES THE SAFETY CULTURE (HUMAN FACTOR)

**IMPACT AND ADAPTATION TO DISRUPTIVE TECHNOLOGIES**  
SO AS NOT TO MISS THE TECHNOLOGICAL TRAIN

**CLIMATE CHANGE AND ENERGY TRANSITION**  
TO BE AN EVEN MORE ENVIRONMENTALLY FRIENDLY AND RESOURCE RESPONSIBLE TRANSPORT. DECARBONISATION OF FREIGHT TRANSPORT

**ECONOMIC SUSTAINABILITY**  
FOR A MORE RESPONSIBLE PRESENT AND FUTURE

**MOBILITY AND CONNECTIVITY**  
IMPROVING INTERMODALITY AND COMMUNICATION WITH USERS

**DIVERSITY, EQUALITY AND SOCIAL ACTION**  
STRENGTHENING GOOD GOVERNANCE AND TRANSPARENCY MEASURES THAT PROMOTE SOCIAL RESPONSIBILITY AND IMPROVE THE INCLUSION OF THE DIFFERENT GROUPS THAT MAKE UP THE COMPANY

**GENERATIONAL TRANSFER**  
SERIOUS STRUCTURAL PROBLEM OF AGEING WORKFORCE WITH CURRENT AVERAGE AGE: 54.94

**TRACK GAUGE STRATEGY**  
TO IMPROVE COMPETITIVENESS BY REMOVING INTERNAL AND EXTERNAL BORDERS

**EXTENSION AND IMPROVEMENT OF NETWORK PERFORMANCE**  
SAME PERFORMANCE AND PERCEPTION OF SERVICE QUALITY FOR OUR STAKEHOLDERS

**LIBERALISATION**  
LIBERALISATION OF THE RAILWAY SECTOR AS SET OUT IN THE 4TH RAILWAY PACKAGE, TAKING ACCOUNT OF NEW ENTRANTS



The Strategic Plan 2030 (SP2030) is based on **three pillars**: safety, service and sustainability which are fully aligned with its mission, vision and values. These pillars are driven by three levers that will stimulate their achievement: digital transformation, strategic innovation and people.

The Pillars and Levers are deployed in **20 Strategic Objectives**, which are measured and monitored through key indicators. These Strategic Objectives are as follows:

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In parallel with the formalization of the strategy, to develop and deploy these objectives to each Area of Activity, a great impetus has been given to the acceleration of strategic initiatives.

There are currently **32 strategic initiatives** structured around each of the pillars and levers. Of the 32 strategic initiatives, 29 are integrated Adif/Adif AV and 3 are exclusive to Adif (Logistics Services Plan, Goods Plan, Plan for the suppression of telephone blockages).

AREA	INITIATIVE	ADIF	ADIF AV	INTEGRATED
Circulation and Capacity Management DG	New Model of Itinerary Traffic Services			X
	Project for a new traffic regulation platform (SITRA)			X
Conservation and Maintenance DG	New Maintenance Model Project			X
Personnel Management DG	Comprehensive People Management Plan			X
Business and Commercial Operations DG	Logistics Services Plan	X		
	Comprehensive Plan for Travellers' Stations			X
	Merchandise Plan	X		
Strategic Planning and Projects DG	Comprehensive Plan to Improve Safety at Road Crossings			X
	Investment Program Development Plan			X
	Internationalization Plan			X
	Development Assets Programme			X
	Plan to Combat Climate Change			X
	Social Action Plan 2020			X
	Integrated Risk Management Development and Deployment Plan			X
	BIM Methodology Implementation Plan			X
	Strategic Innovation Plan			X
Security, Processes and Corporate Systems DG	Plan for Updating and Improving Traffic Safety			X
	Phone Block Removal Plan	X		
	Integral Security Plan for Information Systems (PSISI)			X
	Critical Infrastructure Protection Plan			X
	4G Project Deployment			X
	Project to review and update the Management System			X
	Implementation Plan for a new Asset Management Model			X
	Job Transformation Plan			X
	Unique Telecommunications Operator Project			X
Finance and Management Control DG	Plan for the Elaboration of the Agreement			X
Deputy Presidency	CPF Adaptation Project			X
Internal Audit Department	Transparency and Good Governance Improvement Plan			X
D. Communication and Corporate Reputation	Communication and Corporate Reputation Plan			X
General Secretariat	Responsible Public Procurement Project (social and ecological)			X
	Positioning Plan in the Corporate Group			X
	Electronic Management Plan			X

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

The following shows the annual behaviour of the main strategic indicators of Adif-AV analysed during the 2017-2019 series (Data from 2019, updated to October 2019, except for data with quarterly, half-yearly or annual periodicity. These data are updated to the last period of the year available):

OPERATIONAL ASPECT					
PILLAR/ LEVER	Name	Units	2017	2018	2019
SAFETY	Significant accidents due to the administrator	Nº/MkmTren	0.017	0	0
	Train accidents due to manager's responsibility	Nº/MkmTren	0.018	0	0
	Crimes with an impact on the activity	Nº	282	252	101
	Precursors of accidents due to the administrator	Nº/MkmTren	0.330	0.321	0.3556
	Deliberate attacks on critical infrastructure	Nº	38	9	9
	Accident rate	accidents casualties/1,000 workers	3.05	0	0
	Gravity	lost days/1,000 hours worked	0.09	0	0
	Liberalization**	Number of companies	13	13	14
SERVICE	Reliability of the installations	Nº	2.659	2.508	2.939
	Availability of Facilities	Minutes	65.283	71.21	65.97
	Track Quality	Ratio	99.19	99.10	99.16
	Development of the High-Speed Network	%	N/D	71.80	75.00
	Execution of investments	%	108.14	109.67	104.34
	Modernization of stations	M travellers benefited	136.9	147.6	139.89
	Urban integration**	M euros of accumulated investment	3.622.5	3.877.03	4.030.2
	Commercial activity in stations**	Commercial income	N/D	12.85	15.47
TRANSFORMATION ON LEVERS	Transfer level**	%	86.7	86.7	86.3
	Protection of results in the development of innovation**	Number of products protected as industrial and intellectual property	N/D	6	6

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PILLAR/ LEVER	Name	Units	2017	2018	2019
	Innovation efficiency**	% results transferred	40	50	67
	Collaboration and open innovation**	ideas and projects developed*	N/D	23	37
	Systems availability**	%	99.83	98.94	99.71

(\*) Requested and Received (intra-company, operational areas, collaboration and open innovation)

(\*\*) Integrated Adif and Adif-AV indicator

### ECONOMIC SIDE

PILLAR/ LEVER	Name	Units	2017	2018	2019
SUSTAINABILITY	Gross operating profit (EBITDA)	M euros	287.76	297.924	282.967
	Net operating profit (EBIT)	M euros	38.98	49.112	30.514
	Use of Community funds	%	226	73.27	110.62
	ESA 2010 ratio	%	56.00	56.16	56.4

### ENVIRONMENTAL FOCUS

PILLAR/ LEVER	Name	Units	2017	2018	2019
SUSTAINABILITY	Reduction of GHG emissions	Tm CO <sub>2eq</sub>	20.921	17.874	22.712
	Hazardous waste management	Tm/MkmTrain	0.07	0.038	0.033

### SOCIAL ASPECT

PILLAR/ LEVER	Name	Units	2017	2018	2019
SUSTAINABILITY	Accessibility**	% of travellers	81.21	83.19	85.07

(\*\*) Integrated Adif and Adif-AV indicator

**GOOD GOVERNANCE DIMENSION**

PILLAR/ LEVER	Name	Units	2017	2018	2019
SUSTAINABILITY	Code of ethics**	No. of notifications	N/D	12	16
	Transparency**	% estimated claims	10	7.56	4.88

(\*) Received and resolved through the Ethics Channel or by any other means that could result in a violation of the commitments of the Code of Ethics

(\*\*) Integrated Adif and Adif-AV indicator

### 3.1.1. Materiality analysis 2019

Adif-AV is aware of the need to listen to the various stakeholders in order to achieve a management approach based on responsibility to society. The Entity understands a stakeholder group as any social group that may be affected by the development of the company's activity and/or that may influence its activity.

Thus, Adif-AV's stakeholders include railway companies, passengers, citizens, public administrations, employees, governments of other countries, suppliers, business partners and allies and the third sector (NGOs, associations, etc.).

An update of the materiality analysis carried out in 2017 was performed in 2019, first identifying a list of key issues based on the in-depth analysis of various sources of information, some of which are specific to the public sector and the railway sector at both state and international level. In addition, new trends and the requirements of Law 11/2018 on non-financial information and diversity have been taken into account.

A total of 30 relevant topics or issues have been identified, one more than in 2017, having eliminated two and included three new ones compared to last year. In addition, a total of 7 subjects have changed their nomenclature or adapted their content, to better respond to the requirements and trends in non-financial information.

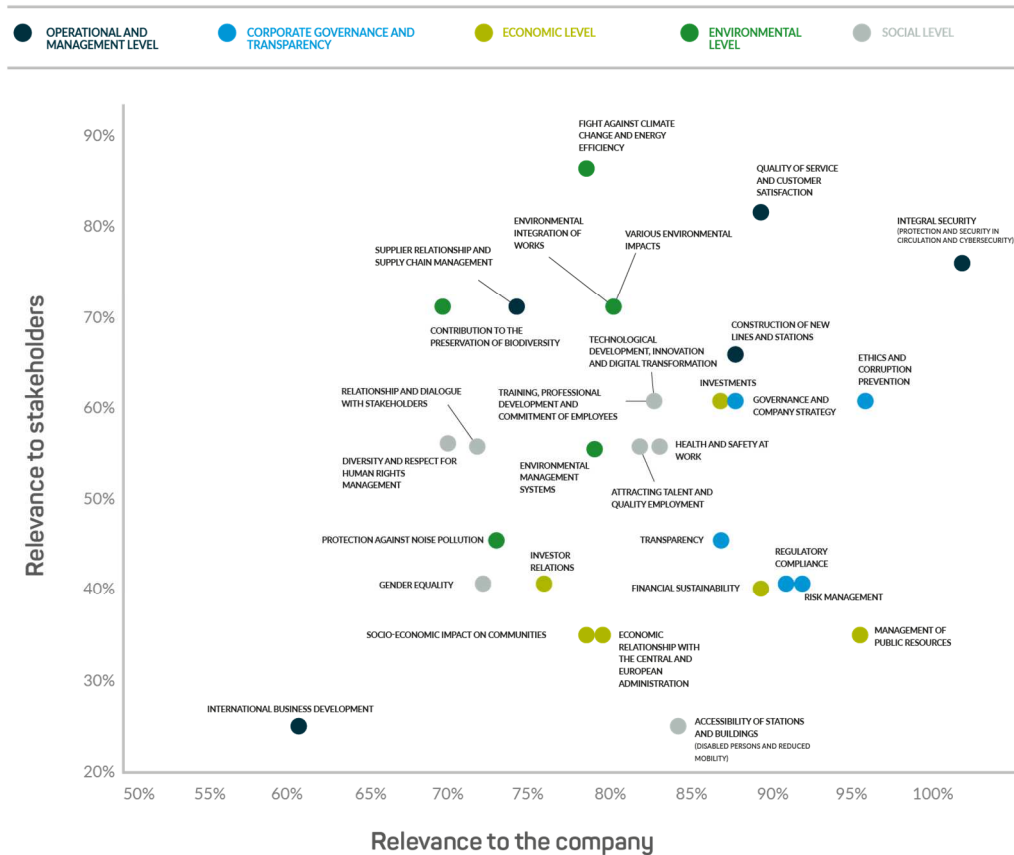


<b>RELEVANT KEY ISSUES IDENTIFIED IN 2019</b>	
<b>Operational and Management Scope</b>	Construction of new lines and stations
	Development of international activity
	Quality of service and customer satisfaction
	Technological development, innovation and digital transformation
	Comprehensive safety (protection and safety, traffic safety and cybersecurity)
	Supply chain and supplier relationship management*
<b>Corporate Governance and Transparency</b>	Corporate Governance and Strategy
	Regulatory compliance
	Risk Management
	Transparency
	Ethics and corruption prevention
<b>Economic field</b>	Financial sustainability
	Management of public resources
	Investments
	Economic relationship with the central and European administration
	Investor Relations
	Socioeconomic impact on communities**
<b>Environmental field</b>	Environmental Management Systems
	Environmental integration of the works
	Climate Change and Energy Efficiency
	Contribution to the preservation of biodiversity
	Protection against noise pollution*
	Various environmental impacts (land contamination and spills, fire prevention, waste management)
<b>Social field</b>	Relationship and Dialogue with Stakeholders
	Accessibility of Stations and Buildings (Disabled Persons and Reduced Mobility)
	Training, professional development and commitment of employees
	Management of diversity and respect for human rights
	Health and safety at work
	Attracting talent and quality employment**
	Gender equality**

(\*) Issues that have changed terminology or include a new approach

(\*\*) New issues

These issues have subsequently been assessed in terms of their relevance to the company itself and to its stakeholders, taking into account their impact on strategy, business objectives and brand reputation and image, as well as their own capacity to generate risks and opportunities. To this end, an internal consultation process has been carried out in which 44 managers and area directors of the company have participated. In addition, different reporting standards have been taken into account, sustainability and CSR reports from railway companies in various countries have been analysed and the issues that have been particularly relevant in the press during the year have been observed. The result of this relationship between internal and external relevance is presented in the following materiality chart:



As in previous years, the integral safety of the railway network, the quality of the service provided and the construction of new lines and stations are among the most relevant issues, given that they are the fundamental aspects on which the Entity's business is based.

However, compared to previous years, there has been an increase in the importance of environmental aspects such as the fight against climate change or the environmental impacts caused and also in aspects such as the company's strategy or health and safety at work. The economic aspects, on the other hand, is less relevant than in previous years.

This trend is logical if we consider the profound changes that are occurring at the social level and the growing relevance that environmental concepts are currently acquiring. The United Nations' Agenda 2030 and the achievement of the Sustainable Development Goals it sets out is a good example of this, making social awareness of the environmental problems that threaten the natural environment increasingly intense.

## 3.2. Business environment: challenges and opportunities

The railway market is dynamic and is subject, both at present and foreseeably in the coming years, to strong changes that open up new opportunities and challenges for which the Entity is already preparing. Technological evolution and digitalization, the strong internal demand for an increasingly safe and quality service, the interoperability and liberalization of the European rail

passenger transport market, as well as the global challenges affecting our business, are all fundamental aspects of an environment in rapid transformation to which we must respond.

Among the main challenges that Adif-AV is facing and that will mark its future development, the following stand out.

### 3.2.1. Maintenance and improvement of the network

As Society demands it, Adif-AV assumes, as a permanent challenge, the continuous improvement of the reliability and safety of the railway infrastructure. Therefore, it makes a sustained effort to allocate resources to the maintenance of the infrastructure and the facilities as a whole, while continuing to develop specific projects such as track renovations, automation of safety systems, removal of level crossings, improvement of platform crossings, etc.

Likewise, due to the importance of their volume in terms of the millions of people who use them, we are very aware of the need to improve the infrastructure on which local traffic circulates, especially in the area of Madrid and Barcelona, but also in other towns with lower volumes.

\*Network length comparability data managed by Adif-AV

The length of the network managed by Adif-AV is 3,456\* km and can be summarised as follows:

Indicator description	Units	2017			2018		2019	
Total managed network*	km	3,152	3,300	3,456				
High-speed network in standard width (UIC)	km	2,514	2,514	2,619				

*\*This length has increased fundamentally due to the commissioning of the Antequera - Granada AV connection and the new route of the Mediterranean Corridor.*

### 3.2.2. Liberalisation of passenger transport

The liberalisation of passenger transport in 2020 could increase traffic on the General Interest Railway Network, with an estimated growth of between 30 and 50 percent on high-speed lines, so it is necessary to ensure the quality and timeliness of service in all rail infrastructures. To do so, it is essential to adapt to some trends that will occur linked to this liberalisation process.

In this way, Spain will advance towards an increase in the high-speed network rates, which is the one that presents the greatest commercial attraction and where the railway is more competitive than other means of transport. Currently, the Spanish high-speed network is used as much as one fifth of the French network and approximately one third of the German or Italian network.



In 2019, **14 companies** used Adif-AV's infrastructures and the volume of traffic was **60.34 million km of trains**, an increase of 4% over the previous year.

In the case of Italy, the liberalisation of passenger rail transport took place in 2012, making it a reference point for Adif-Alta Velocidad. This liberalisation had very beneficial effects for the sector as a whole, with the high-speed market in that country growing by 80%, from 38 million passengers in 2012 to 68 million in 2016.

## Entry of new operators in the market

A number of processes are being developed that will facilitate the entry of new operators into the market. Both Adif and Adif-AV are working on a study of the reorganization of the current traffic in order to introduce the services of the new railway companies.

Visibility will also be given to the capacity available on the network, while providing legal certainty to the companies and giving visibility to the capacity available on the network by signing framework agreements that guarantee the capacity reservation for a period of five years.

Similarly, a system of charges for the use of the network will be consolidated to provide stability and certainty for companies. Adif-AV has included in the 2019 Network Declaration, a description of the model used to calculate directly attributable costs, which is a further step towards compliance with the European framework.

Finally, the possibility of declaring the main high-speed lines as "specialised lines" is being assessed, which would give priority to the traffic that is best suited to a more intensive use of these lines, along the whole length of each one.

Indicator description		Units	2017	2018	2019
Information on performance in society and product responsibility	<i>Liberalisation of passenger transport</i>	No. of companies operating in a network*	13	13	14

\* Number of companies that have operated in the Adif-AV network: Acciona; ALSA; Captrain; Continental; Ferrovial; Go Transport; Low Cost; Logitren; Medway; Renfe Viajeros; Renfe Mercancías; Tracción Rail; Transita; Transfesa.

## Plan for adaptation to the Fourth Railway Package

Adif and Adif-AV are working on a plan to adapt to the Fourth Railway Package, the regulatory basis under which the liberalisation process is taking place.

This plan includes all aspects related to the service provided to railway customers. In this respect, both entities are preparing the stations for the incorporation of new operators, under four management criteria: non-discriminatory treatment, transparency, flexibility and sustainability.

The aim of the aforementioned plan is to make information on the services offered, application and award procedures, as well as prices, which will be published in the Network Statement available to new operators. Likewise, Adif has proactively initiated a process to search for and locate land owned that can be made available to new operators for the construction of their facilities.

Finally, the necessary procedures are being put in place to improve the allocation of energy consumption by each train, with the aim of being able to invoice each operator for what is actually consumed for each service. Following the trend in European countries, we are moving towards a model based on on-board measurement as the unit of invoicing for the service.

### 3.2.3. Global Challenges and Agenda 2030

Since the launch of Agenda 2030 and its Sustainable Development Goals, SDG, at the end of 2015, many efforts have been made by governments, public and private companies and society at large to respond to and advance towards 2030. The National Action Plan for the Implementation of Agenda 2030 provides for the implementation of public policies, key measures for undertaking major transformations, monitoring, accountability and evaluation.

According to the latest available data, the vast majority of public companies consider that the lack of internal awareness and sensitivity to the relevance of the 17 SDG represents a major challenge for their integration into corporate strategies. In this sense, training and the identification of transversal competences are key tools.

Contributing to the achievement of the SDG is an opportunity to improve the results and impacts of companies in society, which will necessarily have a positive impact on their social legitimacy and reputation. Similarly, it allows for the improvement of internal management of processes and represents new business opportunities.

In general terms, and in accordance with the latest published analyses, Spain is in line with the progress being made by the European Union to comply with Agenda 2030. According to the 2019 edition of the SDG Index and Dashboard Report, worldwide Spain is in the first quartile of countries closest to achieving such goals, coming in 21st place out of 162.

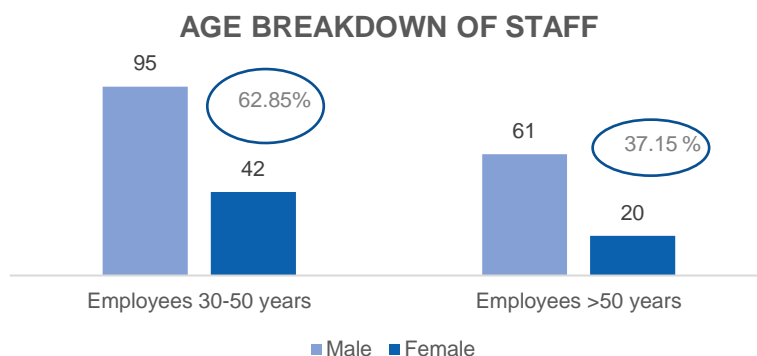


### 3.2.4. Staff transformation process

In terms of internal challenges, the most important one is related to the age pyramid of the professional group that makes up the staff. In Adif-AV, the majority of employees are between 41 and 50 years of age (48.16% of the total), with the average age of employees being 49.3 years.<sup>1</sup>

<sup>1</sup> For more information on the distribution of the workforce by age and seniority, see section 5.6. Our team (Employees)

Therefore, Adif-AV has an important challenge to face, both at present and in the coming years: the rejuvenation of its staff and the transfer of knowledge in key positions. In this sense, initiatives such as partial retirement or the plan for voluntary severance have been implemented, as well as different calls for PEO (Public Employment Offers); all with the aim of accelerating the generational changeover without losing knowledge and experience, which are fundamental to the good running and efficient management of our company.



		2017	2018	2019
Breakdown of staff by age and gender	Male	146	146	156
	Female	59	60	62
	<b>Total</b>	<b>205</b>	<b>206</b>	<b>218</b>

### 3.3. Sustainable Development Objectives in Adif AV Strategy



Aware of the public service that Adif AV provides and the impact that its activity generates on the environment and society, the company has directed its strategic orientation towards the concept of sustainable development, seeking its integration in each line of activity, aiming at more ambitious objectives of creating shared value, in the long term, for society and all our stakeholders.

The **GoODS Project**, created in 2017, pursues the rigorous incorporation of the Sustainable Development Goals and their goals into the business strategy of Adif AV. Through GoODS, the aim is to reinforce and extend the principle of Responsibility that underpins the company's Strategic Plan, covering both operational and management responsibility, as well as responsibility for responding to the global challenges of society, involving the entire organization so that Adif AV's contribution to the SDGs where it has the greatest impact is strengthened.

This project is a fundamental part of the Entity's strategy, and has contributed to making it an effective tool that frames all operational and management decisions, all projects and activities, towards a new strategic orientation based on responsibility and focused on sustainability.

GoODS seeks to ensure that Adif AV plays a relevant role in achieving Agenda 2030, promoting the SDG so that in ten years there will be a substantial change, involving the entire organization. The project consists of three main phases which in turn are divided into several lines of work:

- **Phase 1 (2017-2018): definition and modelling of GoODS.** An in-depth study of the SDG and its targets was conducted, along with a mapping of all areas of the organization to identify the current or potential impacts of the 17 SDG and its 169 targets. From there, a first selection of the SDG was made, identifying the most relevant for Adif AV taking into account its activity and impacts.
- **Phase 2 (2019-2020): implementation and dissemination.** In this phase, which began in 2018, the aim is to consolidate the implementation of the model, disseminate it internally and externally, and also to encourage a change of model and orientation in the next strategic cycle (2020-2030). This will be done through a system of internal indicators (KPIs) and by assuming a leading role in the communication of the SDG.
- **Phase 3: 2020-2030 period.** This last phase is proposed as a single cycle in order to achieve the organization's goals regarding its contribution to the SDG and Agenda 2030. Its planning and specific commitments will be established throughout the 2020 exercise after evaluating the results obtained.

Other European and Spanish institutions are already mobilizing to contribute to the SDG by promoting different initiatives. With GoODS Adif AV wants to

### SDG STRATEGIC AREAS IDENTIFIED BY ADIF-AV

With GoODS, Adif-AV has identified three strategic and priority SDG for the Entity:



Adif-AV's business as a whole is geared towards creating and managing sustainable, quality, resilient and safe infrastructures. In addition, Adif is committed to innovation and modernization of infrastructures by promoting efficiency



The focus on reducing accidents and incidents contributes to providing safe transport systems and improving road safety. In turn, the elimination of physical and communication barriers in access to the railways will contribute to achieving inclusive transport. All this is key as the backbone connecting the urban, peri-urban and rural world



Adif-AV contributes to the fight against climate change through its own activity, promoting the use of a clean means of transport.



## PRIORITY SDG TWO TIERS

### SDG 9,13 and 11

Direct relationship with Adif activity and its ability to contribute

### SDG 9 and 13

Greater room for improvement in Spain



In 2019, as part of **Phase 2 (2019-2020)**, implementation and dissemination through a system of internal indicators (KPIs), indicator sheets have been created for each SDG, reviewing and selecting the strategic and priority SDG, and associating Adif AV indicators (activity, result or impact) with the goals defined by the United Nations for the selected SDG. The objective is to incorporate new indicators into the existing ones, both indicators that already exist but are not within the KPIs of the Strategic Plan, and new indicators specific to the SDG, creating specific strategic initiatives that contribute to the commitments set, and that have their own indicators.

## SDG IMPACTS BY THE STRATEGIC PLAN

Plan Pillars	Strategic targets	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Security Pillar	ODS 1.1 Traffic safety	●	●					●	●							
	ODS 1.2 Cybersecurity							●	●							
	ODS 1.3 Protection and safety	●	●					●	●							●
	ODS 1.4 Occupational health and safety					●										
Service Pillar	ODS 2.1 Transport system	●				●	●	●	●	●	●					
	ODS 2.2 Customer experience	●						●	●			●				
	ODS 2.3 Infrastructure provision				●	●	●	●	●	●	●			●		
	ODS 2.4 Value co-creation							●	●	●	●					●
Sustainability Pillar	ODS 3.1 Sustainable business							●	●	●	●					
	ODS 3.2 Environment and climate	●			●	●	●	●	●	●	●	●	●	●	●	●
	ODS 3.3 Social cohesiveness		●	●				●	●	●						
	ODS 3.4 Governance and management			●				●	●						●	●
Plan levers	People		●	●			●									
	Digital transformation							●	●	●	●	●				
	Innovation							●	●			●	●			●

● There is impact on SDG goals

The current situation leads us to a hopeful future scenario in which, by 2020, we can revise and consolidate this strategic model, and from there generate actions with greater impact by the 2030 horizon.

For more information on Adif-AV's contribution to the SDG, see section 8.



### **3.4. Innovation and digital transformation**

Since the beginning of its activity, Adif-AV has made a strong commitment to innovation and research as the driving force behind the technological evolution of the infrastructure, a fundamental aspect in achieving operational excellence. Externally, the entity acts as a promoter of R+D+i generated by third parties, stimulating new developments that can add value to the infrastructure.

#### **3.4.1 R+D+i management**

Adif-AV's innovation strategy aims to respond to the service and network improvement needs of its stakeholders, which include owners, such as the Ministry of Public Works and Transport, and clients, such as railway operators and end users. Adif-AV's effort in innovative activity is evident in the number of projects it develops, the economic volume of investments and the effort it makes in traction and technology transfer.

Likewise, the corporate strategy and the R+D+i policy are focused on overcoming internal innovation models and adopting open innovation in which Adif-AV is integrated into a multi-sector and multidisciplinary innovation ecosystem that responds to the demands of stakeholders with a forward-looking vision. The launch of technological challenges to the market links external innovation with the technological needs of the infrastructure by generating value.

#### **AREAS OF ACTION OF THE ADIF AND ADIF-AV R+D+i STRATEGY**

The areas of action defined in this strategy are as follows:

- Detection of innovation challenges in Adif and Adif-AV that allow to solve the needs of the operational areas
- Development and innovation in railway technologies of interest to Adif and Adif-AV through the implementation of projects, a large part of which are carried out in collaboration with companies, technology centres and universities.
- Transfer of results to both entities.
- Protection of the results.
- Management of the industrial and intellectual property of Adif and Adif-AV.
- Promotion of the internationalisation of the activity through participation in commissions and associations, such as the Rail System Forum and the UIC R&D Coordination Group.
- Participation in proposals and calls of the Horizon 2020 Programme.
- Technological intelligence, with constant monitoring of the environment and specific actions on demand for innovation activities
- Internal entrepreneurship, promoting creativity and attracting talent from Adif and Adif-AV employees.
- Participation in R&D ecosystem forums: Transfer, S-Moving, South Summit and Startup Ole.
- Launching of innovation challenges on the needs detected, under the formula of prior market consultation before launching projects.

The innovation objectives pursued by both Adif and Adif-AV are distributed across the three pillars of the strategy, thus covering a wide technological spectrum:



**Security:** operational risks (broken rails, track crossings, new technologies for blocking trains, mixed traffic on high-speed lines, intelligent predictive maintenance), increasing the resilience of the infrastructure (external phenomena) and reducing risks of external attacks (operational threats).



**Service:** increasing the capacity of the General Interest Railway Network (binomial track/electrification efficiency), digitalization (automatic infrastructure inspection), boosting freight transport (variable gauge, operational improvements), improving the passenger experience (stations) and open innovation (co-creation spaces).



**Sustainability:** fight against climate change (user electromobility and alternative energies for traction, intelligent railway electric network) and reduce operational costs (life cycle).



During 2019 Adif AV has worked on 31 R+D+i projects, has started 9 (OPTIMA, SMAN DRON, SAFIRTS, Lane 1-2, SLOPE 1-2, ECOMILLA 1-2, H2, EAVM 2) and completed another 9. Of the latter, 3 have been transferred to production (**the accumulated percentage of transferred projects was 39%**).

### 3.4.2 Innovation projects and milestones

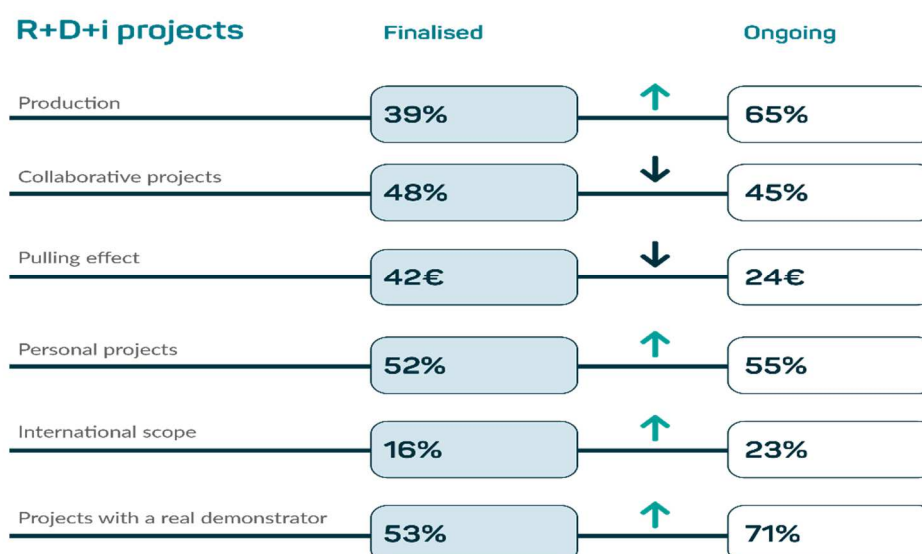
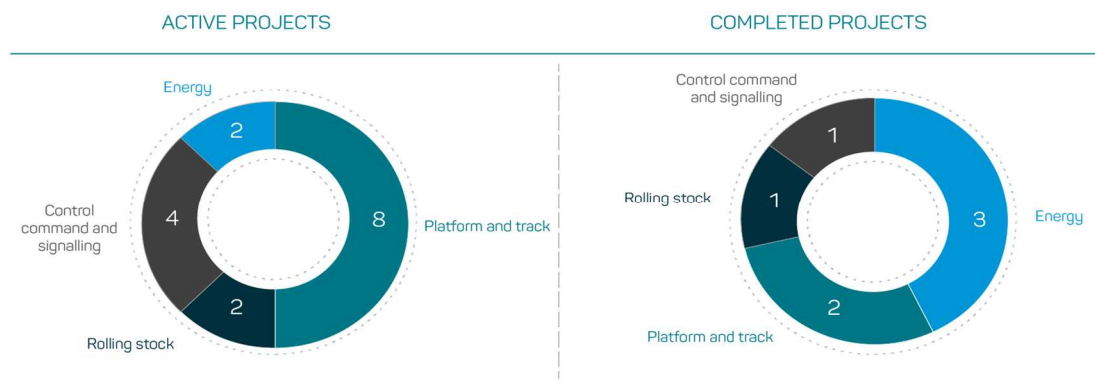
In the new open innovation methodology, mandates are received from innovation plans external to the Adif-AV plan, internal plans and through other mandates. In 2019, four mandates were signed with the Technical Department of the General Directorate of Conservation and Maintenance:

- Development of an "intelligent" terminal in switch heater systems
- Challenge "Predict and detect rail breakage"
- Challenge "To predict and detect strange phenomena on the infrastructure"
- Development of a neutral zone protection system for electrical phase separation

One more with the Directorate of Travel Stations of the General Directorate of Business and Commercial Operations:

- Installation of railway lines within the ECOMILLA project in the stations of Malaga and Santander

During 2019, Adif-AV has initiated 9 projects and completed another 9 that were started in previous years. The portfolio of projects amounts to 132, with the detail shown below



The **9 projects completed** in 2019 include **ANTINTRUSIVE** (aimed at testing DAS technology to detect the unauthorized intrusion of people into the infrastructure), **SMAN SLOPE 2** (development of prototypes based on artificial intelligence cameras to detect obstacles) and **LIDAR** (through which a procedure for digitizing railway infrastructure based on an open platform has been developed).

The **projects transferred to production** are:

- **PN IV** (level crossings equipped with cameras with artificial intelligence): considered to be transferred as it has obtained highly satisfactory results that could be integrated into a future standard.
- **ECOMILLA DC SANTANDER**: transferred to the production cycle; it has resulted in the implementation of a recharging station for electric vehicles at the Santander station, connected to the station's electricity system.
- **LIDAR**: also transferred, it has generated a study of analysis of the existing gauge in the metric width line between Cercedilla and Los Cotos; for the measurements an open data computer tool has been developed that allows to analyse in detail the characteristics of the line (it actually represents a digitalization of the infrastructure) and that could be used in other projects.

A project developed in previous years (**IFZONE**) has been partially transferred to production during 2019. In that project, a new neutral zone switching system was designed and tested, allowing the zone transition by train to be carried out in a transparent manner. This system is expected to be adopted in the future electrification of the conventional line Bobadilla-Algeciras.

Six of the projects initiated come from the splitting of other previous projects. The **BROKEN RAIL** project has been divided into two independent projects that will give rise to two separate demonstrators: **BROKEN RAIL 1**, associated with a demonstrator based on DAS technology, and **BROKEN RAIL 2**, whose demonstrator will be based on technologies associated with acoustic and electrical detection.

The **SMAN SLOPE** project has given rise to the **SMAN SLOPE 1** project, with a demonstrator associated to DAS technology, and **SMAN SLOPE 2**, whose demonstrator is associated to smart cameras, and which, as mentioned above, has ended in this period with satisfactory results.

From the **ECOMILLA DC** project, the **ECOMILLA DC SANTANDER** project has emerged, associated to the system installed in the Santander station which has been already completed, and **ECOMILLA DC PORTABLE**, which is configured as a new project associated to the connection to the DC Air Contact Line in different locations.

Five other projects are also being initiated:

- **SAFIRST**, to analyse the technological regulations in the field of the effect of side wind and to generate a recommendation at European level under the auspices of the UIC.
- **PILOT H2**, to develop a demonstrator for a hydrogen fuel cell electricity generation system
- **EAVM PILOT (PHASE II)**, continuation of the EAVM WAGON project, in which it is planned to implement a complete composition of goods with variable width axles
- **OPTIMA**, a project associated with the Shift2Rail 2019 open call and whose objective is to develop an integration of the different railway operation systems in a central operation platform
- **SMAN DRON**, a new collaborative project (by means of an infrastructure test contract) whose aim is to analyse the use of drones for the inspection of viaducts and bridges; its most innovative aspect is the use of 5G technology.

### Projects aimed at improving problems in railway operations

Project	Objective
R+D+i Platforms	Informs travelers if it is safe to cross to another platform near the track.
R+D+i Broken rail	Detecting possible rail breaks.
R+D+i variable width axis of goods	Develop a new variable-width axle for freight wagons.



## Projects aimed at the digitalization of the railway structure

Project	Objective
R+D+i LIDAR	Progressive implementation of new digitization techniques in the railway infrastructure.
Tunnel curiosity	Tunnel inspection with a multi-sensorial system.
SENTINEL Project	Automate asset inventories.



## Other relevant projects

R+D+i ANTINTRUSIVE	R+D+i IMPACT 0	R+D+i ELITES	R+D+i RAILWAY SMART GRID
R+D+i ECOMILLA AC MÁLAGA	R+D+i PN IV	R+D+i ERSAT GGC	R+D+i SMART STATION

### ECOMILLA PROGRAMME: TOWARDS SUSTAINABLE INTERMODALITY



The unstoppable trend of population concentration in large metropolitan areas requires the generation of efficient solutions that meet current needs, but also needs to take into account future situations.

It is in this context that Adif proposes the Ecomilla Program, which seeks to generate certain areas in the car parks of the main railway stations to promote sustainable mobility in the first and last mile, using an energy-efficient means of transport with low Greenhouse Gas (GHG) emissions.

### 3.4.3. Intangible assets and technology transfer

During 2019, an industrial and intellectual property portfolio of 20 patents has been managed, with 11 international extensions. In addition, 5 utility models, 1 industrial design, 29 national, 7 community and 3 international trademarks, 17 software applications and 63 registers of manuals and standards have been managed.

With the aim of contributing to the transfer of knowledge from the production sector, 16 technology transfer contracts and manufacturing and commercial exploitation licences remained in force in 2019, providing Adif and Adif-AV with 97,559 euros of income in the form of royalties.



In 2019, a portfolio of **20 patents** has been managed and **16 technology transfer and manufacturing license agreements** have been maintained.

The license contracts signed during 2019 are as follows. The product and the licensee companies are indicated below. The amount received by Adif in 2019 is indicated in brackets. In all cases these are non-exclusive licences.

- Variable width changer: Tria.
- Falling Object Detector: Logytel (for Dubai, 4,580 euros), Cobra, Thales (3,000 euros) and Indra.
- Side Wind Detector: CAF Signalling (3,000 euros) and Logytel (3,000 euros).

### 3.4.4. Collaborative innovation

The competitive environment forces us to look for new ways to organize our internal processes and design our relationships with other agents with whom we can share risks and resources. Adif and Adif AV encourage collaborative and open innovation to promote knowledge and technological development in the scientific-technical community. The publication of the technological challenges stimulates research to achieve technologically advanced solutions to the real needs of the exploitation coming from the innovative environment, at the same time that it boosts the economy. Relations with the innovative environment are also established through the presence of Adif and Adif-AV in specialised forums.



SPECIALIZED FORUMS WITH THE PRESENCE OF ADIF AND ADIF-AV



### 3.4.5. Open innovation and entrepreneurship

During 2019, the preliminary market consultation procedure for the solution of challenges and innovation of Adif and Adif AV has been launched. It is a way to publish the innovation needs detected in the different areas of the company, so that any entity can know them and present its solution proposals. A total of 6 challenges have been published, the last of which has a deadline for the submission of proposals until March 2020:

- Predicting and detecting rail breakage
- Replacing the Telephone Blockade with new technologies
- Predict and detect external phenomena on the infrastructure
- Introduction of the Blockchain technology in the processes that require guarantee of the information
- New Value Added Services Wi-Fi Network in Stations
- Implementing predictive maintenance in track circuits and turnout drives

All information is published on the website:  
[http://adif.es/es\\_ES/empresas\\_servicios/innovacion\\_idi/retos\\_adif/retos\\_adif.shtml](http://adif.es/es_ES/empresas_servicios/innovacion_idi/retos_adif/retos_adif.shtml)

The internal undertaking has received a strong boost in 2019 with the resolution of the VII and VIII competitions of Participation and Value Creation. On 30 October, a recognition day was held at the Railway Museum, where the groups selected by an external jury received the award for their work from their respective general managers. The president put the finishing touches by thanking the participants for their generosity and encouraging all the members of Adif and Adif AV to persevere on the path of entrepreneurship by presenting initiatives to the new Adif Talento competition, launched months earlier.

Adif-AV Talento is the new corporate proposal to stimulate and attract internal talent. It is a new format that seeks to take advantage of the existing potential in Adif and Adif AV with a vision more adjusted to the corporate strategy and its needs. The phase of presentation of proposals in this first edition of the competition is open until 31 March 2020.



The Sub-directorate of Strategic Innovation manages two mailboxes to channel internal creativity, through which Adif and Adif-AV members can channel their proposals:

- The **Ideas and Innovation Initiatives Mailbox** is an internal communication channel of Adif that allows any worker to make proposals for the improvement of the company's management, channelling experience and knowledge in such a way that their contributions allow for greater efficiency in management and create value in the company, making it more competitive.
- The **R+D+I Ideas Mailbox** is an open door to innovation through which proposals for projects and ideas can enter and be transformed into new R+D+I projects. This mailbox is also open to the outside world through a link on the Adif-AV website, so that it is not



limited to internal creativity, but allows contributions from anyone, whether or not they are related to Adif or Adif-AV.

### **3.4.6. Centre for Railway Technologies**

The Railway Technology Centre (CTF) is a space for innovation that has a long history and is firmly established in the technology sector. Its main feature is that it is designed as a meeting place for innovators and a workspace where companies developing technological initiatives applicable to the railway can carry out their activities with their own staff in a shared environment.

So far 22 companies, 16 of them multinationals, have set up in the CTF to develop their own projects, always related to railway innovation. The two that have joined during 2019 are:

- **Dassault Systèmes**, which specializes in the development and commercialization of PLM software and services to support industrial processes throughout the product life cycle, from design to maintenance.
- **Mahle**, which designs and manufactures products and devices that are incorporated into technologically advanced electric mobility elements, related to the last mile.

### **The Railway Innovation Hub Spain**

In May 2018, Adif-AV and the association "The Railway Innovation Hub Spain" signed a general action protocol to promote collaboration in activities related to scientific research and technological development. Under this protocol, the Hub establishes its headquarters in the CTF and uses the common facilities. So far 82 companies have joined this initiative, and 16 of them have a physical presence in the CTF itself.

### **3.4.7. Collaboration with Universities**

In 2019 Adif-AV has renewed the Collaboration Agreement with the "Salvador Velayos" Electromagnetism Institute (Applied Magnetism Institute), associated with the Complutense University of Madrid. This Institute has a solid track record of technological development in the field of energy and signalling and plans to continue this line of work.

On the other hand, the Innovation Department of Adif-AV has continued to collaborate with various universities with which it has coordinated the development of several projects through students on university internships. In 2019, projects have been developed with the Carlos III University of Madrid (for the analysis and study of power converter technology used in reversible DC substations) and with the Polytechnic University of Madrid, both with the School of Industrial Design (for the analysis of additive manufacturing technology in the infrastructure field) and with the School of Industrial Engineering (with which a project has been developed for the control and positioning of railway vehicles, specifically applied to the circulation of the test wagons with which the new OGI variable gauge axle is being homologated).

### **3.4.8. Digital Transformation**

Adif-AV understands digital transformation as the implementation of an intelligent management system for Adif's processes and the strengthening of digital interaction with clients. In this way, the digital transformation implies changes in the organizations and in how people approach the processes. Not only does it require a technological effort in the deployment of platforms and



systems, but also changes in habits and processes that will lead to a cultural change to align them with the digital society.

In 2019, the Digital Transformation and Systems Department has launched the "Digital Transformation Lever" by developing its strategy and carrying out various Action Plans, with a view to fully incorporating the company into the digital society.



### MAIN LINES OF ACTION RELATED TO DIGITAL TRANSFORMATION

Unified workspace  
(Workplace)

Migration of cloud  
environments (Cloud)

Electronic management Plan

Transformation of  
"Legacy" applications

Renewal of Adif's image  
on the Internet

### Main projects related to Digital Transformation

In 2019, Adif-AV continued to support projects and plans from other business areas as a lever for transformation, such as the "Digital Transformation Master Plan for Passenger Stations", the "Implementation Plan for an Asset Management System (SGA) and a new Maintenance Model (MDM)" and the "New Traffic Regulation Platform SITRA+".

In collaboration with the Digital Transformation and Systems Department, once the Master Plan for the Digital Transformation of Passenger Stations had been defined in 2018, the Digital Transformation Office (OTD) was designed at the beginning of 2019, with the mission of launching and monitoring the initiatives defined in the plan. During the first months of the year, its competencies, processes and governance models for operational relations and follow-up were defined, formally beginning its activity in May 2019 and since then meetings of the Strategic Committee, Technical Committee and the creation of a collaborative space have been held, development of the scorecard, workshops and monographs, so that of the 41 initiatives, work has mainly been done on 20 (1 completed, 7 launched and 12 in progress) such as, among others, the identification of cars on platforms, new digital formats, study for intelligent guidance, Adif Space or Neuronal Centre for Stations.

In this sense, Adif -AV has launched two ambitious projects that will allow the application of all the advances and advantages of the digital transformation directly in the stations: Smart Station and Neuronal Centre of Stations.

**SMART STATION: ADIF-AV'S VISION**

Adif-AV is deeply convinced that stations must be powerful social actors for the service of passengers and citizens, functioning as sustainability nodes that add to their traditional characteristics, others related to social, environmental and impact aspects, creating an intelligent and sustainable relationship with the city and its inhabitants. The stations must merge with the city they serve, bringing together the following characteristics:

- **Stations with life:** buildings that are adaptable, sustainable and integrated into the surrounding ecosystem, equipped with intelligence and capable of responding to the needs of the citizen.
- **Ability to recognize users** as soon as they enter the station, becoming a personal assistant through mobile devices.
- **Meeting and leisure areas**, open, bright and natural spaces.
- **More efficient maintenance**, with sensors, automation systems and robots that allow the station to perform predictive maintenance and report incidents and necessary repairs.
- **Hyperconnected:** fully integrated in the city and territory, based on the integrity of infrastructures and supported by the bidirectionality of data exchange.

**NEURONAL STATION CENTER**

Intelligent and hyperconnected stations also have the possibility of evolving towards more advanced concepts. This is the concept of the Neuronal Station Centre. This is a project to create a management, operations and maintenance centre for Adif-AV stations, from which the intention is to operate the installations and systems of all Adif-AV stations and have the capacity to interact with clients and other interested parties.

The idea behind this is to give voice to Adif-AV and capacity to reach passengers, 24 hours a day and 365 days a year. Connected to the future platforms of the Smart Stations, this centre will become the brain of the stations through which all the information will pass to facilitate and enable more agile decision making with better data.

In 2019, work will continue to optimise station maintenance and increase control of stations centrally and remotely, mainly by making progress in the execution of work for the remote management of passenger stations and starting up the future Neuronal Station Centre. Work has been carried out in 35 stations, intervening in basic service facilities, mainly for opening and closing access doors, lighting or intercoms for communication with customers. In addition, tenders have been prepared for another 13 and for technical assistance to support the process of drafting the project and implementing the centre, as well as the associated systems and actions at the stations.

## 4. GOOD GOVERNANCE, TRANSPARENCY AND RISK MANAGEMENT

*At Adif-AV we understand that it is fundamental to base our management on a system of governance whose pillars are to guarantee regulatory compliance, to promote business ethics in the culture of the organization (with special emphasis on zero tolerance for corruption) and to develop transparency in management.*

Adif-AV is a public body attached to the Ministry of Public Works and Transport, based on Law 40/2015, of 1 October, on the Legal System of the Public Sector. It has its own legal personality and full capacity to act in order to fulfil its purposes and its own assets.

However, in terms of contracting, Adif-AV is governed by current legislation applicable to public administrations on public sector contracts for the construction or modification of railway infrastructures, with the exception of maintenance, signalling and electrification works. In the area of property, it is governed by the Public Administration Property Law.

### 4.1. Governing and internal management bodies

The Board of Directors is the highest governing body of Adif-AV and therefore has the broadest powers for the administration and management of the Entity. Furthermore, it has the power to determine its structure; to set the rules for the operation of the Board; to approve the annual budgets, the Annual Accounts and the Management Report and to authorize credit and other debt operations.

Adif-AV has other collegiate bodies outside the state created by the Board of Directors. These bodies are: The Audit Committee, the Ethics and Compliance Committee, the Appointments and Remuneration Committee and the Internal Code of Conduct in the Securities Market of ADIF-AV. There are also other bodies for deliberation and advice from the Chairman, such as the Steering Committee and the Contracting Committee.

BOARD OF DIRECTORS	PRESIDENCY
AUDIT COMMISSION	ADIF-AV'S COMMITTEE FOR COMPLIANCE WITH THE INTERNAL RULES OF CONDUCT IN THE FIELD OF THE SECURITIES MARKET
ETHICS AND COMPLIANCE COMMITTEE	STEERING COMMITTEE
APPOINTMENTS AND REMUNERATION COMMITTEE	HIRING COMMITTEE

#### 4.1.1. Board of Directors













The Adif-AV Statute establishes that the Board of Directors must be formed by a Chairman (who in turn is the Chairman of Adif) and a minimum of nine and a maximum of ten members, whose appointment and dismissal corresponds to the Ministry of Public Works and Transport. The

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

Secretary of the Board of Directors will be the Secretary of the Board of Directors of Adif (article 25 of the Adif-High Speed Statute), who will have voice in the meetings, but will not have the right to vote, unless he/she is a member.

As of 31 December 2019, the Board of Directors was made up of eleven members: the President, the Secretary of the Board and nine members:

In 2019 the Board of Directors has met **13 times**.

ADIF-AV 2018 BOARD OF DIRECTORS	
 <b>Ms. Isabel Pardo de Vera Posada</b> 29/06/2018	 <b>Mr. Jesús Miguel Pozo de Castro</b> 10/03/2017
 <b>Mr. Guillermo Martínez de Simón</b> 30/01/2019 Ethics and Compliance Committee President	 <b>Mr. Jaime Sellés Santiveri</b> 29/09/2017
 <b>Mr. Jorge Ballesteros Sánchez</b> 18/04/2013	 <b>Mr. Javier Herrero Uzano</b> 02/07/2018
 <b>Mr. Julián González Cid</b> 10/01/2019	 <b>Ms. Elena María Ayuso Mateos</b> 13/07/2018
 <b>Mr. Rodrigo Moreno Pérez</b> 10/02/2017	 <b>Ms. María Pilar Seisdedos Espinosa</b> 19/11/2018
 <b>Mr. Domingo García Díez</b> 01/03/2017 Audit Commission President	
<div> <div>● President</div> <div>● Secretary</div> <div>● Members</div> <div>  27.7% women on the Board of Directors           </div> </div>	

(\*) Appointed as Secretary of the Board of Directors of ADIF on 30/01/2019

### The withdrawals from the Board during 2019 were:

- Mrs. Myriam Bonafé Tovar (10/01/2019)

The most significant aspects regarding the operation and organization of the Board of Directors are the following:



**Constitution:** in order to constitute the Board of Directors, the President and the Secretary must be present, and at least half of the members must be present at the first call and one third at the second call. At least one hour must elapse between the two calls.



**Meetings:** in accordance with article 19 of Royal Decree 1044/2013, of 27 December, which approves the Adif-AV Statute, the Board of Directors shall meet, upon prior notice and at the initiative of its Chairman, or at the request of at least half of the members. It will meet as often as necessary for the proper performance of the entity's functions, although a minimum of 11 meetings per year is established.



**Proxy voting:** Proxy voting is not contemplated in the Adif-AV Statute, nor in the General Rules of Operation of the Adif-AV Board of Directors.



**Adoption of agreements:** the agreements of the Board of Directors will be taken by an absolute majority of votes of its members present. The President is responsible for breaking ties.



**Remuneration:** in accordance with Article 21 of the Adif-AV Statute, the members of the Board of Directors will not receive remuneration or compensation for attending the meetings.

## FUNCTIONS AND TOPICS BOARD OF DIRECTORS

The Board of Directors has been assigned the following main functions

- To determine the structure of the Entity and the guidelines for the modification of the staff and its basic remuneration conditions
- Establish the rules for the operation and adoption of resolutions by the Council itself
- Approve the annual operating and capital budgets, the multi-year action programme and submit them to the Ministry of Public Works and Transport
- To approve the Annual Accounts, the Management Report and the proposal for the application of the result
- Authorize credit and other debt operations

In 2019, the Board of Directors has met 13 times. These meetings dealt with issues such as:

- Tenders, awards and contract incidents
- Administrative agreements
- Management assignment agreements between the public business entity Adif-Alta Velocidad and the public business entity Administrador de Infraestructuras Ferroviarias (Adif)
- Granting of powers of attorney and, corporate and property actions
- Approval of the Individual Annual Accounts of Adif-AV for the 2018 financial year
- Update of the Network Statement Document for 2019 and 2020
- Authorisation and borrowing of financial operations
- Master Plan to Combat Climate Change 2018-2030.
- Strategic Risk Map.
- Update of the functions and appointment of members of the Audit Committee of the public business entity Adif-Alta Velocidad.
- Adif-Alta Velocidad Corporate Governance and Regulatory Compliance Model: Approval of the Gifts and Services Policy.
- Adif-Alta Velocidad Data Protection Model: Approval of the Corporate Personal Data Protection Policy and the Statute of the Data Protection Delegate.
- Approval of the Statute of the Internal Audit activity of Adif-Alta Velocidad.
- Approval of the Statute of the Regulatory Compliance activity of Adif-Alta Velocidad.
- Strategic Plan 2030. Development and deployment of strategic initiatives.
- Annual Corporate Governance Report of the E.P.E. Adif-Alta Velocidad.
- Liberalisation of commercial passenger services. Main characteristics of the Adif capacity allocation system.
- Third issue of Adif-Alta Velocidad in Green Bonds format.



The operation of the Board of Directors is regulated by the provisions of the Statute of the Public Business Entity Adif-AV, available on the website [www.adifaltavelocidad.es](http://www.adifaltavelocidad.es) and by the General Rules for the Internal Operation of the Board of Directors of the Entity, and by the provisions of Law 40/2015, on the Legal System of the Public Sector for collegiate bodies.

- Approval of the Application for Extension of the EMTN (Euro Medium Term Note Programme).
- Agreement by the Board of Directors of the public business entity Adif-Alta Velocidad to provisionally assign Framework Capacity.

### 4.1.2. Other internal management bodies



#### AUDIT COMMISSION

The operation of the Audit Commission is governed by the operating rules approved by the Board of Directors at the session in which the body was created on February 27, 2017, with the Audit Committee being eliminated.

As of 31 December 2019, the Audit Commission consisted of 3 ADIF-Alta Velocidad counselors, 1 Chairman (Mr. Domingo García Díez), and 2 members (Mr. Jorge Ballesteros Sánchez and Mrs. M<sup>a</sup> Pilar Seisdedos Espinosa). In addition, this body has Mr. Guillermo Martínez de Simón Santos as secretary. Its members are appointed by the Board of Directors for a period of 4 years, and without prejudice to their possible re-election.

The Audit Committee supervises the economic and financial information and reports to the Board of Directors on its actions and on any relevant issues it deems necessary.

Due to the business nature, size and complexity of the public business entity Adif-AV, it is advisable to strengthen the internal control function. Therefore, the Board of Directors agreed in 2013 to reinforce the Internal Audit function with the aim of ensuring that the decisions of the Senior Management, the procedures it implements and the controls it establishes are correctly, systematically and permanently applied.

In line with the above, on 28 March 2019 the Board of Directors approved the Internal Audit Activity Statute, which sets out the mission, authority, independence and objectivity, scope of internal audit activities and responsibility of the Internal Audit Department.





## ETHICS AND COMPLIANCE COMMITTEE

This body was set up in response to the new Ethical Management Model at Adif-AV and replaced the former Code of Ethics and Conduct Monitoring Committee which was in place until 28 September 2018.

Therefore, it is the body responsible for ensuring, in its last instance, compliance with the Code of Ethics and Conduct approved by the Board of Directors. Its main functions include

- Evaluate and ensure compliance with the Adif-AV Code of Ethics and Conduct
- Monitor the mechanism that allows both employees and third parties to report breaches of the Code of Ethics and Conduct
- Instruct consultations and reports on alleged breaches of the Adif-AV Code of Ethics related to the Regulatory Compliance Area
- To propose amendments to the Code of Ethics to improve it and adapt it to new circumstances and realities
- Propose measures to promote the dissemination of and compliance with the Code
- Review Compliance Policies
- Approve the Community Funds Fraud Self-Assessment and Summary Report
- Any others entrusted to them by the Board of Directors

The Committee was constituted with the following composition:

- Mr. Guillermo Martínez de Simón Santos – Chairman
- Mr. Michaux Miranda Paniagua – Member Human Resources
- Mr. Juan Pedro Galiano Serrano – Member Corporate Social Responsibility
- Mrs. Lourdes Porta Etessam – Member Risk Management
- Mr. Manuel Fresno Castro – Member Financial Management
- Mr. Juan Pablo Villanueva Beltramini – Member Adif-AV
- Mr. Antonio Velázquez Borge – Secretary - Regulatory Compliance

17%

Women

## RISK COMMITTEE

This body was constituted on 14 December 2018 and is composed of the designated heads of the areas of activity, the risk coordination areas, and internal audit. It has the following functions:

- Drawing up and updating, at least annually and whenever necessary, the entity's Risk Map.
- Monitoring of the risks already identified, their controls, indicators and action plans, throughout the year with the required frequency.
- Approval of any specific risk management policies that may be developed.
- Determining and reviewing the company's objective risk profile, ensuring its alignment with the entity's strategy.
- Informing the Management Committee, submitting for its approval those proposals necessary for the correct development of the risk function.



**STEERING COMMITTEE**

The Steering Committee functions as an extra-statutory deliberative and advisory body to the President. It has the following functions:

- To advise the Chairman on matters within the competence
- To advise the Chairman on matters of the Board of Directors to be brought to attention or for approval
- To deliberate on other Adif-AV matters that, on the initiative of the Chairman or on the proposal of the members that make up the Management Committee, are decided to include in the agenda

**CONTRACTING COMMITTEE**

The Contracting Committee functions as an extra-statutory deliberative and advisory body to the President. It has the following functions:

- To advise the Chairman on matters relating to contracting that are within the competence of the latter, either directly or by delegation from the Board, as well as those that fall within the competence of the Board of Directors and which must be submitted to the Chairman for approval or knowledge of the latter
- Deliberation and knowledge of any other matter concerning the Contracting of the Entity

**APPOINTMENTS AND REMUNERATION COMMITTEE**

The Board of Directors of the E.P.E. Adif-AV agreed, in its meeting of January 29, 2018, to approve the creation of the Company's Appointments and Remuneration Committee. It is made up of a Chairman (María Pilar Seisdedos Espinosa) and two members (Domingo García Díez and Jesús Miguel Pozo de Castro).

Its main functions are:

- To establish a representation objective for the least represented gender on the Board of Directors
- To supervise that the members of the Board of Directors of Adif-AV comply with the obligation not to incur in causes of legal prohibition or incompatibility for the performance of their duties as a Director.

The Appointments and Remuneration Committee did not hold any meetings in 2019.

**COMPLIANCE COMMITTEE FOR THE INTERNAL RULES OF CONDUCT IN THE AREA OF THE ADIF- ALTA VELOCIDAD SECURITIES MARKET**

The Adif-AV's Compliance Committee with the Internal Code of Conduct in the Securities Market is an extra-state body of the Entity, made up of its Chairman (Mr. Juan Pablo Villanueva Beltramini, as General Manager of Adif-AV) and 3 members, Mr. Juan Pablo Villanueva Beltramini and Mr. Juan Pablo Villanueva Beltramini. Guillermo Martínez de Simón Santos (as Secretary of the Board of Directors of the Entity, who will act as Secretary of the Committee), Mr. Manuel Fresno Castro (as General Financial and Corporate Director of Adif) and Mr. Javier Torres Gella (Legal Director of Adif); these last two directors are members of Adif.

The functions of this Committee are set out in section 14 of the Internal Code of Conduct. It is responsible for overseeing and supervising adequate compliance with the aforementioned Regulations and has responsibilities and powers to:

- Evaluate the efficiency of internal procedures and supervise general compliance with the measures to safeguard Privileged Information established in the Regulations.
- Adopt the necessary measures for the training of employees in the application of the Regulations.
- Interpreting the rules contained in the Regulations, resolving doubts about their application and adapting them to current legislation.
- Inform the Code of Ethics and Conduct Monitoring Committee annually of any relevant incidents that may arise.

The Compliance Committee with the Internal Code of Conduct did not hold any meetings in 2019.

**30%****Women****4.1.3 Applied policies and indicator management system**

Adif-AV is a public company at the service of citizens and as such has the obligation to adapt to social changes and meet the needs of society, thus contributing to the transformation of the sector and of the Entity itself and guaranteeing the sustainability and public utility of the railway system. For these purposes, Corporate Policies are established that deal with the relevant issues for the organization and that set the commitments of Adif-AV in the different matters.

**COMPANY POLICIES**

- Corporate Anti-Fraud Policy
- Prevention and Management of Conflict of Interest Policy
- Quality Policy
- Environmental Policy
- Preventive Policy
- R+D policy
- Information Security Policy
- Adif- Alta Velocidad Code of Ethics and Conduct
- Ethical Channel Management Procedure
- Comprehensive Risk Management Policy
- Fraud Prevention, Detection and Management Procedure
- Security Policy
- Community Funds Fraud Risk Management Procedure

Adif-AV manages the following indicators in relation to these policies and the fight against corruption and bribery:

	Indicator description	Units	2017	2018	2019
	Ethical Channel Notifications **	N.º	73	57	60 (16) *
Measures taken to prevent corruption and bribery	Declarations of Conflicts of Interest **	N.º	N/D	794	886
	Employees trained in ethics **	N.º	238	542	398

(\*) Received and resolved through the Ethical Channel or by any other means that could result in a violation of the commitments of the Code of Ethics

(\*\*) integrated Adif and Adif-AV

## 4.2. Ethics and transparency

Since 2009, Adif-AV has had a Code of Ethics and Conduct approved by the Board of Directors, which was revised and updated in March 2015, taking into account regulatory changes in the area of criminal liability and the principles that inspire Law 19/2013 on transparency, access to public information and good governance.

In 2019 and as part of the process of continuous improvement, the Adif-AV Ethical Model was reviewed and updated, revising the Code of Ethics and Conduct and approving a series of policies and procedures.

### ADIF-AV CODE OF ETHICS AND CONDUCT

This text sets out the Entity's values and ethical principles, with the aim of formalising the ethical guidelines that can be expected from them and which are applicable to all persons belonging to the Entity or its governing bodies and to all third parties that have a relationship with it.

The Code contains the following commitments:

- Compliance with legislation.
- Infrastructure safety.
- Good use of public resources.
- Professionalism and integrity
- Fight against fraud.
- Good use of information.
- Good use of information.
- Decent and respectful treatment to people.
- Equal treatment to clients and suppliers.
- Safeguarding safety and health.
- Respect for the environment and cultural heritage.
- Safeguarding the reputation of ADIF

The Ethics and Compliance Committee is the body ultimately responsible for ensuring compliance with the Code of Ethics and Conduct.

The Code of Ethics, which was included in Clause 12 of the First Collective Agreement of Adif and Adif AV, is published both on the Adif-AV intranet and publicly on its website. The entity provides training to its employees through a course on ethical management, which is compulsory for all.



In 2019, **398 employees\*** (Adif and Adif AV aggregate) performed ethics training.

In this way, Adif -AV guarantees that all its employees know and act according to its principles.

### ETHICAL CHANNEL

The Ethical Channel acts as a channel for receiving and addressing potential breaches of the Code of Ethics and Conduct.

The Ethical Channel admits reports sent both by Adif-AV staff through the Intranet, and by third parties through the website. Reports may be anonymous as long as they are accompanied by evidence or indications that justify the initiation of an investigation. The following commitments are guaranteed during the procedure of communication and management of the communications made through the Ethical Channel:

- Confidentiality of personal data and information received through the Ethical Channel
- Commitment that there will be no repercussions against any person who makes a communication in good faith
- Privacy, defence and presumption of innocence of all those professionals who are the subject of an investigation

In 2019, **1,698 visits were made to Adif-AV's external ethical channel**, and **no notification** was received regarding alleged breaches of the Code of Ethics.

Adif-AV is firmly committed to the professionalism and integrity of its employees, rejecting any type of action that is suspected of corruption or any type of bribery.



In 2019, **886 (\*) declarations of conflicts of interest have been registered** (\*added data Adif / Adif-AV)

The Code of Ethics establishes the commitment of employees to always act with **integrity and honesty** in the performance of their work, communicating and **avoiding situations of conflict of interest** that may occur.

In this line, a series of measures and obligations are established to be fulfilled by employees in the performance of activities:

- Not to use the entity's funds and resources for their own benefit
- Not to accept favourable treatment or privileged status deriving from the professional position or post held
- Reject any gift, favour, service or financial benefit that goes beyond the usual, social and courtesy uses, whether from suppliers, contractors or any other area
- Not to make payments, gifts or other offers to public or private employees that could influence their decisions
- Communicate situations of conflict of interest in which they may be involved
- Refrain from intervening in or influencing decision-making, participating in meetings or accessing confidential information in matters where a conflict of interest exists
- Reject favouritism, on the grounds of kinship, friendship or any other circumstance, in the processes of hiring or promoting employees
- Avoid any practice that could be considered as not exemplary

The activity of Adif-AV must at all times respond to the public interest and the values set out in its Code of Ethics and Conduct, so that each action and decision taken complies with the following premises:

- Be legally valid.
- Be ethically acceptable.
- Be desirable to society and to the Entity.
- Each person is willing to take responsibility for themselves in the eyes of colleagues, family members and citizens in general.

On the other hand, and within the framework of Law 19/2013 on Transparency, Adif-AV maintains its faithful commitment to continue strengthening the transparency of its activity, in accordance with the best national and international practices. For this reason, it has a Citizen's Portal where any interested party can access the company's public documentation. In addition, Adif-AV participates in the Ministry of Public Works and Transport's Transparency Portal, where information on other public bodies, commercial companies and foundations can be consulted in relation to different channels.



The Citizen's portal is accessible through the corporate website  
**[www.adifaltavelocidad.es](http://www.adifaltavelocidad.es)**

#### **4.2.1. Measures taken to prevent corruption and bribery**

Within the framework of Adif-AV's strategic orientation and commitment to creating value for society, and with the aim of developing a governance and management model that strengthens Adif-AV as a well-managed and governed public entity under the principles of ethics and transparency, a Corporate Anti-Fraud Policy has been established

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

This Policy applies to all members of the Board of Directors, Senior Management and in general, without exception and regardless of their position, responsibility, occupation or geographical location, to all employees of Adif.

Adif-AV is committed to adopting a policy of zero tolerance towards fraud and therefore establishes certain obligations to this end:

- Commitment to communicate any sign of fraud through the appropriate channels.
- Promotion of a culture that acts as a deterrent to any type of fraudulent activity.
- Transmission of reliable information to society, in order to form a true image of Adif-AV's activities, strategy and economic, social and environmental performance.
- Rejection of misleading, fraudulent or malicious conduct that leads Adif-AV to obtain undue or unfair advantages.

### KEY DOCUMENTS IN THE FIGHT AGAINST FRAUD

The fight against fraud is a fundamental pillar of Adif-AV's Regulatory Compliance model. The key documents are:

- Corporate Anti-Fraud Policy
- Procedure for the Prevention, Detection and Management of Fraud which sets out the principles and guidelines for combating fraud
- Institutional statement on the fight against fraud
- Community Funds Fraud Risk Management Procedure

To demonstrate its commitment for zero tolerance of fraud and corruption, Adif-AV has measures in place to prevent and detect, where possible, any fraudulent actions and, where appropriate, to address their consequences. This control system has been developed in the Prevention, Detection and Management of Fraud Procedure which establishes the objectives, responsibilities and anti-fraud measures of Adif-AV.

The Management of the Community Funds Fraud Risk Management Procedure aims to establish the responsibilities, methodologies and activities carried out in Adif and Adif-AV in the anti-fraud cycle. This cycle includes all those measures aimed at the prevention, detection and prosecution of Fraud. The combination of measures in these four elements of the anti-fraud cycle allows for a proactive, structured, targeted and comprehensive approach to fraud risk management as recommended by the European Commission, thus enabling a significant reduction in the risk of fraud and providing sufficient deterrence.

On 26 November 2019, the Self-Assessment of Community Funds Fraud Risk Sub-Committee was established with the main responsibility of preparing, with the periodicity established in the Self-Assessment of Fraud Risk Procedure, in terms of impact and probability, using the tools provided by the European Commission or others that may be established by Adif and Adif-AV. This Self-Assessment, which contains more than 100 controls, must be reviewed and updated annually.

### 4.3. Commitment to human rights

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Through its Code of Ethics and Conduct, Adif-AV expresses its commitment to the dignified and respectful treatment of all people. In doing so, it ratifies the principles established in the Universal Declaration of Human Rights and the Tripartite Declaration of the Organization of Work.

All employees of Adif-AV must respect all persons with whom the Entity relates, both inside and outside the organization. In this sense, non-discrimination, equal opportunities and dignified treatment are essential for a stimulating and productive working environment at Adif-AV, which translates into a positive and trusting relationship with stakeholders.

In 2019, Adif-AV has not received any **complaints of human rights violations**.

### 4.4. Risk Management

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Adif-AV, in its permanent commitment to transparent, responsible and sustainable management, considers it essential to have a global, consistent and transparent risk management system that establishes a common regulatory framework, facilitates the identification, evaluation and homogeneous management of risks and establishes clear roles and responsibilities for their adequate treatment. To this end, in addition to the specific areas of risk management that make it possible to respond to the needs and regulations specific to the activity (traffic safety, occupational risk prevention, the environment, information security, internal control of financial information, regulatory compliance, etc.), it has defined its integrated risk management model.

Adif-AV has an integral **risk management model** that allows the establishment of appropriate information channels that guarantee adequate communication to promote a proactive risk management culture in all areas of the company while maintaining consistent risk levels.

#### 4.4.1. Integrated Risk Management System

ADIF-Alta Velocidad has an Integral Risk Management System that, aligned with best practices, facilitates a systematic and orderly response to a universe of risks with the complexity and dispersion of an organization of its characteristics. This system obeys to the following principles, established in the **Integral Risk Management Policy** approved by the Board of Directors of the entity:



**PRINCIPLES OF THE INTEGRATED RISK MANAGEMENT POLICY**

- Integration of risk in the management of the entity, through a unified vision of the strategic and business objectives, and the risks associated with them.
- Ensure that the risks that may affect the strategy and objectives are adequately managed, and within the levels of risk that the entity establishes.
- Have a global risk management system, consistent and transparent; that establishes a common normative framework that facilitates the identification, evaluation and homogeneous management of risks, and that establishes clear roles and responsibilities.

The roles of the various actors involved in the system are clarified in the policy. Thus, in addition to the risk management responsibilities intrinsic to the functions of the various areas of activity, "coordination areas" are identified that are dedicated to the management or supervision of specific risks. All of these constitute the Risk Committee, which is led by the risk area and reports to the Management Committee.

The Risk Committee is responsible for the preparation and monitoring of the Adif-AV risk map. This map reflects the main threats to which the entity is exposed, and which could significantly affect the achievement of its objectives and the development of its functions. These risks place special focus on the main key pillars of the activity:

Risk Category	Description
Safety	Risks related to incidents, accidents or attacks that may affect the continuity of the Entity's operations, the integrity of its assets, workers, customers or the environment
Operations	Circumstances that could threaten the quality of services provided
Regulation and compliance	Risks arising from failure to comply strictly with applicable rules and regulations, or with voluntarily adopted codes of good practice
Reputation	Issues related to strengthening good governance, transparency and accountability of a public company
Financial	They affect aspects related to the availability of resources and the financial sustainability of the Entity

It should be noted that Adif-AV's ESG risk management is being processed for implementation in 2020.

#### **4.4.2. Internal Control System for Financial Information (IFCS). COSO III Model**

ADIF-Alta Velocidad has an Internal Control System for Financial Information implemented, hereinafter SCIIF which is a part of the internal control and is configured by the set of processes that the entity and all the staff involved carry out to provide reasonable assurance regarding the reliability of the financial information.

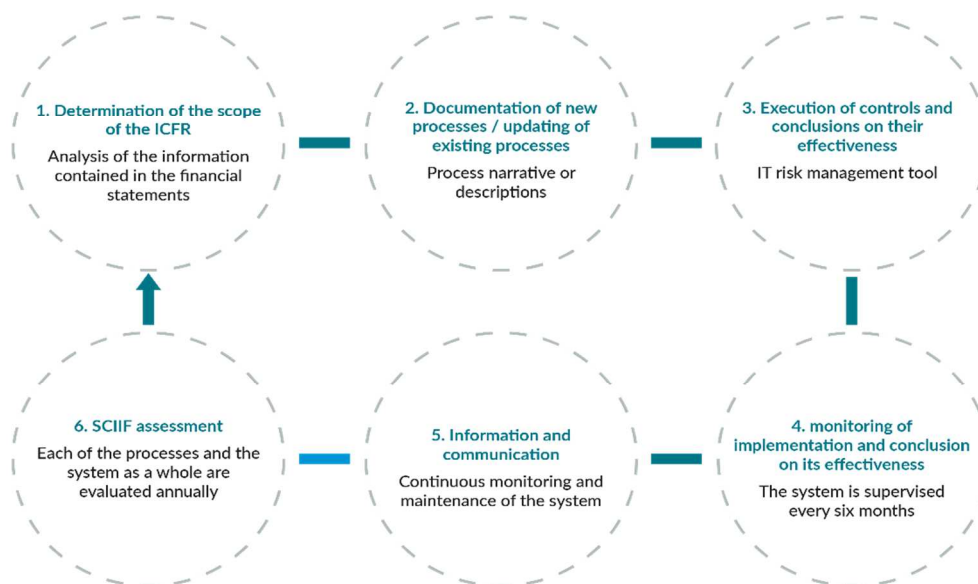
The SCIIF seeks to ensure the reliability of financial information by fulfilling the following five objectives:

- **Existence and Occurrence:** the transactions and other events collected by the financial information do indeed exist and have been recorded at the appropriate time.
- **Completeness:** the information reflects the totality of transactions and other events in which the entity is an affected party.
- **Valuation:** transactions and other events are recorded and valued in accordance with applicable regulations.
- **Presentation, disclosure and comparability:** transactions and other events are classified, presented and disclosed in the financial information in accordance with applicable regulations.
- **Rights and obligations:** the financial information reflects, at the corresponding date, the rights and obligations through the corresponding assets and liabilities.

The SCIIF of ADIF-Alta Velocidad is inspired by COSO III; an internationally recognized integrated control reference framework, based on three key elements: documentary support for controls or evidence, continuous evaluation throughout the annual cycle and the established pyramid scheme of responsibilities. The entity has an SCIIF Policy approved by its Board of Directors, which establishes the methodology, competencies and principles that lay the foundations of the SCIIF in ADIF-Alta Velocidad.

The SCIIF is organized as a cyclical process that works continuously, thanks to which this system remains updated and current. This annual cycle is divided into six phases:

### PHASES OF THE INTERNAL CONTROL SYSTEM FOR FINANCIAL INFORMATION



The processes with relevant financial information included in the scope of the 2019 financial year were as follows

1. Fixed Assets and Grant Management
2. Revenue: Fees
3. Financial Instruments and Treasury
4. Taxes

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5. Electrical Energy
6. Accounting and financial reporting
7. Economic Registry of Contracts
8. Revenues: Rentals
9. Revenues: Fibre optic lease

The SCIIF Committee, chaired by the Director General of Finance and Management Control and comprising the heads of each SCIIF process, the Directors of Internal Audit, Treasury and Accounting, Planning and Budget and Risk, met twice in 2019.

At these meetings, the annual review of the previous year was carried out, the scope of the 2019 financial year was approved, and the 2019 cycle and the supervision carried out were monitored.

## 5. IMPACT ON SOCIETY AND CREATION OF SHARED VALUE

*At Adif-AV we are aware that we have a great responsibility and that our actions have an important impact on society. That is why we work with a strong commitment to always be at the service of the general interest, trying to generate a positive impact on all our stakeholders and working to create shared value.*

 <h3>STAKEHOLDER RELATIONS</h3> <hr/> <p><b>5,100</b> actions on social networks</p> <hr/> <p><b>100%</b> of answered requests on websites</p> <hr/> <p><b>40</b> number of agreements and arrangements with sectoral and professional organisations and associations, in force</p>	 <h3>HEALTH AND SAFETY</h3> <hr/> <p><b>ABSENCE</b> of accidents with leave</p> <hr/> <p><b>2</b> Health and safety committee meetings</p>	 <h3>SERVICE IMPROVEMENTS</h3> <hr/> <p><b>2,224.72 M€</b> (VAT non inc) awarded to construction projects (works, services and supplies)</p> <hr/> <p><b>29.5 M€</b> for high-speed network operation</p> <hr/> <p><b>298.9 M€</b> for maintenance purposes</p>	 <h3>ECONOMIC IMPACT</h3> <hr/> <p><b>1,187.6 M€</b> ECONOMIC VALUE GENERATED</p> <hr/> <p><b>1,114.4 M€</b> DISTRIBUTED ECONOMIC VALUE</p> <hr/> <p><b>73.2 M€</b> ECONOMIC VALUE RETAINED</p>
 <h3>ENVIRONMET</h3> <hr/> <p>Reduction of carbon footprint <b>31.1%</b></p> <hr/> <p><b>0</b> penalties</p> <hr/> <p><b>0.33%</b> Reduction in water consumption</p>	 <h3>EMPLOYEES</h3> <hr/> <p><b>218</b> employees</p> <hr/> <p><b>28.44%</b> women</p> <hr/> <p><b>50.96%</b> covered by award</p> <hr/> <p><b>97.57%</b> indefinite contracts</p> <hr/> <p><b>-0.39%</b> absenteeism rate</p>	 <h3>CUSTOMER-DRIVEN ORIENTATION</h3> <hr/> <p><b>-40.2%</b> claims</p> <hr/> <p><b>-29.1%</b> suggestions</p> <hr/> <p><b>7</b> out of 10 in perceived quality</p>	 <h3>COMMUNITY ENGAGEMENT</h3> <hr/> <p><b>486*</b> activities open station program (*integrated Adif/Adif AV)</p> <hr/> <p><b>78*</b> open station program stations (*integrated Adif/Adif AV)</p> <hr/> <p><b>54</b> conventions, agreements, protocols, addenda, of integration with the companies in which Adif AV participates</p>

## 5.1. Relationship with stakeholders

As indicated, Adif-AV seeks to base its management on responsibility to society, which is why it is essential to listen to the various stakeholders and establish channels of communication and dialogue with them.

Adif-AV considers as a stakeholder group any social group that is or may be affected by the company's activity, now or in the future, and/or that, in a legitimate way, affects or may affect the company's activity and, therefore, its results. Its stakeholders include railway companies, passengers, citizens, public administrations, employees, governments of other countries, suppliers, business partners and allies and society (NGOs, associations, etc.). The WP2030 has considered, by grouping different groups, five priority interest groups:



Adif-AV is aware of the importance of maintaining a close, accessible and transparent relationship with all its stakeholders, and therefore gives great importance to the active management of its communication channels and to being able to listen to what its stakeholders demand and think about the Entity.

Therefore, in the future, the Entity plans to revitalize its presence on the Internet by developing and creating a new corporate website. In addition, the company has increased its relations with the media and has created a Transparency Portal. As in the past year, Adif-AV maintains its focus on dialogue with stakeholders through social networks.

The corporate **website**, **Social Networks**, **media** relations, the H24 **Network Management Centre**, the Transparency Portal and **events** are the **main channels of communication** with stakeholders.

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In the following table you can see a summary of the communication channels established with the different stakeholders of Adif-AV.

Stakeholders	Established channel
<b>PUBLIC ADMINISTRATIONS AND INVESTORS</b> <b>((Ministry of Public Works and Transport, Administration and financial organizations))</b>	<ul style="list-style-type: none"> <li>Continuous communication through the competent bodies (Under-Secretary of State, Secretariat of State for Infrastructure, etc.)</li> <li>Follow-up meetings</li> <li>Administrative Agreements</li> </ul>
<b>EXTERNAL CUSTOMERS</b> <b>(users of the railway system, railway operators, corporate customers, governments of other countries)*</b>	<ul style="list-style-type: none"> <li>Customer Service Offices at Adif-AV stations (personalised attention, complaints and suggestions management, etc.)</li> <li>Annual satisfaction surveys for passengers and tenants of commercial premises located in Adif-AV stations</li> <li>Information telephones and e-mail</li> <li>Agreements and arrangements</li> <li>Mechanisms for complaints and suggestions (RECLAMA computer application, complaints books, etc.)</li> <li>Meetings with representatives of citizen groups interested in the management of the railway infrastructure in their locality</li> <li>Web communication mailbox</li> <li>Social Networks</li> <li>Adif-AV App Channel (real time information on network status and schedules)</li> </ul>
<b>SUPPLIERS</b>	<ul style="list-style-type: none"> <li>Communication via e-mail or telephone</li> <li>Collaboration agreements</li> </ul>
<b>BUSINESS PARTNERS AND ALLIES</b>	<ul style="list-style-type: none"> <li>Sectoral agreements and partnerships</li> <li>General and European assemblies, international delegations</li> <li>Specialized events and forums</li> <li>E-mail or telephone</li> </ul>
<b>SOCIETY (citizens, associations, NGOs, European and international organizations)**</b>	<ul style="list-style-type: none"> <li>Adif-AV annual reports and other publications</li> <li>Permanent information through the media</li> <li>Web communication</li> <li>Social Networks</li> <li>Transparency Portal</li> </ul>
<b>EMPLOYEES***</b>	<ul style="list-style-type: none"> <li>Corporate Portal Starts</li> <li>Adif-AV workers' representation committees</li> <li>Work climate and Adif-AV commitment surveys</li> <li>Internal communications</li> <li>Information on training courses</li> <li>Suggestion box</li> <li>Improvement initiatives mailbox</li> </ul>

(\*) For more information on the relationship with this interest group, see the "Customer Satisfaction" section

(\*\*) For more information on the relationship with this interest group, see the "Citizens" section

(\*\*\*) For more information on the relationship with this interest group, see the "Employees" section

## AGREEMENTS AND ARRANGEMENTS

### WITH SECTORAL AND PROFESSIONAL ORGANISATIONS AND ASSOCIATIONS

During 2019, in order to better comply with its objectives, a comparison is made of the number of agreements and arrangements with sectorial and professional organizations and associations, both signed and in force, signed by Adif AV:

Number of agreements and arrangements with sectoral and professional organisations and associations: <b>IN FORCE</b>	2017	2018	2019
Adif-AV+ Others	25	34	40
Adif+ Adif-AV+ Others	17	27	36
Adif+ Adif-AV	5	6	9

*\* Provisional data pending determination of the number of agreements in force by application of the 8th D.A. of Law 40/2015, of 1 October, on the Legal System of the Public Sector*

Number of agreements and arrangements with sectoral and professional organizations and associations: <b>SIGNED</b>	2017	2018	2019
Adif-AV+ Others	5	9	6
Adif+ Adif-AV+ Others	5	11	9
Adif+ Adif-AV	0	1	3

The main Adif-AV figures for 2019 related to communication with stakeholders are as follows:

Concept	2018	2019
Number of actions in social networks	5,438	5,100
Total percentage of requests answered through the website	100%	100%
Events managed by Adif -AV	13	20
Strategic Communication Plan, number of actions	331	355
Percentage of media requests answered	100%	100%
Percentage of complaints about transparency accepted by the Board for Transparency and Good Governance	7.56%	4.88%

The relationship between Adif-AV and some of the most important stakeholders is summarised below:



## **PUBLIC ADMINISTRATIONS AND EUROPEAN BODIES**

Adif-AV is affiliated to the Ministry of Public Works and Transport, which has a regulatory and investment role, and therefore the entity is committed to maintaining a continuous relationship based on transparency, through efficient and sustainable management of its activities. The relationship between Adif-AV and the Ministry of Public Works and Transport is established mainly through the Undersecretary of State, the Secretariat of State for Infrastructure, Transport and Housing, and especially, with the General Directorate of Railways. It is also in continuous contact with other entities attached to it, such as Renfe Operadora and other ministries such as the Ministry of Employment and Social Security and the Ministry of Finance and Public Administration.

On the other hand, Adif-AV maintains a relationship with regulatory bodies such as the Court of Auditors and the General State Comptroller, with which it establishes regulated contact in accordance with current regulations, and with other entities such as the Ombudsman (in the treatment and response to complaints submitted to this body and similar institutions in the Autonomous Communities), State lawyers (for the resolution of consultations and supervision aimed at ensuring compliance with applicable legal requirements with unit of criteria), certification bodies, the National Institute of Statistics (regularly providing data related to Adif-AV activity) or universities and public study centres with which Adif-AV establishes collaboration agreements.

In addition, Adif-AV maintains contact and participates with different entities at an international level:

- RNE (RailNet Europe): to collaborate in the planning and management of railway capacity on international corridors and to improve quality and efficiency aimed at the competitive development of passenger and freight traffic on these corridors.
- EIM (European Infrastructure Managers): as an association that brings together the most important European infrastructure managers and which acts as an interest group before political and legislative decision-making bodies of the European Union and carries out studies to support the modernisation of the railway sector.
- ERA (European Railway Agency): for the development of technical specifications aimed at interoperability and safety, Adif-AV participates in this development through EIM.
- EEIGs (European Economic Interest Groupings): for the development of cross-border projects linked to international rail corridors and Trans-European Transport Networks (TEN-T).
- PRIME: is the platform of European railway managers for the development of the Fourth Railway Package. Adif-AV participates in the development of a system of indicators that allows the monitoring of the main activities and the improvement of management.

## **SUPPLIERS**

Suppliers are an essential part of Adif-AV's business. The relationship with suppliers is based on guaranteeing the transparency of the contracting process and legal security.

The contracting procedure is established through the applicable contracting regulations, which include rigorous selection parameters and articulate all purchasing procedures through management based on transparency, contemplating all processes and their possible incidents.

For each contracting process, Adif-AV carries out the selection of suppliers in which they must prove their business and technical solvency, as well as compliance with social and environmental requirements determined for each contracting file.

## **FORÉTICA**

Forética is an association that seeks to promote the culture of Ethical Management, Social Responsibility and sustainability in companies. Currently, it is a reference organization in CSR in Spain and Latin America, being the most consolidated and leading Spanish platform in corporate responsibility and sustainability.

Adif/Adif AV joined Forética in 2017 as a promoting member. In addition, in 2018 it joined the Action Group on CSR in Public Companies, co-leading with ICO the collaborative business platform coordinated by Forética, which aims to promote the exchange of knowledge between participating public companies on environmental, social and good governance issues, to make visible successful business cases, to transfer relevant tools and trends at international level and to contribute positively to the leadership of public companies in this field.

In 2019, Adif/Adif AV continues to lead this platform together with ICO, which has 28 public member entities: Adif, AENA, CESCE, Correos, Emasesa, Enaire, Extremadura Avante, Grupo Tragsa, ICO, INFORMA D&B, ISDEFE, ITVASA, Metro de Madrid, Paradores, Renfe, RTVE, Valenciaport, Aquavall, Canal Sur Radio y Televisión, Corporación Pública de Aragón, Enresa, Grupo ENUSA, ICEX España Exportación e Inversiones, INCIBE, INECO, INFORMA D&B.

## **BUSINESS PARTNERS AND ALLIES**

Within this stakeholder group, Adif-AV identifies the subsidiaries and investee companies, including the integration companies. The management of this stakeholder group is based on its monitoring and the coordination of railway integration actions in the cities with the collaboration of other areas of the company. In 2019, 58 Board of Directors and Shareholders' Meetings were held in the companies that are subsidiaries and investees and in the integration companies.

In this way, Adif-AV establishes alliances with external companies and administrations that are formalized through agreements, collaboration agreements and shareholdings.

In the area of integration companies, and as a result of the Entity's effort to adapt to the new strategic framework of the company and the economic environment that requires greater efficiency and transparency in the use of resources, the debt of certain companies has been refinanced, the legal, administrative and accounting management has been assumed, as well as the economic and financial monitoring of others that lacked sufficient structure to carry it out, and participative loans have been negotiated.

## **SPANISH UNITED NATIONS GLOBAL COMPACT NETWORK**

In 2018, Adif completed its process to join the Spanish Network of the United Nations Global Compact, as a participating partner. REPM is a non-profit association. The Entity has considered its adhesion to this association to be of interest in order to form part of the largest global initiative of business sustainability promoted by the United Nations, and also from its commitment to promote a relevant change in the way of approaching and integrating Corporate Responsibility into the Entity's strategy and business operations for an improvement in its performance and impact on society, actively contributing to the achievement of the SDG.

In 2019, REPM, as part of its commitment to sustainable development, analyzed Adif's sustainability reports, with the aim of detecting the strengths and areas for improvement in both the entity's level of transparency and the level of implementation of each of the four blocks of the United Nations Global Compact, thereby strengthening the levels of transparency in reporting and favoring the level of integration of the Sustainable Development Goals in the business strategy.

## 5.2. ESG Risk Rating



Within the framework of its presence in the financial markets as a socially responsible issuer, Adif-AV has participated for the first time in Sustainalytics' ESG Risk Rating, placing the public entity in April 2019 as the leader both in the transport infrastructure sector - with respect to a total of 102 companies evaluated - and in the road and railway subsector, being one of the ten most valued companies out of the 10,026 analysed by this rating.

**Adif-AV obtained first position in the ESG Risk Rating for the transport infrastructure sector**

A guarantee of long-term financial profitability is to implement responsible investment policies. In this context, socially responsible investment (SRI) can be approached from different perspectives. It can be done with a "value" approach, motivated by ethical or moral considerations; with "risk", in order to achieve better management of reputational, operational, financial or regulatory risk; with "return", to take advantage of financial opportunities such as the energy transition; or with a "duty" approach, in line with the investor's fiduciary obligation.

In 2019, Adif Alta Velocidad made a new issue of green bonds worth 600 million euros, aimed at financing or refinancing projects that generate environmental or climate benefits (see section 10.4). This is the third bond issue of these characteristics, after those made in June 2017 and April 2018, with the three issues **totalling 1.8 billion euros**.

The Finance Department produces a *Newsletter* (quarterly, in English) for socially responsible investors, which includes information on the activity and projects being carried out by Adif-AV in the area of environmental sustainability, although it also extends to other socially responsible initiatives and projects. It also contains a section on financial information.

## 5.3. Health and Safety

Safety, understood in its widest scope (train movement, protection against criminal acts and safety at work), is one of the strategic pillars of Adif-AV and is a central element of the business culture that guides decision-making. Safety management is based on the need to minimize possible risks, so as to achieve a high level of safety in all aspects of infrastructure management and rail traffic. In order to fulfil its corporate purpose, the Entity assumes the commitment to carry out its activities in a safe and efficient manner.

### KEY ELEMENTS OF SAFETY POLICY

- To ensure the implementation and dissemination of a safety culture at all levels of the Entity, based on prevention, proactivity and staff participation.
- Manage the risks associated with the activity and operation.
- To promote a culture of trust, positive safety and continuous learning, which encourages all the organisation's staff to contribute to the development of safety.

In this way, the integral safety culture is understood in a transversal sense to the activity, at all levels, all processes and all subjects related to it and includes the management of safety in the infrastructures managed by the Entity, the safety in railway operations that run on them, as well as the safeguard of the safety of the own and external workers that have any kind of labour relationship with it. Adif-AV is currently immersed in the task of internally reinforcing the culture of

safety, in which the risk analysis of each activity, each process and each organizational change planned in the Entity takes on a relevant value. Internally, this reinforcement of the safety culture has been reflected in the creation of the Safety, Processes and Corporate Systems Management.

Therefore, Adif-AV not only focuses on improving safety in traffic, but also pays special attention to the prevention of occupational risks and the promotion of the safety of its employees, with numerous actions aimed at this end. Finally, in an increasingly digitalised world, cyber security cannot be ignored both externally with suppliers working with Adif-AV or customers visiting the website, and among their own employees.

Integral Security in Adif-AV is based on the following pillars:



- **Protection and safety:** Safety in infrastructures and installations of the company through the implementation of the systems and appropriate protocols in cases of incidents or emergencies, in collaboration with the competent public entities.
- **Railway traffic safety:** Control of the inherent risks in the circulation of trains, derived from the activity of ADIF-Alta Velocidad and Operating Companies, giving users confidence in the network through which they transit.
- **Prevention of Occupational Risks:** Commitment to the safety and health of our own employees, collaborating with other companies to understand and control the risks arising from the interaction with contractors and suppliers, as well as from anyone who performs a punctual or long-term job for Adif-AV.
- **Cybersecurity:** Protection of Adif-AV's management information or operational systems against intrusions, aggression, undue access to information and/or damage to the organization's assets.

### 5.3.1. Protection and Safety

The area of protection and safety refers to the activity carried out by Adif-AV to guarantee the safety of people, the continuity of operations and the preservation of assets, in the face of safety threats and emergency situations. The aim is to achieve a response system that is capable of absorbing the impact of a threat without losing operational capacity

During the year 2019, different actions are being carried out. The most relevant achievements are detailed below:

## SAFETY

- 115 administrative complaints and 164 criminal complaints filed.
- 1,624 safety inspections and 188 extraordinary operations carried out.
- 2,103 interventions to assist people.
- 354 emergency interventions for accidents.
- Recovery of 3,089 lost objects.
- Score of 37.55 out of 45 in the evaluation of the surveillance and security services.

## SELF-PROTECTION AND EMERGENCIES

- 20 Self-protection plans carried out.
- 51 simulations carried out.
- Execution of 116 inspections to protection means and facilities.
- 292 training days for internal and external staff with 3,368 students.

## TECHNICAL AREA

- A project for protection and safety installations in stations has been completed and 88 projects have been reported.

In addition, during 2019 and with respect to the previous year, the number of incidents of theft of electrical conductors has decreased by 30.30 %, from 66 incidents in 2018 to 46 in 2019. On the other hand, 8 deliberate attacks against critical infrastructure have been recorded and 101 crimes with an impact on the activity have occurred, decreasing by 51.44 % with respect to 2018.

In 2019 a total of **292 courses\*** (Adif/Adif-AV aggregate) and **51 simulations** (Adif-AV aggregate) have been carried out.

INFORMATION PERFORMANCE IN SOCIETY AND PRODUCT RESPONSIBILITY	Indicator description	Units	2017	2018	2019	Goals for 2020
	Evaluation of the provision of surveillance and safety services	points/45	38.33	39.46	37.55	> 35
	Deliberate attacks on critical infrastructure	Nº	38	9	9	<= 25
	Emergency situations with application of the Self-Protection Plan	%	100	100	100	>=90%
	Crimes with an impact on the activity	Nº	282	252	101	<= 200
	Persons killed or seriously injured in accidents	Nº	1	0	0	<= 0

### **5.3.2. Traffic Safety**

The operation and maintenance activities of the infrastructures owned by Adif-AV have been entrusted to Adif, through the corresponding addenda to the Agreement signed between both entities, for the provision of various services.

Directive 2004/49/EC established a common regulatory framework for railway safety through the harmonisation of the content of safety standards, safety authorisation of infrastructure managers, the tasks and role of the safety authorities and the investigation of accidents.

Furthermore, Directive (EU) 2016/798 of the European Parliament and of the Council of 11 May 2016 on railway safety substantially amending Directive 2004/49/EC of the European Parliament and of the Council considers that the main actors of the railway system in the Union, infrastructure managers and railway undertakings, should be made fully responsible for the safety of the system, each in so far as it concerns them, and that where appropriate they should collaborate in implementing risk control measures.

Safety on the railways should be maintained in overall terms and, where practicable, continuously improved, taking into account scientific and technical progress and the impact of human and organisational factors.

In this context, the Railway Traffic Safety Management System (SGSC) is a crucial element on which the safety of the system depends, providing, inter alia, procedures for managing safety, distribution of responsibilities, risk analysis and management and human factor aspects, promoting a safety culture through trust and learning and providing for mechanisms to disseminate information.

Traffic safety management must be considered by all as a transversal function for all directions of the company, an essential need that is only guaranteed with the maximum staff and collective effort in the daily fulfilment of our professional activity and with the impulse of all the actions that are directed towards that only objective.

With the publication of the Guideline for the Railway Traffic Safety Management Policy, the internal commitment of the Entity to the national and European regulatory framework is reinforced, by establishing the criteria and organizational standards for the management of safety in traffic, strengthening the Traffic Safety Management System.

The guideline aims to promote, at all levels of action and in all services, full awareness of the priority nature of strengthening the foundations for Railway Traffic Safety Management within Adif, consolidating the fundamental principles of the Safety Policy and the positive Safety Culture at all organizational levels of the entity, based on risk prevention and management, proactivity and staff participation.

Adif and Adif AV, in the exercise of their competences, identify the basic elements on which safety in traffic rests, these being people, technology applied to installations, infrastructure, rolling stock and technical and regulatory standards.

In addition, the Safety Policy contemplates different tools, among which the application of an own traffic safety management system, based on prevention, continuous improvement and development of corrective measures, supported among others, on a management based on the responsibilities and competences of the staff, continuous training, participation, information and awareness of the staff, as essential elements to guarantee the surveillance of railway safety.

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Along these lines, and in order to promote compliance with the Safety Policy and the Safety Objectives of Adif and Adif AV, the **Annual Traffic Safety Plan (PASC)** was drawn up and approved by the Operational Safety General Committee.

The PASC is a safety method that aims to continuously improve the levels of safety in Adif and Adif AV, bringing together programs and actions that facilitate compliance with the objectives and indicators established therein.

Furthermore, it brings together and includes the action programs and objectives of safety, supervision, and all the actions that the Adif General Directorates and their specialized areas of activity.



As for security surveillance, these were developed through two groups of activities entrusted to Adif:

- **1st Level Surveillance:** Proximity control and early detection actions on the application of security standards regarding processes and staff.
- **2nd Level Surveillance:** inspections aimed at checking, by means of observation and analysis, the correct compliance with the regulations and safety requirements applicable to activities, elements and conditions related to train movement safety.

### Noteworthy actions in the field of traffic safety

#### ADIF'S SAFETY MONITORING ACTIONS

Adif carries out supervision actions with the aim of checking the application and compliance of the applicable regulations in the different operational activities, with the safety of the railway traffic circulation, in the RFIG managed by Adif and Adif-Alta Velocidad.

In this sense, in 2019, 2,098 inspections, 182 safety audits and 19 surveys were carried out.



## ACTIONS TO CONTROL RAIL TRANSPORT

For the rail transport control, systematic actions are established, which allow the detection of risk situations in the course of the movement of goods and passenger trains, in order to verify compliance with the rules established in terms of train composition (towed material), loading and documentation of the train.

In 2019, 32,146 wagon weighing actions were carried out, over and above the 32,484 actions that were initially programmed, with compliance exceeding that originally planned for.

The 2019 PASC programmed 6,720 visual train recognitions, with 5,387 actions finally carried out.

## OPERATIONAL CONTROL ACTIONS

These are actions programmed within the 1st level operational control activity of Adif/Adif-AV, which has the aim of verifying compliance with existing technical operating standards, as well as the good condition and maintenance of the fixed installations and rolling stock assigned or entrusted for their maintenance and conservation work when carrying out manoeuvres.

The testing allows compliance with the traffic rules to be verified in the conversations recorded at the Control Posts, as well as in those of the Traffic and Energy Remote Control Cabinets, in order to detect deviations in compliance with the operating rules and adopt the necessary corrective/preventive actions. In 2019, 5,041 wiretaps were made on the conventional network and 428 wiretap actions were made on the high-speed network. Safety visits are aimed at reducing risk situations caused by non-compliance with processes and tasks related to traffic. In 2019, 5,372 visits were made on the Conventional Network and 94 on the High-Speed Network.

## PROMOTION OF A TRAFFIC SAFETY CULTURE

Among the most outstanding actions are training and those aimed at the granting, extension, maintenance and replacement of qualifications.

In 2019, 713 driving licences were maintained for Adif staff and 14,281 authorisations were issued to staff related to safety activities in the movement of Adif and external companies, in accordance with the requirements established in current regulations. In addition, during the year, 869 candidates from external companies were assessed for theoretical knowledge and 764 for practical knowledge in order to obtain qualifications, as well as 282 candidates for the 2019 EPO in two calls for applications.

In the year 2019, of the total number of traffic accidents on the RFIG administered by Adif AV, there have been 3 accidents with victims. The main figures recorded are defined below:

	2016	2017	2018	2019
No. of road accidents produced	1	1	0	3
Deceased men	0	1	0	0
Seriously injured men	1	0	0	2
Deceased women	0	0	0	0
Seriously injured women	0	0	0	1
Total victims (deceased and seriously injured)	1	1	0	3

In the context of Traffic Safety, **different bodies are contemplated for participation in Traffic Safety management**, constituted as mechanisms for the supervision and control of the safety of operational activities, with the aim of ensuring the participation of all the organisation's staff, directly or through their representatives, and of ensuring the continuous improvement of traffic safety.

Depending on the action area and scope of their functions, different participation bodies are set up: the Central Traffic Safety Technical Commission, the General Directorates' Traffic Safety Operating Commissions and the Territorial Technical Commissions for Traffic Safety. During 2019, these participation bodies have been convened a total of **56 times**.

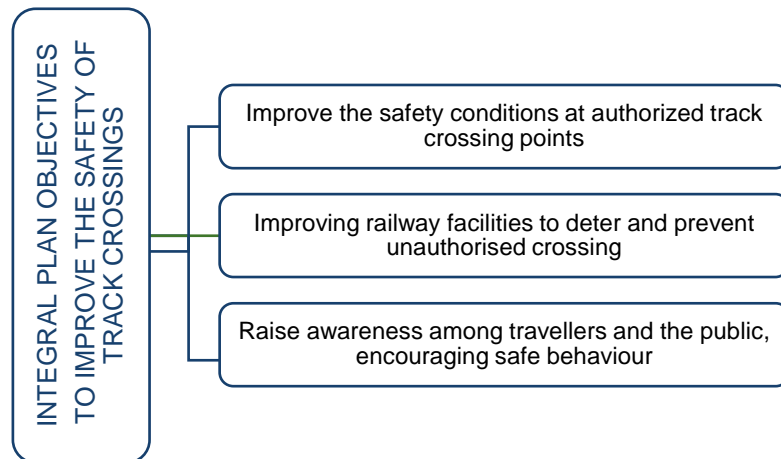
In addition, Adif-AV actively participates in different national and international forums in order to share its experience in the field of traffic safety.

### **Prevention of accidental collisions**

According to the latest available data, between 2010 and 2019 there were 522 accidental collisions in the network, resulting in 241 deaths, 107 serious injuries and 174 minor injuries. Accidents occur in different situations: at level crossings, at unauthorized crossings, at authorized crossings at the same level between platforms, and in falls from the platform onto the track. These collisions have a high personal and social cost (each collision is a severe blow from the human point of view), and the maximum possible effort and collaboration of everyone is required to try to avoid them.

In order to reduce these types of accidents, Adif has continued working throughout 2019 to address this problem from a comprehensive standpoint, following the work plan initiated in 2017 to reinforce the measures implemented to date. The framework for this work, in which different areas of the organization are participating, is the **2018-2028 Comprehensive Plan for Safety Improvement at Road Crossings, PIMSCV**.

The current Plan includes a global and planned approach that contemplates all types of crossings and the different situations in which accidental collisions occur, addressing both the improvement of objective safety conditions of the infrastructure and the awareness of the population about the need to carry out safe behaviour.



Likewise, this Plan is one of the relevant projects of the Strategic Plan 2030 and contributes to the achievement of Strategic Objective 1 on Traffic Safety (Safety Pillar). It is also aligned with SDG 3 (Good Health and Well-Being), SDG 9 (Industry, Innovation and Infrastructure) and SDG 11 (Sustainable Cities and Communities).

The PIMSCV is structured in 4 lines of action:

## LINES OF ACTION OF THE PIMSCV



## STRATEGIC LINES

L1A. Legislative compliance: removal

to comply with the OM of 2/08/2001, A\*T>1500:464 should be deleted

T>6 and A<250, Adif:148

T>6 and A>250, Agreement:279

T>6 and A>250, road headline:37

removal of level crossings with A\*T>1500 and Adif responsibility:148

24 on site actions (integral works and suppression works)

83 in drafting/writing/updating

174M euros funding required

31 previous studies with own resources

removal of level crossings with A\*T>1500 and requires co-financing by road/rail agreement: 279

41 on site actions (integral works and suppression works)

5 in draft form or drafted and pending convention

72M euros funding required

232 pending (27 with old project), 205 to propose solutions

## STRATEGIC LINES

L1A. legislative compliance: protection

Improved protection to optimise line operating conditions

classes A, B and F in stations

60, 58 in draft, 1 under construction, 1 affected by The

Level crossings with  $1000 < A*T < 1500$  and  $A > 100$  and are not class C

2 in project phase

Level crossings with  $1000 < A*T < 1500$  and  $A < 100$  and are not class B

40M euros funding required

4 in project phase

Level crossings with  $100 < A*T < 1000$  and  $Dr < Dt$  and are not class B

48 in project phase

The estimated budget of the Integral Plan amounts to 462,451M euros and, is composed of 48 actions.

Some of these actions carried out to date and during the 2019 financial year are summarised below:

- Improved safety at authorized crossings at the same level located in RFIG passenger stations and other environments:
  - Identification of the provisional minimum protection measures to be applied according to RT 7/2018 of the AESF in each of the stations.
  - Installation of signals as applicable within the Class 1-P measures of the Technical Recommendation (4.624 signals).

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

- Drafting of specifications to carry out actions at different levels in 86 stations.
  - Study and planning of speed changes and operations at specific stations with crossings between platforms at the same level, taking into account data from the AESF on stations without visibility.
  - Update September 2011 Adif/Renfe Agreement for the provision of services in suburban stations, under which each entity will undertake the necessary actions to implement the measures class: 1-P, 1-A1 and 1-A2, according to RT 7/2018 of the AESF.
  - Completion of the procedure for provisional risk assessment at platform crossings, as well as classification of all stations (729) according to risk level.
  - Hiring of technical assistance for the preparation of the definitive procedures for the risk assessment of track crossings (crossings between platforms and level crossings) in accordance with regulations (RT, MCS, etc.). It was decided to align the risk management procedures for level crossings and platform crossings so that both comply with the CSM, taking into account the regulatory requirements (RT 7/12018 and future RD on operational safety and interoperability).
  - Revision of the Assistance Plan for victims of serious railway accidents and their families, and preparation of the Assistance Plan for victims of collisions and their families.
- Improvement and elimination of level crossings:
    - Contracting technical assistance for the preparation of the definitive procedure for assessing the risks of track crossings (level crossings) in accordance with regulations (RT, CSM, etc.).
    - Search for new technologies to be incorporated for the protection of level crossings to increase the detection of the risk of accidents with sufficient anticipation.
    - Preparation of a catalogue of level crossings to be removed by agreement, in accordance with the RSF (art. 18).
    - Collaboration with the General Directorate of Traffic to promote the safety of National Parks from the standpoint of road users.
- Improvement of security in infrastructure protection systems against improper crossings:
    - Count of vicious crossings located on tracks
    - Preparation of documentation for the bidding process for technical assistance in the drafting of construction projects for enclosures.

### 5.3.3. Prevention of Occupational Risks

The health and safety of employees is fundamental to Adif-AV and forms part of one of its strategic objectives. In this sense, we work daily to maintain Adif-AV as a reference in the sector due to its low accident rate, making a permanent effort in prevention.

The prevention of occupational risks and the actions taken to ensure the health and safety of employees are developed in section 5.6.4. Our team - Prevention of occupational risks.

### 5.3.4. Cybersecurity

The Sub direction of Information Security (SSI) is encompassed in the General Directorate of Security, Processes and Corporate Systems, having entrusted the tasks and actions associated with cybersecurity globally for the entity.

Within the TRANSFORMA 2030 PLAN, the strategic objective of Cybersecurity within the Security Pillar was included, "Protecting Information Systems IT (Information Technologies) and OT (Operation Technologies)", against intrusions and aggressions; and, where appropriate, minimize its impact on the activity.

Cybersecurity is one of the biggest concerns of public entities and companies around the world. The security incidents to which the Spanish Public Administration systems are exposed are becoming more numerous every day, and they are also easy to carry out and spread through the Internet. Moreover, the importance of cyber-attacks is especially relevant in the railway sector, with railway infrastructure managers being critical operators in accordance with the provisions of current regulations.

As such, cyber security represents another of the fundamental pillars of safety within Adif-AV and forms part of one of the strategic objectives, in order to protect its information systems against intrusions and aggressions and, should they occur, to minimize their impact on the activity.

The railway sector has become hyperconnected in just a few years, which has meant the introduction of new emerging risk factors. For this reason, Adif-AV has the strategic objective of guaranteeing the integrity, availability and confidentiality of both the organization's information and the systems, communications and technologies that support the different business processes, with teamwork being essential in all areas.

#### INTEGRAL INFORMATION SYSTEMS SAFETY PLAN (PSISI)

The Integral Information Systems Safety Plan (PSISI) was created with the objective of defining a corporate model for Information Security Management with an integral scope, establishing the bases for a process of continuous improvement that guarantees the security of both information and the systems, communications and technologies that support the different services of the Organization.

The PSISI encompasses both IT and operational environments that fundamentally support Adif-AV's business and are of a very heterogeneous nature. For the control and monitoring of the project, a Steering Committee, a Technical Committee and an Operational Working Group were set up, all of which are responsible for identifying assets, developing, supervising and approving the actions that have made it possible to ensure the objectives set out in the Plan. In addition, a risk analysis of the company was carried out, in order to identify vulnerabilities and the level of maturity of the company, establishing action plans to mitigate the risks.

During 2019, a contract has been formalized to protect the Spanish railway infrastructure against cyber-attacks, providing service and support to the two main areas: GRC Area (Governance, Risk and Compliance) and Operations and SOC Area (Managed Security Operations Centre).



During 2020, the regulatory framework will be developed and the Governance Model will be implemented

In 2019, the president of Adif and Adif-AV, Isabel Pardo de Vera, signed the new **Information Security Policy**, which will guarantee a more cybersecure railway infrastructure system, in accordance with current legislation: Royal Decree-Law 12/2018, of September 7th, on Network and Information Systems Security, transposing the NIS (EU) 2016/114 directive and Royal Decree 3/2010, of January 8th, which was modified by Royal Decree 951/2015 regulating the National Security Scheme.

## **5.4. Service improvements**

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In order to carry out its functions under the highest quality standards, Adif-AV has a highly qualified team and the technical means necessary to carry out its construction, maintenance and operation activities. In this context, the Entity works to:

- Guarantee traffic safety in coordination with other entities with responsibilities in the area of safety.
- Apply criteria of efficiency and sustainability from an economic and environmental point of view in the planning, design, construction and maintenance of railway infrastructures, with the aim of guaranteeing the highest possible degree of safety, reliability and availability.
- To optimise the quality of service by ensuring the quality and reliability of projects and supplies, while minimising the cost of maintenance and the life cycle of the installations.
- To guarantee the availability of the infrastructure and provide railway operators with the maximum reliability of the installations.
- To apply quality, safety and environmental criteria with employees and workers.
- To promote the development of technology to manage railway infrastructures, both in new and existing ones.

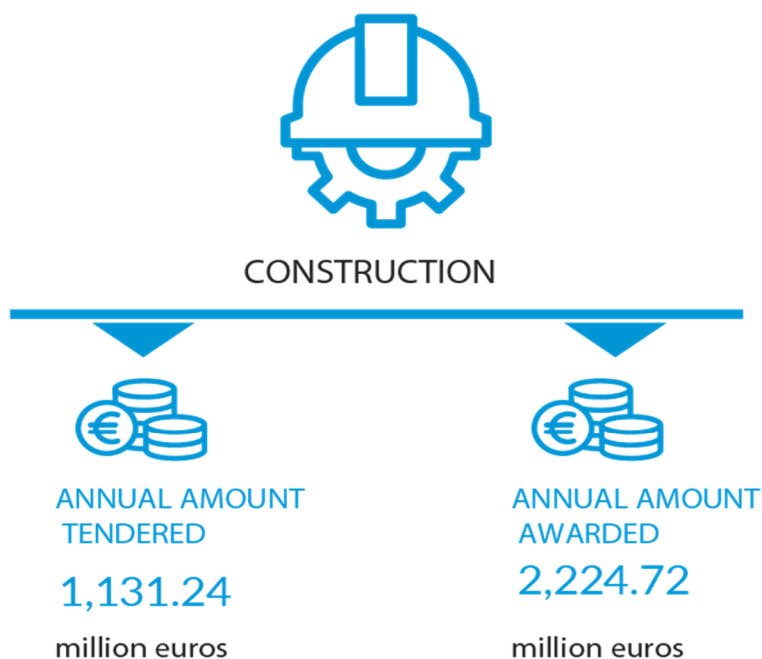
These activities are certified in accordance with the main quality, environmental and occupational safety standards, so that they are in line with its commitment to society.

### **5.4.1. Construction**

During more than 25 years of history of high speed in Spain, one of the most modern and advanced railways of this type in the world has been developed. This infrastructure has generated development, improving the structure of the country and the quality of life of the people.

At present, Adif-AV's strategy continues with the objectives of structuring the territory and social cohesion, taking advantage of the European funds given to the projects currently underway, and allowing their completion.

Adif-AV closed the 2019 financial year with an investment budget of 1,199.5 million euros (VAT included), of which 1,110.22 million euros refer to the construction of new lines and the rest to the replacement and improvement of assets in operation.



## MAIN CONSTRUCTION AND INFRASTRUCTURE IMPROVEMENT ACTIVITIES

The following is the status of some of Adif-AV's most important construction works.

- Madrid-Extremadura High Speed Line: Work continues on the platform of the works between Talayuela and Badajoz. On the Plasencia - Cáceres - Badajoz section, the platform is almost complete, and track assembly, electrification and signalling work has begun.

Work has begun on the architectural actions in the stations of Cáceres, Mérida, Plasencia and Badajoz.
- Antequera-Granada High Speed Line: the works were completed and put into service on 25 June 2019.

Work is underway on the conventional-gauge access to Antequera station and platform work will soon begin between Quejigares and Variante de Loja.
- León-Asturias High Speed Line (Pajares Bypass): during 2019, all platform works were completed and electrification, civil protection, energy and safety and communications installations have continued.
- Almería-Murcia High Speed Line: there are 4 sections with platform works completed between Vera and Los Arejos and platform works have begun on another 10 sections
- High-speed line to Galicia: work has been completed between Zamora and Pedralba de la Pradería, pending commissioning.

On the Pedralba de la Pradería - Taboadela section, almost all the platform work has been completed, and work has begun on track assembly, electrification, civil protection and telecommunications installations.

Track assembly, electrification, signalling and telecommunications works have also commenced on the Taboadela - Orense section.



### **Asset Management Platform (AMP)**

Adif-AV has an Asset Management System based on the ISO 55000 standard, with a systematic process of operation (PR 110 Asset Strategy), which allows the updating of the organization's assets in a profitable way during the whole life cycle, where engineering and mathematical analyses are combined with good business practices and economic theory.

Today, Asset Management (AM) is a reference in the transformation of companies towards excellent management models both within and outside the railway infrastructure sector. Although sustained for more than 20 years, its development has experienced a qualitative leap thanks to standards such as PAS 55 (2008) or the more recent ISO 55000 (2014). The latter has become the fundamental guide for achieving "best in class" asset management at an international level, establishing the 4 foundations on which asset management is based:

1. **Value:** the assets must provide value to the organization and its stakeholders.
2. **Alignment:** organizational objectives must be translated into technical and financial decisions, plans and activities.
3. **Leadership and commitment** of all management levels.
4. **Ensuring that assets serve their purpose.**

Adif-AV currently has an Asset Management Platform (AMP), implemented for the conventional Iberian-wide network, which allows the updating of the organization's assets in a profitable way during their life cycle.

In order to reinforce a knowledge-based management culture that allows maximum value to be obtained from the company's assets, taking advantage, now and in the future, of the gradual integration of new capacities, techniques and technological tools, in 2019 the asset management process implemented in ADIF was consolidated and evolved along three lines of work:

- Integration of the Strategic Infrastructure Asset Management Process (ADIF-PR-110-001-001) into the ADIF Integrated Management System through the preparation of relevant procedures and technical instructions.
- Study and analysis for inclusion of standard and metric gauge network in the asset management process.

Begin design and implementation of a corporate asset management model certifiable to ISO 55000 and a new maintenance management model resulting from the review of the current maintenance model and the requirements and criteria established by the asset management model.

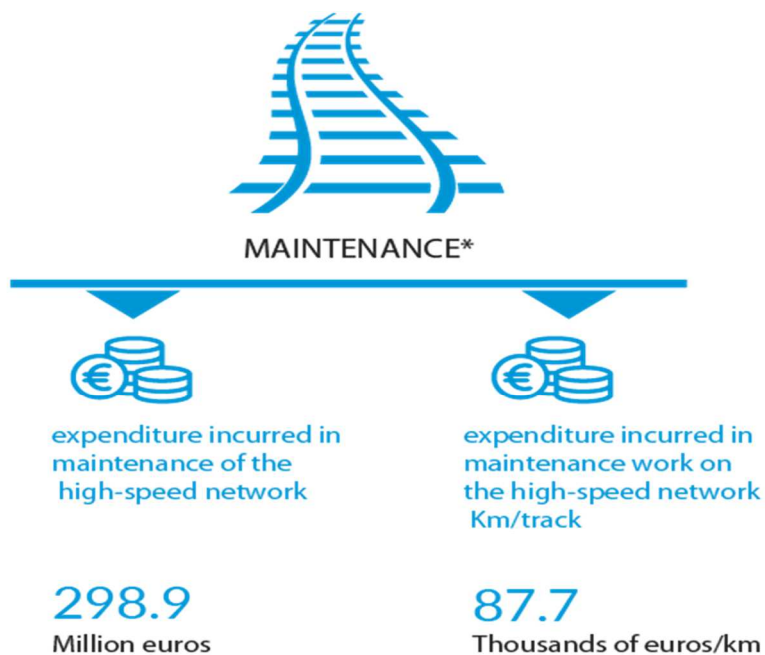
### **5.4.2. Maintenance**

In the maintenance of the infrastructures owned by Adif-AV, the Entity focuses its resources, both human and technical, on the activities that provide the greatest value, optimizing preventive maintenance, managing inspection activities more efficiently and reducing incidents. All this makes it possible to offer transport operators maximum availability of railway facilities.

Adif-AV allocates both human and technical resources to carry out maintenance activities, with the aim of optimizing preventive maintenance, managing inspection activities as efficiently as possible, thus reducing incidents.

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

The total expense incurred in maintenance work on the high-speed network was 281.2 298.9 million euros in 2019 (excluding VAT).



\* amounts without VAT

### MAIN SAFETY ACTIVITIES

- On the High Speed Line Cáceres - Badajoz: 100% execution of the laying of optical fibre cable. The Plasencia-Cáceres Phase II Project has been drafted and supervised and is currently being executed.
- On the Antequera-Granada High Speed Line, work has been completed on fixed telecommunications and the commissioning of all the networks.
- On the Olmedo-Zamora-Lubián-Orense High Speed Line:
  - 60% of all the trunk fibre optic lines have been laid
  - 60% of the buildings are equipped with the elements that make up the telecommunications networks
- On the Chamartin-Atocha high-speed line, work has been completed on fixed telecommunications and the commissioning of all the networks.
- On the Monforte del Cid-Murcia High Speed Line, access to Murcia has been implemented and the El Reguerón - Murcia section is in service.
- On the Valladolid-Burgos High Speed Line, fibre optic cable has been laid on the Arlanzón River viaduct since February, thus completing the installation to Burgos.

### KEY ENERGY ACTIVITIES

In the area of Electrical Energy Management, ADIF-Alta Velocidad managed the supply of electricity to 3,402 supply points in 2019, with an incoming energy consumption of 2,830 TWh. This represents 99% of consumption, and corresponds to a total of 1,255 supply points equipped with telemetering systems, for which the following average costs were obtained:

Cost of Energy:	63.72 €/MWh
Cost of ATRs:	36.30 €/MWh
Total cost consumed MWh:	100.02 €/MWh

The remaining 2,147 supply points, which represent 1% of consumption, correspond to low voltage supply points with very low consumption demands, which are not equipped with telemetering systems, and for which a total cost of 174.76 euros/MWh has been obtained (energy and TPA included).

In 2019, progress has continued to be made in obtaining resolutions from the Ministry for Ecological Transition for the economic recognition of compensation for train braking energy returned to the electricity system in the UIC network, obtaining authorisation in October 2019 for 10 substations corresponding to the Madrid-Valladolid, Córdoba-Málaga and Galicia lines, which began on 1 December 2019. With these 10 authorised substations, the total number of UIC substations that are compensating for the energy discharged by the braking of railway compositions is 36, which in 2019 has meant a saving of 3.18 million euros (without VAT), corresponding to the compensation for 46.7 GWh of energy discharged.

In October 2019, the tender for the supply of electricity in 2020 and 2021 at non-telemetered supply points was awarded, with the possibility of an extension for 2022. A price reduction of 15.7% was obtained with respect to the period October 2018-September 2019, which represents an estimated saving of 1.35 million euros for the period 2020-2021. It is also worth noting that the contract includes renewable energy certificates.

The remaining 2,147 supply points, representing 1% of consumption, correspond to low voltage supply points with very low consumption demands, which are not equipped with telemetering systems, and for which a total cost of 174.76 euros/MWh (energy and TPA included) has been obtained.

In regards to invoicing with suppliers (retailers and distributors), individualised management of TPA invoices per supply point was consolidated in 2019 after adaptation at the end of 2018 to the exchange procedure between retailers and distributors established by the CNMC. In 2019, 55,907 receipts have been technically checked, representing an estimated turnover of close to 282.3 million euros (excluding VAT).

Within the current framework of liberalisation, the Energy Management sub-directorate has carried out the following work to be able to comply with the milestones established in the implementing regulation (EU) 2018/868 of the Commission of 13 June 2018 with regard to the provisions relating to the energy measurement system and the data collection system:

- The evolution of the Traction Power Supply Additional Service billing mode has been published in the Network Statement allowing billing to more than one operator on UIC lines.

#### KEY ENERGY ACTIVITIES

- In order to comply with transparency and non-discrimination criteria, a tender was launched to define the methodology ("Establishment of the Billing Methodology for the Complementary Service for Traction Current Supply in the ADIF and ADIF-Alta Velocidad Network") that will define billing for the complementary traction current supply service in an auditable, transparent and non-discriminatory manner, introducing the on-board measurement as the billing unit. It is estimated that this tender will be awarded in January 2020.
- On-board Energy Measurement: Standard EN 50463-4:2017 (UNE-EN 50463-4:2018 Spanish version) has been transposed, resulting in Adif Standard NAT 760 on "On-board Energy Measurement Communication", which defines the communications between an EMS (On-board Measurement Equipment) registered with Adif and the DCS (Adif Ground Measurement Concentrator). This standard is expected to be approved by the Standards Committee in January 2020 for publication.
- Based on NAT 760, a study has begun on how the development and/or evolution of the current On-board Measurement Concentrator (OMC) should be. This work will continue throughout 2021.
- On January 1, 2020, ADIF joined the ERESS Association, to provide a system for billing energy consumption based on on-board measurement of traction units. ERESS is a non-profit association that has developed a reliable, flexible, efficient and accurate energy billing system for European railway companies.

#### FIBER NETWORK

In 2019, support services for billing and commercial reporting, development of the Plan Renove and the provision of Professional Services continued to be provided.

The additional income for Adif-AV derived from the actions for the Reintel work amounted to 776,871 euros. Recurring income amounted to 181,118 euros.

More than 1.3 million euro have been certified for the Plan Renove in 2019, with the new cables coming into service in Astorga-Ponferrada, Miranda de Ebro-Orduña and Alsasua-Zumárraga.

### 5.4.3. Exploitation of renewable infrastructure

In regard to the operation of the infrastructures owned by Adif-AV, Adif is the entity in charge of managing the network's traffic, allocating capacity to the railway companies and other candidates, directing and coordinating traffic, programming and verifying installations.

At present, Adif-AV has the following resources for the planning and management of railway traffic:

- 1 capacity allocation department
- 22 Regulation and Control Centres (18 of them in the conventional network and 4 in the high-speed network)
- 1 Network Management Centre H24
- Circulation Cabinets
- Itinerant Traffic Services (SIC)

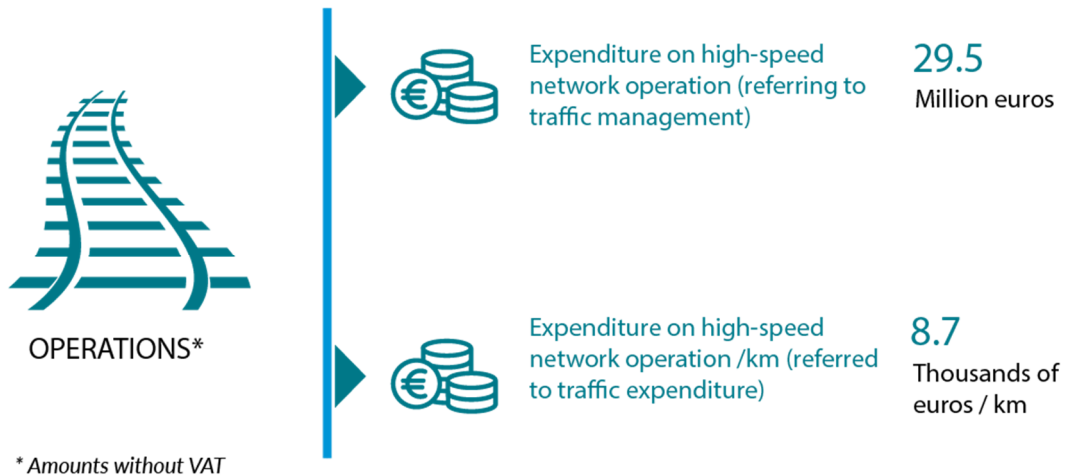
The allocation of capacity to railway companies and the management of the movement of their trains, 24 hours a day, 365 days a year, are aimed at satisfying the needs of these companies, applying non-discriminatory treatment and guaranteeing the safe movement of trains with criteria of optimum use of the railway network.

## H24 NETWORK MANAGEMENT CENTER

This Center, which operates 24 hours a day, 7 days a week, leads and coordinates the territorial areas of circulation and is the central interlocutor with the maintenance and construction areas of Adif, Adif AV and with the railway companies, both to make compatible the temporary restrictions of capacity in the RFIG, which the former generate, with the needs of use of the latter, and to provide a prompt response to contingencies that disrupt the normal development of the Transport Plan and the scheduled execution of works and infrastructure.

It hosts communication representatives and other operational areas of the company in order to coordinate actions and share information in real time.

In order to carry out its management and control tasks, it has computer tools shared with all the Traffic areas and other participants in railway traffic.



Adif carries out the material tasks of traffic management and allocation of capacity also in the network owned by Adif-AV.

The length of the network managed by Adif-AV is 3,456\* km and can be summarized as follows

Figures in km/line (data at 31 December)	2017	2018	2019
<b>Total managed network</b>	3,152	3,300	3,456
<b>High-speed network in standard width (UIC)</b>	2,514	2,514	2,619

\*The total network managed is increased by transfers of ownership from Adif to Adif-AV, of Iberian wide and narrow gauge network paths necessary for the development of the high speed network.

On the other hand, the indicators relating to the volume of traffic managed by Adif-AV are as follows

	2017	2018	2019
<b>Circulations (daily average of the number of trains)</b>	747	845	952
<b>Circulations (total)</b>	272,730	308,390	347,480
<b>Km-train (daily average)</b>	156,019	162,333	169,503
<b>Km-train (total)</b>	56,946,995	59,251,500	61,868,768

Throughout 2019, there has been a slight increase in traffic on the General Interest Railway Network, RFIG, managed by Adif and Adif-AV, increasing passengers by 0.04% and freight by 1.24%.

## Station Management

The management of stations is a fundamental element in the development of rail transport, since it is through these infrastructures that Adif completes the quality service to passengers, railway operators and commercial operators. The design, construction, maintenance and operation of railway stations is carried out with integral sustainability criteria (innovation, safety, efficiency, intermodality, accessibility, etc.), taking into account the entire life cycle of these infrastructures and the provision of services with high quality standards:

- Correct operation and sizing of the facilities (cleaning, maintenance, conservation, air conditioning, etc.).
- The creation of safe environments.
- A commercial offer adapted to the needs of the clients and the city.
- Adequate information related to the station and the services offered therein, in Spanish and, where appropriate, in the co-official languages of the respective Autonomous Communities.

In 2019, Adif/Adif-AV owns **1,495 stations** (42 are AV). Of these, **639 stations are managed by these entities**, and **in 856 the management has been entrusted to Renfe Operadora** by virtue of the Agreement for the provision of services in suburban stations, signed by both entities in September 2011.

## Liberalisation of passenger transport

2019 has been the year in which the first steps have been taken towards the liberalisation of passenger transport, the main issue on which we are focusing in order to fulfil the commitments before December 2020.

In this sense, throughout 2019, work has been carried out to define those commercial services in passenger stations that have been offered in the Network Declaration in order to enable the entry of new transport operators in the rail passenger transport sector.

Specifically, work has been done on the preparation of the catalogue of services where the aspects related to the services provided in the area of passenger stations have been developed; as well as on the description of the services offered in these stations (preparing an information sheet for all stations), the procedure for requesting and awarding services, the prices applicable

for their provision, the general principles and conditions that regulate the operation process of passenger transport railway companies. The document prepared as a result of this work has been published on the Adif website as part of the Network Declaration, and will serve as a starting point for 2020, when the particular needs of each operator will be specified and work will have to be done to be able to provide service to all of them efficiently.

### **Digital transformation of the stations**

Although in 2018 the digital transformation of the stations began, with the definition of the **Digital Transformation of Passenger Stations Plan** based on the customer's experience and supported by the new technologies available, 2019 has been the year in which the digital transformation begun has begun to take shape, seeking to evolve towards personal stations, with better service to customers, more competitive and containing multidimensional concepts, stations in which, in addition to travelling, it is possible to work, enjoy oneself, become cultured, etc.

In collaboration with the D. of Digital Transformation and Systems, the **Digital Transformation Office (DTO)** has been designed, with the mission of launching and monitoring the initiatives defined in the Plan, defining its competencies, processes, operational and monitoring relationship governance models, and formally beginning its activity in the month of May, with meetings of the Strategic Committee held since then, Technical Committee, creation of a collaborative space, development of the scorecard, workshops and monographs, so that of the 41 initiatives, work has been done mainly on 20 initiatives (1 completed, 7 launched and 12 in progress) such as, among others, the identification of cars on platforms, new digital formats, study for intelligent guidance, Adif Space or **Neuronal Centre of Stations**.

Likewise, in collaboration with other Adif departments, the use cases to be deployed in Malaga María Zambrano station during the years 2020 and 2021 have been defined (improvement of Wi-Fi service in station, transparent biometric access in station, personal digital railway record and BIM-5G) for the public call for RED.ES aid for the development of **5G technology pilot projects** in the Autonomous Community of Andalusia.

### **Milestones in 2019**

In addition, other actions have been taken in 2019:

- In relation to the centre **VIALIA Vigo station**:
  - Beginning of the construction and commercialization, by the awarded CEETRUS, of the centre **VIALIA Vigo station**. The shopping centre integrated in the railway station has 35,000 square meters of profitable surface and becomes a reference for the city of Vigo.
  - Drafting of an addendum to the agreement and pooling with the administrations involved for the accesses and new urban viability, which will be signed at the beginning of 2020
  - Approval of the Access construction project, allowing the Xunta de Galicia to begin work on the bus station.

In short, during 2019 work has been coordinated in order to maintain the objective set by the three administrations of completing the works in April 2021.



- Other **commercial actions**:
  - Tender for consultancy contract to establish the **commercial strategy for passenger stations in the future**, carried out in the second half of 2019. Faced with the challenges of the described process of liberalization of passenger transport by rail, Adif must define a new commercial model that will provide solutions to the new scenario of entry of new railway companies and the corresponding increase in capacity. Likewise, to position the commercial activity of Adif stations with a reference commercial model in the "retail" sector in our country and at an international level in the "travel" sector. At the same time, progress has been made in the tool of large digital formats in which a museum concept of video art is linked, Atocha Visual Art, which relates the station to a new digital cultural concept, and which will serve as the basis for the drafting of a Madrid Puerta de Atocha Master Plan, one of the first works to be developed by the consultancy firm.
  - Development of the **Adif-AV's Ecomilla brand**, which aims to create zero emission areas around the stations, to encourage sustainable mobility in the first and last mile of passengers (transfer from the initial destination to the station and from the station to the final destination). As a result of this development, the pilot test of the Ecomilla project will be implemented at the Madrid Puerta de Atocha station.
  - Carrying out work on the marketing of new products that help to improve the perception and satisfaction of our customers:
    - Continued implementation of new "multistore" premises under the umbrella brand of Adif **MASCOSAS** (implemented in 3 new stations), has meant a consolidation of this new commercial format implemented just two years ago. This brand unifies the restaurant and shop activities in a single location operated by a specialized operator. Five stores currently operate under this brand.
    - Continued implementation of the **new consignment service**, which has been consolidated with the establishment of premises in Barcelona Sants and, following a new tender process, the service of paid toilets in the stations has been extended.
    - **SAP Real Estate computer application** for managing the property inventory of the Station Management, an interface has been developed in 2019 to reconcile it with SAP Financial, which will enable the economic management of the buildings of the aforementioned Management.
    - implementation of the social **"co-working" activity** for the first time in one of our stations (Maria Zambrano road station).

In regards to improving stations from the point of view of the building, during 2019 the activity has focused on drafting projects and executing works to improve their functionality and operation, optimising the performance of the facilities and increasing their useful life, with special emphasis on improving accessibility and the use of new technologies so that the stations evolve towards the concept of intelligent installation.

In 2019, an investment of 25.87 million euros (including VAT) has been made in the drafting and execution of works, of which **12.7 million euros (including VAT) correspond to actions related to accessibility**. Currently 85.07% of passengers transit through accessible stations.



- **Improvement of the functionality and operation of the stations**, drafting of projects and execution of works, giving continuity to the work required by the transfer of the sales channel by Adif to Renfe Operadora, in which it is necessary to undertake the separation between the sales premises leased to Renfe Viajeros and the rest of the premises owned by Adif and, above all, with a view to the new needs deriving from the liberalisation mainly in the high-speed stations of Madrid Puerta de Atocha, Madrid Chamartín, Barcelona Sants and Sevilla Santa Justa.
- **Improvement of station accessibility**, execution of complex works to extend platforms to allow the construction of underpasses or overpasses with lifts or ramps that in many cases affect the track and must be resolved without interrupting normal station service.

In this sense, both in the entity's own assets and those derived from the management assignments signed with Adif Alta Velocidad, important works have been completed to improve accessibility in Areta, Barcelona França, Portbou, Valencia Nord, Xeraco, Villarrobledo and Cabeza de Buey, as well as emergency works for the rehabilitation of the roof in Barcelona França, the adaptation of the air conditioning installation in Zaragoza Delicias or small adaptation actions with a view to liberalization in Chamartín and Barcelona Sants. In addition, projects have been completed such as the improvement of platform evacuation at Barcelona Sants, expansion of the Cádiz car park, improvement of accessibility at Legazpi, preliminary project for the refurbishment of the Barcelona Plaza de Cataluña station or improvement of the Torre Pacheco station. Finally, important others have been initiated, such as the new Albal station or the improvement of the accessibility and evacuation of Madrid-Recoletos.

- **Optimisation of station maintenance and increased control** of stations in a centralised and remote manner, mainly through progress in the execution of work for the remote management of passenger stations and the commencement of work on the implementation of the future Neuronal Centre of Stations, with actions having been carried out in 35 stations, intervening in basic service installations, mainly for the opening and closing of access doors, lighting or intercoms for communication with customers. In addition, tenders have been prepared for another 13 and a technical assistance support for the process of drafting the project and execution of the centre, as well as the associated systems and actions at the stations.
- Definition of the **model for a multipurpose fibre network in Passenger Stations**, which has been specified in the tender (at the end of 2019) for the "Drafting of construction projects, execution of work and maintenance of fixed telecommunications and Wi-Fi networks in Adif and Adif AV passenger stations" to be implemented in 2020-2021.

Finally, another milestone of great impact for the improvement of the safety of crossings between platforms, responding to the **"Technical Recommendation 7/2018 of the State Railway Safety Agency on Crossings between Platforms for Passengers"** of 31 October 2018, is the tender and awarding in 2019 of the framework agreement for the adaptation of crossings (lighting, signalling, tactile pavement, etc.), which sets the prices to be applied in the building works to be carried out, as well as the supply and installation of signs, and technical assistance for the drafting of projects and their optional management. In 2019, 12 of the 26 projects have been drafted in accordance with the lots in the framework agreement. With regard to signals, the class 1P measure of passive protection relating to signal actions has been implemented, covering 396 stations, and the class 1-A1 measure of active protection warning the user of the arrival of trains has been implemented, covering 255 passenger stations, and a total of 615 signals have been installed, whose installation work did not affect the traffic safety gauge, and 3 have been delivered and collected. 522 signals to be installed in 2020 along with the actions, contracted in 2019, for beaconing and lighting on platforms at track crossings.

Furthermore, in the **quality surveys** carried out during 2019 on the services provided in high-speed and conventional stations, the overall rating obtained is 7.76 out of 10, exceeding the 2018 rating.

## **5.5. The environment and the fight against climate change**

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Adif-AV has always taken into account the integration of environmental criteria in its business management. Proof of this is the existence of documents such as the Environmental Policy, or the Code of Ethics and Conduct. The PT2030 places the environment as one of the priorities of the business strategy. This is reflected in Strategic Objective 17 on the Environment and Climate of the Sustainability Pillar, which aims to contribute to transport that is respectful of the environment and responsible in the use of resources.

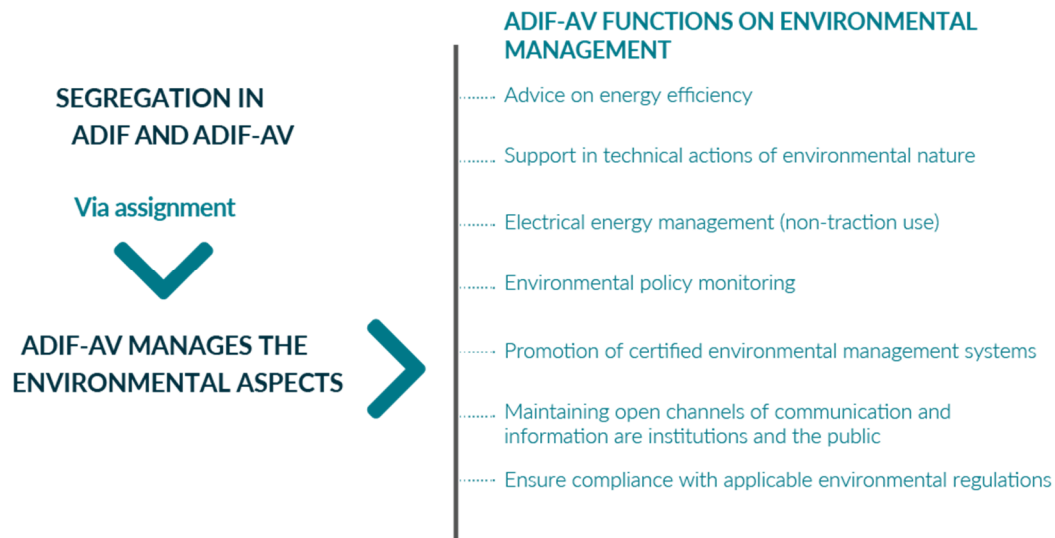
Although it is true that railway represents an environmental advantage over the use of other means of transport due to its low impact on pollution and its low emissions of greenhouse gases, Adif-AV is aware of the negative impact that its works generate on the environment. For this reason, the Entity understands the importance of ensuring environmental prevention and monitoring.

### **5.5.1. Environmental Management**

The aspects related to business sustainability and energy efficiency are managed by Adif's Strategy Department, while the operational aspects are handled by Adif-AV's Environmental Sub-Directorate.

Thus, the strategy and environmental policy of Adif-AV is defined jointly by the Sub-directorate of Corporate Responsibility and Sustainability, belonging to the strategy area of Adif, and the Sub-directorate of Environment of Adif-AV.

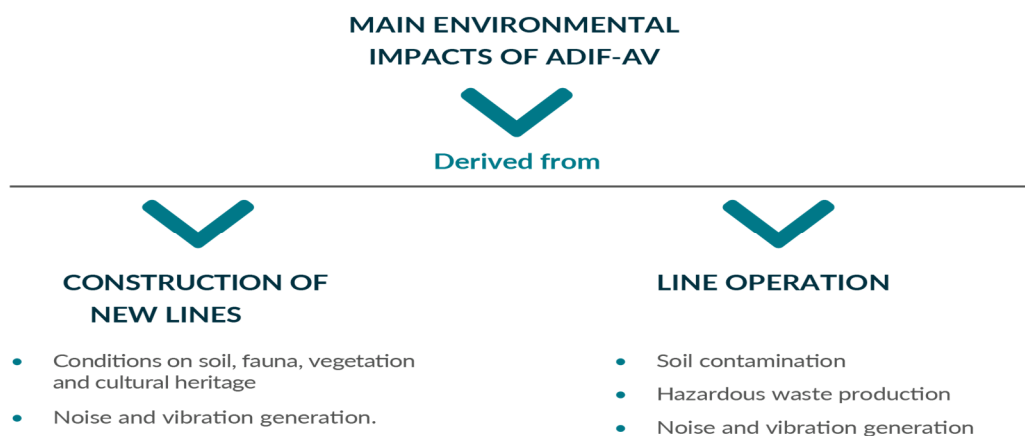
It is Adif-AV that, after the segregation into Adif and Adif-AV, and via the assignment, implements and supervises this policy in both Adif and Adif-AV. Adif-AV also provides other environmental management services to Adif.



The Adif-AV's General Procedure for the Management and Coordination of Environmental Activities sets out the guidelines to be followed for environmental management at an internal level, in order to reduce environmental risks, optimise available resources and define guidelines for action.

The entity has developed an Environmental Management System, in order to prevent, mitigate, correct or compensate for the environmental impacts derived from its activity. The objective of this initiative is environmental legal compliance, as well as the preservation of the environment and biodiversity.

This Environmental Management System begins with the identification of those environmental aspects derived from Adif-AV's activity and which are mainly due to the operation of the new lines, including the circulation of trains and the conservation and maintenance of the infrastructures, installations and stations associated with them, as well as those derived from the construction activities of new lines.



Adif-AV's Environmental Management System is based on the ISO 14001:2015 Standard and is certified by AENOR. With this certification, Adif-AV ensures to:

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

- Guarantee compliance with the environmental legislation applicable to the scope of certified activities and centres.
- Establish and implement objectives of continuous improvement in the scope of the certified system that allow to improve the environmental management of these activities.

The scope of this certification covers the following aspects of Adif-AV's activity:

- The direction and coordination of the drafting of studies and projects of the railway infrastructure and installations of the High-Speed Network.
- The control and monitoring of compliance with the environmental conditions established in the Environmental Impact Statements (EISs), in the Environmental Monitoring Plans and applicable requirements in the construction activities of the High-Speed Network's railway infrastructure and installations.
- The management of the maintenance of the high-speed railway platform, track and facilities.
- The operation of high-speed passenger stations.

The relevance of environmental management in the development of business activity is supported as a strategic component in the Integrated Risk Management model, requiring the corresponding periodic monitoring and control from the perspective of risk management. For this purpose, Adif-AV allocates specialized human resources which, together with its Environmental Management System, allow for the minimization of any negative impact.

As a result of the Entity's good environmental practices, **no serious or very serious environmental administrative penalties imposed on Adif-AV have been recorded during 2019.**

### VOLUNTARY INITIATIVES

With a firm commitment to act in line with the protection of the environment, Adif-AV carries out various actions and participates in different voluntary initiatives with third parties to promote respect for the natural environment and minimise the environmental impacts derived from its activity. The main actions aimed at protecting natural resources in the area of the railway infrastructures it builds, maintains and operates are as follows:

- Monitoring the consumption of natural resources: Adif-AV periodically prepares indicators on the consumption of water, energy and fuel.
- Approval of ballast quarries: Adif-AV has a list of quarries that have an Environmental Impact Study and the corresponding Restoration Plan.
- Use of solar energy: Adif continues to develop actions for the use of this type of renewable energy that contributes to sustainable development without affecting the quality of air and soil.

Historically, Adif-AV has participated in various initiatives to improve knowledge of both the natural environment and the impact of its activities on it. Adif participates in the activities of the UIC (Union Internationale des Chemins de Fer) Environment, Energy and Sustainability Platform.

### 5.5.2. Sustainable use of resources

Adif-AV consumes different resources necessary for the development of its activity. In order to develop good environmental practices and with the support of its Environmental Management

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

System, the Entity aims to minimize, as far as possible, the consumption of resources necessary for the development of its activity, as well as the impact of its activities on the environment.

The main resources used are related to the consumption of energy, water, materials, atmospheric emissions, soil contamination, waste management and other significant potential impacts.

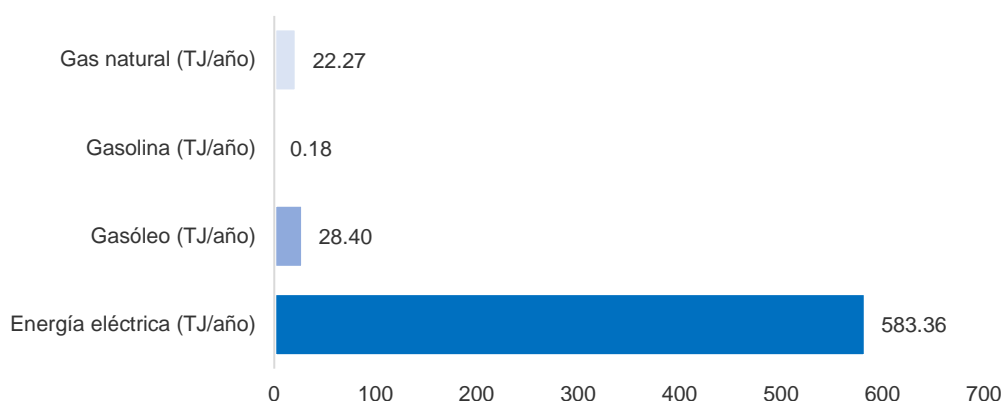
### Energy consumption

Energy consumption in Adif-AV's own activities comes mainly from electricity (92%). To a lesser extent, there is low consumption of diesel (4.5%) and natural gas (3.5%). Finally, there is practically no consumption of petrol (0.03%).

Type of Energy/Fuel	2017	2018	2019
Electrical power (TJ/year)	531.56	570.79	583.36
<b>Traction Uses (UT)</b>	218.34	254.39	267.10
<b>Non-Traction Uses (UDT)</b>	313.22	316.40	316.27
Diesel fuel (TJ/year)	28.59	26.73	28.40
<b>Diesel A - Automotive</b>	1.29	1.21	1.21*
<b>Diesel B - Maintenance Track</b>	26.30	8.46	10.02
<b>Diesel B - Manoeuvres to Workshops</b>	0.00	0.00	0.00
<b>Diesel B - Oper. Terminal Assistants</b>	0.00	0.00	0.00
<b>Diesel B - Manoeuvres Stations</b>	0.00	16.77	17.17
<b>Diesel C - Heating</b>	1.01	0.28	0.00
Gasoline (TJ/year)	0.00	0.18	0.18*
Autogas (TJ/year)	0.00	0.00	0.00
Natural Gas (TJ/year)	40.67	35.85	22.27
<b>TOTAL</b>	<b>600.82</b>	<b>633.56</b>	<b>634.22</b>

\* 2018 values. To be updated.

### ENERGY CONSUMPTION BY TYPE OF FUEL



As can be seen in the graph, energy consumption in Adif-AV's own activities comes mainly from electricity.

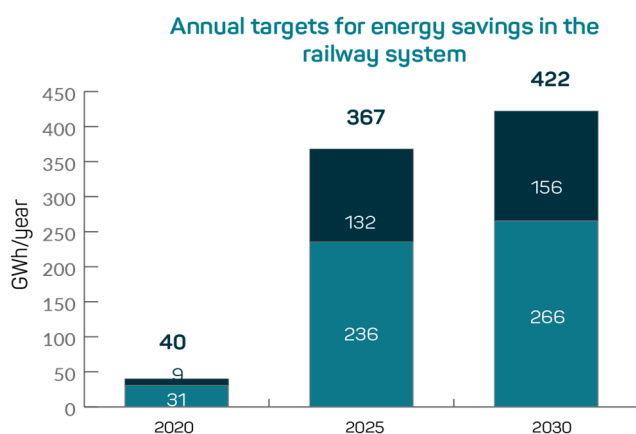
One of Adif's strategic objectives is to improve energy efficiency, which translates into a reduction in energy consumption (GWh equivalent). This year, 2019, thanks to the implementation of the

actions derived from **Adif's Plan to Combat Climate Change and Adif-AV 2018-2030**, as well as the measures implemented since 2009 as a result of the previous Energy Saving and Efficiency Master Plans, the following data on energy savings in the railway system have been obtained, both for traction and non-traction use:

	2017 (GWh/year)	2018 (GWh/year)	2019 (GWh/year)
UT (traction use)	56.36	56.36	77.86
UdT (non-traction use)	25.09	25.11	25.70
<b>TOTAL</b>	<b>81.45</b>	<b>81.47</b>	<b>103.56</b>

**103.56**  
GWheq/year of  
energy consumption  
saved since 2009.

In terms of energy savings, the aforementioned Adif and Adif-AV Plan to Combat Climate Change for the period 2018-2030 has established the following goals for three different times:



Through the implementation of the projects included in this Plan, the accumulated reduction in energy consumption estimated for the period 2018-2030 is a total of 2,900 GWheq for both entities.

On the other hand, indirect consumption of primary energy is mainly attributed to electricity consumption. Thus, the following table shows the indirect consumption derived from the final consumption of electrical energy, broken down by type of primary energy source

Primary energy sources (TJ/year)	2017*	2018*	2019
<b>Coal</b>	267.49	263.86	80.22
<b>Natural gas and fuel</b>	-	-	-
<b>Combined cycle</b>	212.74	200.23	386.18
<b>Nuclear</b>	350.39	402.34	421.63
<b>Cogeneration and non-renewable waste</b>	193.97	233.92	238.80
<b>Turbination pumping</b>	14.08	14.97	13.06

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

Fossil Resources	1.038.67	1.115.32	1.139.89
Hydraulics	48.32	81.32	133.14
Wind	124.73	116.68	35.30
Solar (photovoltaic and thermal)	35.26	28.29	11.15
Other renewables <sup>2</sup>	11.75	10.02	241.51
Renewable resources	220.07	236.31	241.51
TOTAL	1.258.73	1.351.63	1.381.41

*Note: Values calculated based on data from Red Eléctrica de España on the structure of annual electricity generation on the peninsula.*

*\* Data updated according to methodology applied for 2019.*

### Final and primary energy intensity

Energy intensity is understood as the consumption of final or primary energy (in MJ consumed) per unit of production representative of Adif-AV activity (managed traffic, in km-train).

These two indicators make it possible to quantify the energy efficiency of the Entity's management, in addition to the dependence of energy consumption on the growth of the activity.

	2017	2018	2019
Managed km-train (km-train/year)	56,946,995	59,251,500	61,868,768
Final energy intensity (MJ/km-train)	10.55	10.69	10.25
Primary energy intensity (MJ/km-train)	22.06*	22.57*	23.15

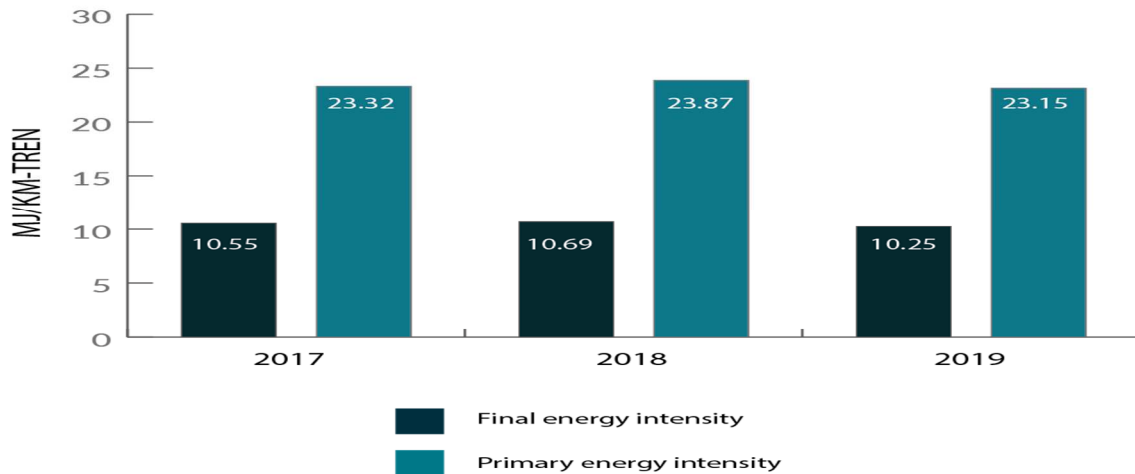
*\* Data updated according to methodology applied for the year 2019*

In spite of the fact that the number of train kilometres managed has been increasing, in the period 2017-2019 a decrease of 0.7% can be observed in the primary energy intensity, with a value of 23.15 MJ/train-km in 2019, 3% less than the previous year.

In the case of final energy intensity, it has decreased by 3% with respect to 2017, reaching 10.25 MJ/train-km in 2019, and 4% with respect to 2018.

<sup>2</sup> Other renewables include biogas, biomass, marine hydraulics and geothermal

## Energy intensity



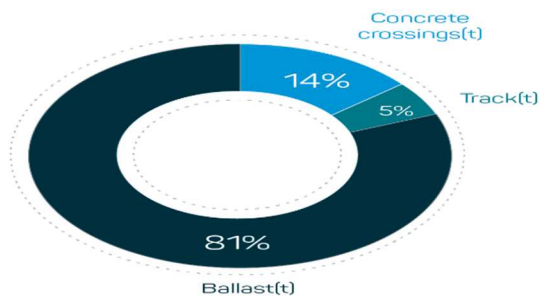
## Consumption of materials in construction and maintenance operations

The final energy intensity is reduced in **Adif-AV during 2019**, which translates into a more sustainable use of energy by the Entity.

The consumption of materials at Adif-AV is mainly concentrated on railway materials used in network maintenance and construction activities, such as sleepers, rails and ballast.

Total railway material	2016	2017	2018	2019
Track (t)	12,356	11,815	21,638	45,947
Wooden sleepers (t)	0	0	0	0
Concrete sleepers (t)	94,488	27,354	64,638	139,102
Ballast (t)	387,275	461,593	638,051	813,005

## MATERIALS CONSUMPTION



Material consumption is reduced mainly to the use of ballast (81%), followed by concrete sleepers, which account for 14% of total material consumption.



## Herbicide consumption

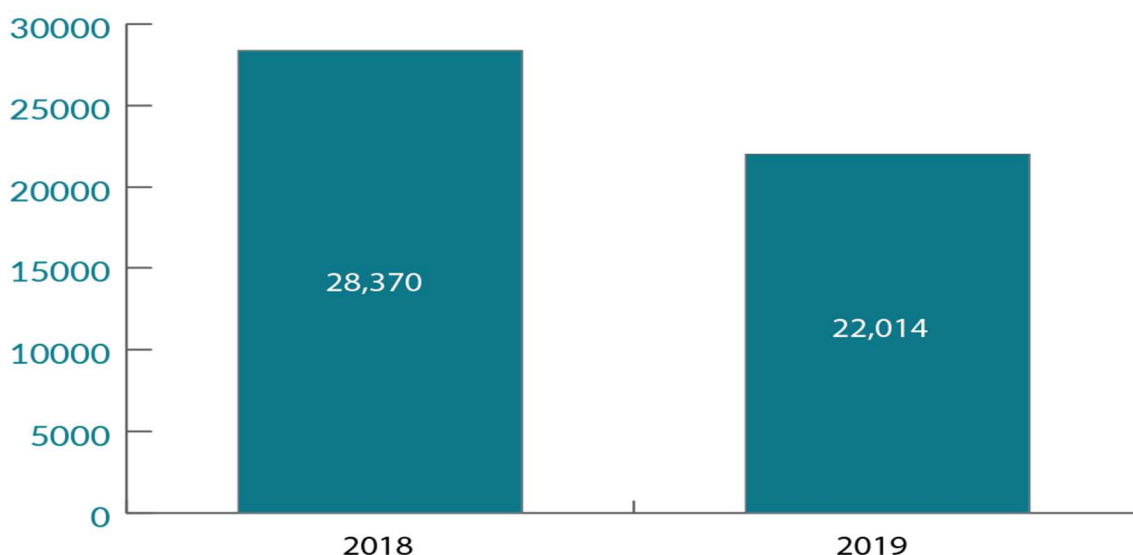
Adif-AV uses herbicides in order to prevent the growth of herbaceous plants in its infrastructure and facilities, the growth of which can generate traffic problems and a greater risk of fires on the edges of the roads. Herbicide consumption per unit of surface treated in 2018 has been reduced by 31% compared to 2017.

*\* Latest available data*

## Water consumption

Water consumption at Adif-AV is mainly due to sanitary use and cleaning of the facilities. The main source of supply is the public supply network, although there is a small consumption from wells.

AMOUNT OF WATER USED (m<sup>3</sup>)



## 5.5.3. Fight against climate change

Adif-AV complies with the current regulations that establish the parameters for atmospheric emissions.

### Emissions from Adif-AV's own activities

The emissions generated by Adif-AV's activity are indirect emissions (from the generation of the electrical energy it consumes) and direct emissions (from the consumption of diesel and natural gas boilers, from the traction motor material and machinery used and those of the vehicle fleet).

These emissions are monitored by calculating the carbon footprint, a tool that enables the greenhouse gas (GHG) emissions associated with the activities carried out by an organisation to be known. These emissions are defined based on two scopes:

## ADIF-AV'S CARBON FOOTPRINT

### Scope 1 emissions

#### DIRECT GHG EMISSIONS

- Oil and natural gas boilers.
- Traction motor material.
- Track maintenance machinery, shunting and auxiliary operations.
- Vehicle fleet usage.

### Scope 2 emissions

#### INDIRECT GHG EMISSIONS

Generation of electricity acquired and consumed by Adif-AV.

The following table shows the CO<sub>2</sub> equivalent emissions (tCO<sub>2</sub>eq/year) for 2017-2019.

		2017	2018	2019
Scope 1	Combustion plants	2,377.07	2,046.72	1,257.14
	Track work, shunting and auxiliary operations	1,870.99	1,795.6	1,934.58
	Vehicles	92.10	99.01	99.01*
	<b>Total Scope 1</b>	<b>4,340.16</b>	<b>3,941.49</b>	<b>3,292.38</b>
Scope 2	Electrical power consumption	38,135.11	34,684.49	25,963.29
<b>TOTAL (tCO<sub>2</sub>eq)</b>		<b>42,475.26</b>	<b>38,625.98</b>	<b>29,254.02</b>

(\*) According to 2018 values

The Adif-AV **Carbon Footprint** in the period 2017 - 2019 **has been reduced by 31.1%, with a 24.3% decrease compared to 2018.**

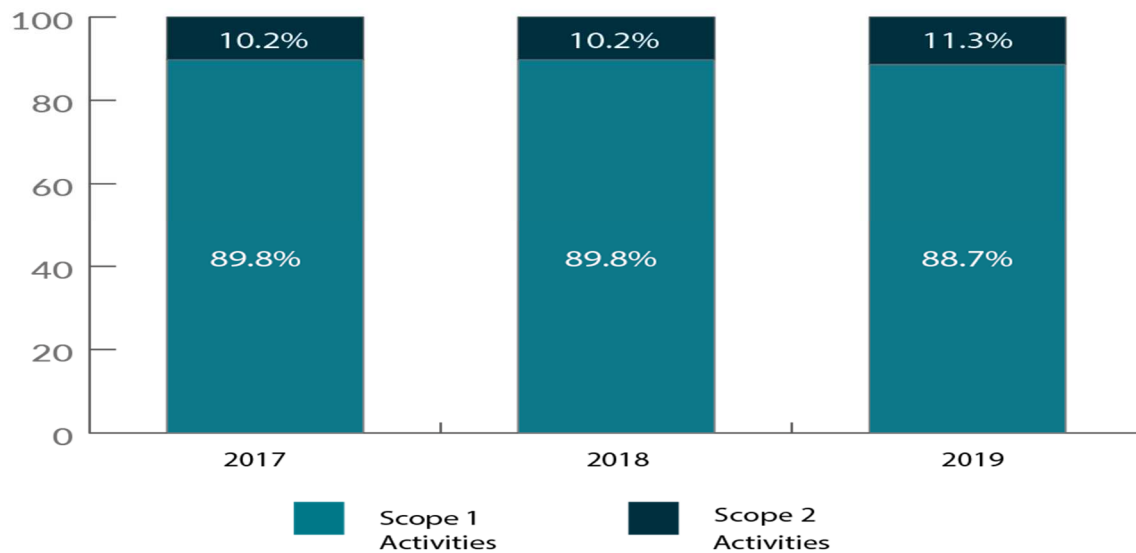
The reduction in the Carbon Footprint compared to 2018 is mainly due to the emissions corresponding to Scope 2 and is explained by the fact that, having recorded higher electricity consumption, the CO<sub>2</sub> emission factor for 2019 has been lower. Likewise, the Footprint decreases in Scope 1 due to lower consumption in combustion facilities, while it has increased in rail vehicles for maintenance, shunting and auxiliary operations.

On the other hand, in 2019, all the electrical energy consumed by Adif has been with **Guarantee of Origin (GoO) certificates**, so if we take this circumstance into account, it is possible to make a calculation of the Carbon Footprint assuming that the emissions corresponding to scope 2 are zero. Thus, in 2019, the Footprint would be 3,292.38 tCO<sub>2</sub>eq, corresponding to Scope 1. This would mean that the reduction with respect to 2017 would be **92%** and **91%** with respect to 2018, which shows the weight of electricity in Adif-AV's energy consumption balance.

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

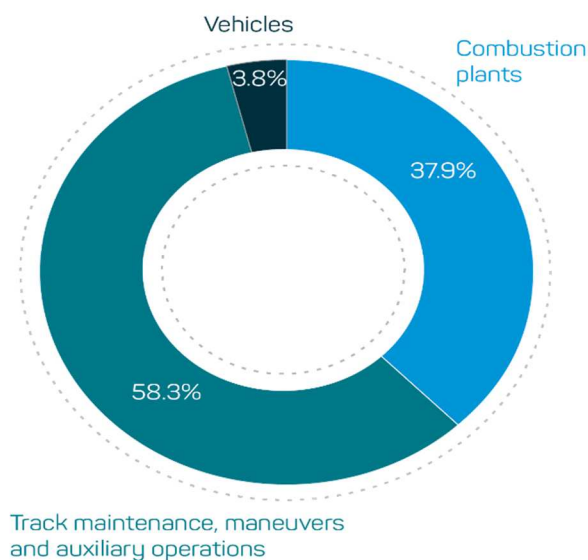
The contribution of the two scopes to the Carbon Footprint is expressed in the following graph:

SHEET1

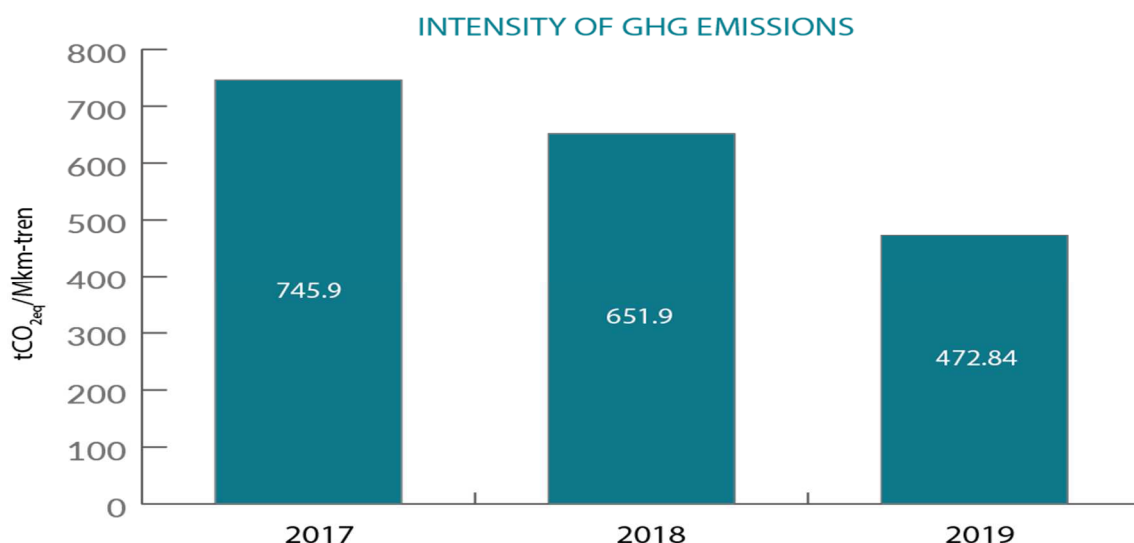


It is noted that the scope 2 is the main contribution with almost 90%. Within Scope 1, activities related to track maintenance, shunting and auxiliary operations are those that cause the greatest amount of direct GHG emissions (58.3%), followed by emissions caused by combustion installations (37.9%).

### SCOPE 1 ACTIVITIES

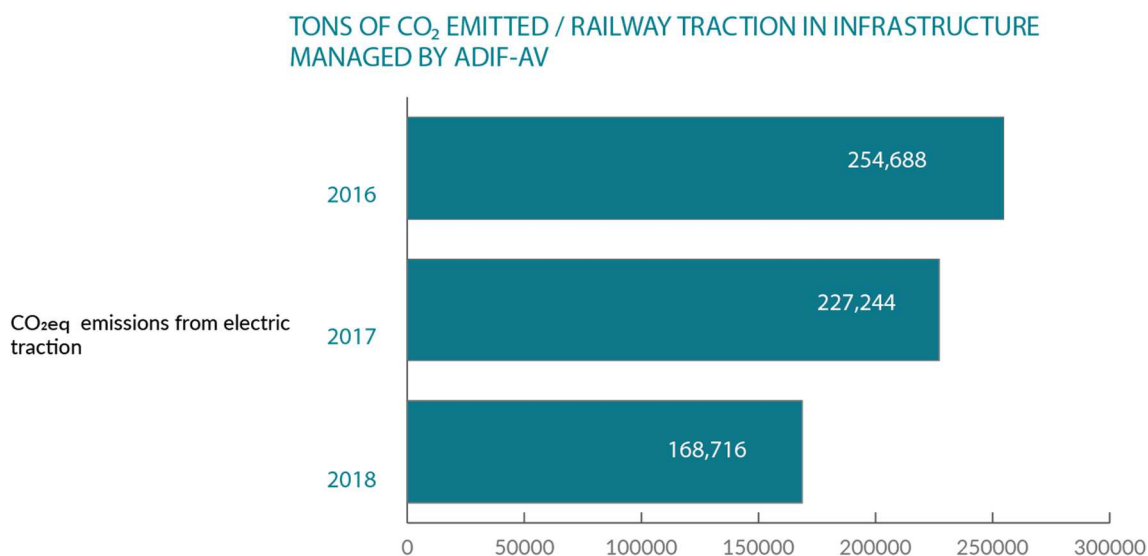


Analysing the emissions and taking into account the representative production unit (Mkm-train), it can be seen that the intensity of GHG emissions has been reduced by 27.5% in the period 2018-2019 and a decrease of 36.5% since 2017.



## Railway traction emissions in infrastructures managed by Adif-AV

In the case of the high-speed network, there is only electricity consumption by the railway operators, so the emission of greenhouse gases is indirect and related to the generation of this electricity consumed. The evolution of these emissions for the 2017-2019 series is shown below:



In the period of 2017-2019, emissions generated by electric traction were reduced by 34%. These emissions are not produced during the operation of the railway, but originate from the electricity generation facilities, a situation that makes them dependent on the peninsular electricity generation system (whose scheme varies annually).

## Adif and Adif-AV 2018-2030 Plan to Combat Climate Change

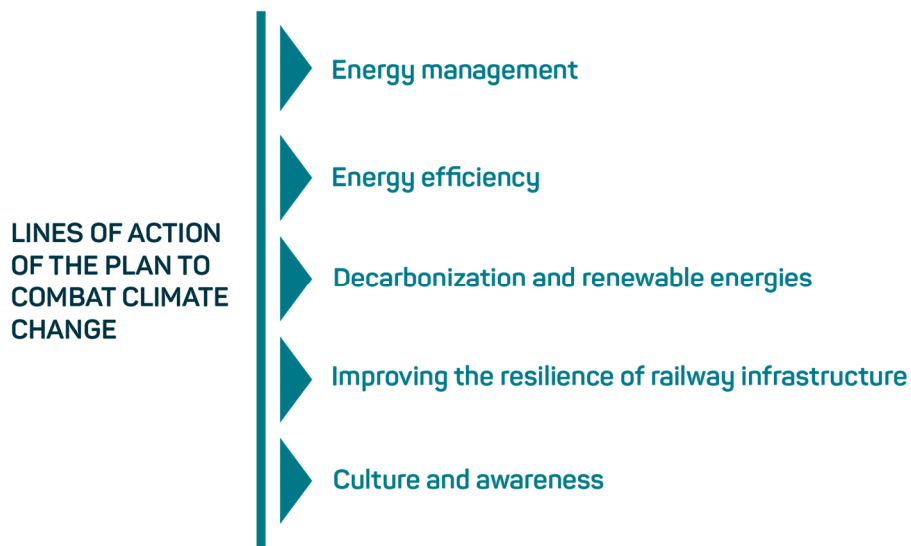
In the area of climate change mitigation, as mentioned in previous sections, Adif had a Master Plan for Energy Saving and Efficiency 2014-2020 that has allowed for a reduction in CO<sub>2</sub> emissions thanks to the development and implementation of measures that have achieved savings in energy consumption since the previous Master Plan began to be implemented in 2009.

On the basis of this Master Plan, and taking advantage of the experience and knowledge acquired, work has been carried out in 2018 to draw up a **Plan to Combat Climate Change 2018 - 2030** common to both Adif and Adif-AV which, since its approval in the first quarter of 2019, has replaced the Energy Saving and Efficiency Master Plans 2014 - 2020 of both entities.

The purpose of this Plan is to **increase the contribution of Adif and Adif-AV to the fight against climate change**.

To this end, this Plan, in line with the Plan to Combat Climate Change 2018-2030, drawn up jointly with Renfe, aims to go beyond energy efficiency, contemplating measures for action in the area of decarbonisation of the railway system and increased use of renewable energies. It also includes a line of action related to the field of adaptation to climate change, the aim of which is to improve the resilience of the railway infrastructures managed by Adif and Adif-AV.

Thus, the Adif and Adif-AV's Plan to Combat Climate Change is structured along the following lines:

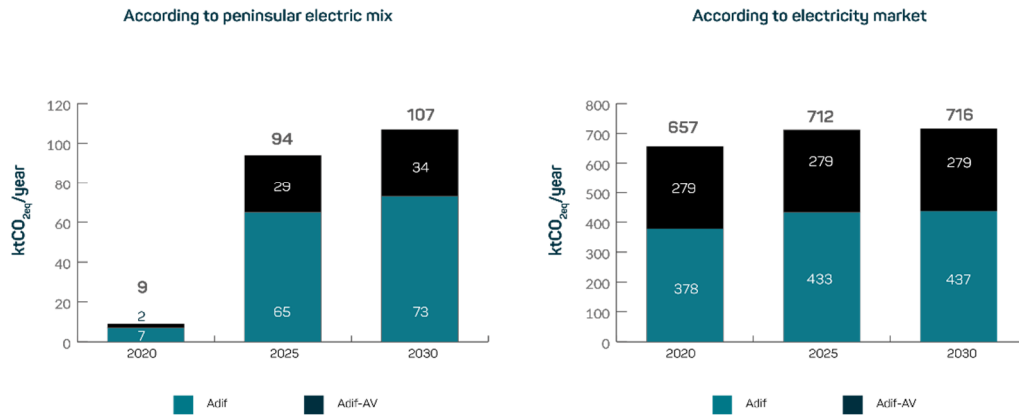


The Adif and Adif-AV's **Plan to Combat Climate Change** was approved in the first quarter of 2019, establishing objectives to reduce energy consumption and GHG emissions and setting specific targets for the years 2020, 2025 and 2030.

Within the framework of this Plan, it should be noted that since 2019, Adif and Adif-AV have committed to the **Purchase of Green Electrical Energy** with Guarantee of Origin Certificates (GoO), so that the GHG emissions associated with the consumption of electrical energy could be considered zero.

However, in order to define the Plan's objectives for reducing GHG emissions, a double calculation has been carried out, applying the recommendations of international standards. Therefore, annual goals have been established for reducing GHG emissions for Adif and Adif-AV according to the peninsular electricity mix and according to the electricity market with the Purchase of Green Energy with GoO:

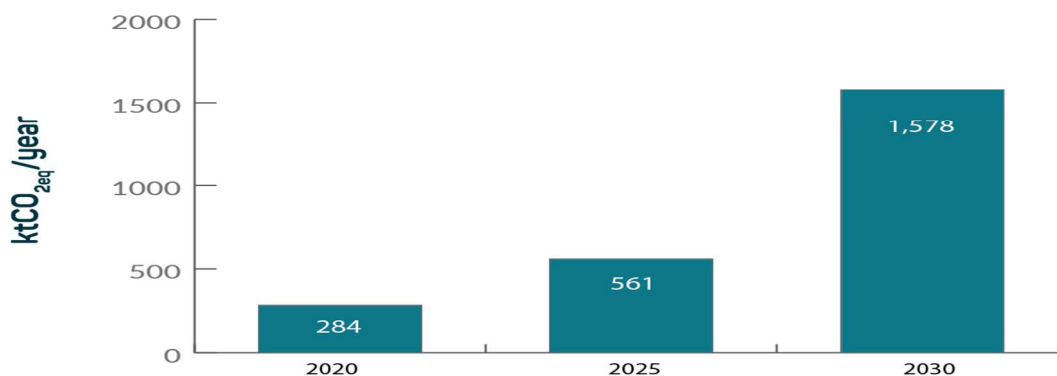
## ANNUAL TARGETS FOR THE REDUCTION OF GHG EMISSIONS FROM THE RAILWAY SYSTEM



The accumulated emissions reduction for Adif-AV's Plan 2030 for would be **777 ktCO<sub>2eq</sub>** (according to the electricity mix) and **3,700 ktCO<sub>2eq</sub>** (according to the electricity market with the purchase of green energy with GdO).

The Plan also takes into account the contribution of the actions developed to promote the modal shift to the railway. Thus, based on a hypothesis of an increase in the modal share of railways in 2030 for both passenger and freight transport, in line with the objectives of the White Paper on Transport and the targets set by the European Union and the International Energy Agency, the GHG emissions avoided by the modal shift to rail are estimated.

## ANNUAL TARGETS FOR GHG EMISSION REDUCTIONS FROM MODAL SHIFT



The cumulative emission reduction by 2030 from modal shift is estimated at over **8,400 ktCO<sub>2eq</sub>**.

Thus, adding up the estimated emissions for the modal shift, the Adif and Adif-AV's Plan to Combat Climate Change would generate a total reduction in accumulated GHG emissions for

2030 of **9,100 ktCO<sub>2eq</sub>** according to the electricity mix and **12,000 ktCO<sub>2eq</sub>** according to the electricity market with the purchase of green energy with GdO.

## REDUCTION OF TOTAL CUMULATIVE GHG EMISSIONS (2030)

According to peninsular electric mix

**9,100 ktCO<sub>2eq</sub>**

According to electricity market

**12,000 ktCO<sub>2eq</sub>**

As in the case of energy consumption, there is a strategic indicator that measures the reduction of GHG emissions thanks to the implementation of the actions derived from the **Adif and Adif-AV's Plan to Combat Climate Change 2018-2030**, as well as the measures implemented since 2009 as a result of the previous Energy Saving and Efficiency Master Plans.

The data for this indicator for the period 2017-2019 are:

	2017	2018 <sup>(1)</sup>	2019
UT (tCO <sub>2</sub> /year)	14,471	12,375	17,083
UdT (tCO <sub>2</sub> /year)	6,449	5,499	5,629
<b>TOTAL(tCO<sub>2</sub>/year)</b>	<b>20,921</b>	<b>17,874</b>	<b>22,712</b>

*(1) Data updated according to emission factor published by REE for the peninsular mix in 2017.*

In the area of adaptation, in relation to **improving the resilience of railway infrastructures**, it should be noted that in 2019 work has continued in the Adif and Adif-AV Climate Change Working Group created the previous year. This group has been working on the preparation of an internal standard that establishes the methodology to be followed to assess the vulnerability of railway infrastructures to the adverse effects of climate change in the design phase. The intention is that, in the initial phases of defining construction projects for the infrastructures, the impact of climate change on them will be one more variable to be taken into consideration for the design of the infrastructures.

### 5.5.4. Contamination

#### Noise pollution

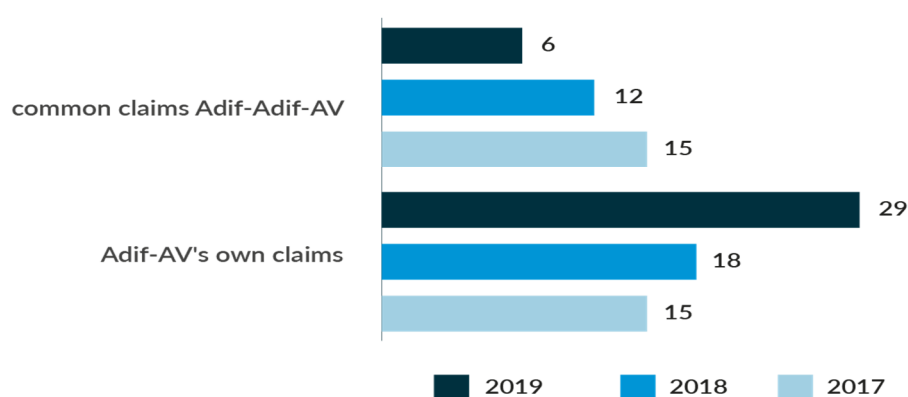
Another adverse environmental aspect resulting from Adif-AV's railway activity is noise pollution. The emission of noise and vibrations comes mainly from the movement of passenger and freight trains. Additionally, there are other sources of noise and vibration emissions, such as:

- Activities carried out in Adif-AV passenger stations, such as public address systems, train composition shunting and building air conditioning systems.
- Infrastructure maintenance operations fundamentally derived from the use of mechanized track equipment.
- Construction work on the new high-speed lines.

Adif-AV has a procedure for the reception, documentation and processing of complaints of an acoustic nature within the framework of its Management System.

Approximately **90%** of the complaints received are related to **noise problems** and the remaining **10%** to **vibration problems** (Adif/Adif-AV aggregate data).

### EVOLUTION OF ACOUSTIC TYPE COMPLAINTS



On behalf of the Ministry of Public Works and Transport, Adif-AV has been carrying out the Strategic Noise Maps (SRM) and the Action Plans (PAR) corresponding to the Major High Speed Railway Axes (axes with more than 30,000 trains per year).

#### Land pollution

As is usual in the execution of projects on high-speed lines, Adif-AV contemplates all the aspects necessary to prevent contamination of the soils where the works are carried out. However, sometimes, during the execution of the works, a soil condition may arise, caused by various causes. In 2019, no incident of this type was recorded at Adif-AV works.

#### 5.5.5. Waste Management and Circular Economy

Adif-AV generates commercial, industrial and hazardous waste, mainly derived from the development of activities in passenger stations and logistics centres.

Adif's Waste Management model is based on two axes: a corporate system and a decentralized system.



## ADIF'S WASTE MANAGEMENT MODEL AXES

### operating system

network of 60 temporary storage and transfer centres (CAR) to the authorised operators for removal

### decentralized system

management of hazardous waste congestion at the points of generation itself, preventing its transport to the CAR

In 2019, Adif-AV generated a total of 2.02 tons of hazardous waste, with the production of electrical and electronic equipment waste (RAEE), gases in pressure vessels and paint being particularly significant. The intensity of waste generation stands at 0.03 t of waste/million km of train (PCB, asbestos and health care waste are not included in the calculation as their generation is not related to Adif-AV's own activities).

Adif-AV has a **hazardous waste management system**, which is complemented by an Integrated Management Manual and its corresponding procedures.

## HAZARDOUS WASTE GENERATED IN THE OPERATION AND MAINTENANCE OF INFRASTRUCTURES (T)



## HAZARDOUS WASTE GENERATION INTENSITY (T WASTE/MILLION KM-TRAIN)



In relation to commercial and domestic waste, this is mainly generated in Adif-AV stations as a result of passenger traffic and existing commercial and catering activities that take place in the establishments. This waste is usually removed by the public cleaning or waste collection services,

so its final destination is unknown. For the collection of this waste, a total of more than 260,000 euros has been paid in 2018\* as rubbish collection fees.

With regard to dumping, the most significant comes from the use of the public toilets in the stations. In stations with significant traffic, sanitary wastewater is discharged into the public sewage network for treatment at the corresponding Wastewater Treatment Plants (WWTP). However, in the rest of the stations of the conventional network, work continues on replacing cesspools with connections to the network.

(\*) *latest available data.*

### **Spanish Strategy for the Circular Economy<sup>2</sup>**

During 2018 and 2019, Adif together with Adif-AV collaborated in the elaboration of the Spanish Strategy of Circular Economy (EEEC) contributing with a total of 7 projects within the action lines in which the Strategy is structured.

Specifically, these projects are located in the axes of Consumption, Waste Management, Secondary Raw Materials Market and Employment and Training.

The projects that were finally selected to form part of the EEEC were:

- Elaboration of a Catalogue of environmental criteria that facilitates the incorporation of the same ones in the Administrative Clauses with the objective that Adif and Adif-AV promote the strategy of the Circular Economy and the Ecological Public Contracting in a transversal way.
- "Ecomilla" Project (Last Green Mile).
- Efficient management of surplus land from railway infrastructure works to favour the environmental recovery of degraded environments.
- Management of Construction and Demolition Waste in station works assigned to the Passenger Station Management.
- Increase the reuse of topsoil in works for restoration and landscape integration.
- Recycled, regional and sustainable materials in Station Architecture Projects.
- Integral program for the social recovery of disused railway assets, generating value through entrepreneurial or public service projects.

The EEEC passed the public information phase at the end of 2018 and is pending approval.

### **5.5.6. Biodiversity Protection**

In the area of environmental management, Adif-AV considers the protection of biodiversity to be a priority, mainly due to the high occupation of the land dedicated to the network and the facilities managed by Adif-AV. The active railway network has a total length of 3,403 km, with an occupied surface area of approximately 10,889 ha, and an estimated area of 31,257 ha.

According to data from 2007, the last year for which information is available, 11.11% of the total length of the railway network managed by Adif and Adif-AV affected Natural Protected Spaces and others with some form of environmental protection.

In order to comply with current regulations on biodiversity, the company ensures that both its construction projects and its activities meet the requirements of the Environmental Impact Statements (EIS).

In 2019 Adif-AV, in relation to the environmental management of its projects, carried out **225 environmental review reports**, including **15 environmental adequacy reports**, in accordance with environmental legislation.

In 2019, Adif-AV, in relation to the environmental management of its projects, carried out **39 environmental monitoring reports** for projects not subject to EIS and **248 periodic regulatory reports** for environmental monitoring of projects with EIS.

### **Fire prevention plan in and around the road**

The measures aimed at preventing the risk of forest fires are articulated in the **Road and Proximities Fire Prevention Plan** throughout the national territory. This Plan, drawn up in accordance with fire prevention regulations, identifies risks, risk areas and preventive and corrective actions, as well as recommendations to be taken into account in typical cutting and welding operations and in the operation of hot axle detectors.

Since 2006, Adif-AV has signed collaboration agreements with the autonomous communities to develop joint actions for the prevention and, where appropriate, extinction of forest fires in areas close to the railway platform, as part of the development of the Plan.

By virtue of these agreements, the Entity undertakes to implement Self-Protection Plans aimed at the integrity and conservation of the facilities it owns and to prevent the potential consequences of possible fires in forest areas or within the perimeter of the municipalities.

Regardless of the measures adopted by Adif-AV, the railway track and the driving and traffic management staff are becoming important as effective tools not only in the detection but also in the extinction of forest fires near the infrastructure.

The track acts as a firebreak and the railway staff can often see fires early on, which will allow them to warn the fire-fighting bodies of the different administrations through the command posts and the Adif-AV H24 Network Management Centre.

#### **MAIN FIRE PREVENTION MEASURES AND ACTIONS**

- Control of train braking systems.
- Monitoring of track work with ignition sources.
- Periodic monitoring of the proper functioning of the temperature detectors of the train axles, as they pass by, and regulatory action in the event of alarms.
- Chemical and mechanical cleaning of vegetation and waste material on the track margins.
- Monitoring of trains as they pass through stations to determine whether there are any anomalies in their operation.

During 2018, there were no fires on the margins of the High-Speed rail network caused by faulty installations or line maintenance work.

	2016	2017	2018	2019
Fire prevention expenses (euros)	2,833,756	1,701,007	999,724.73*	-
Fires	0	0	0*	-

(\*) latest available data

## Environmental management indicators in design and construction

### ❖ In Infrastructure projects

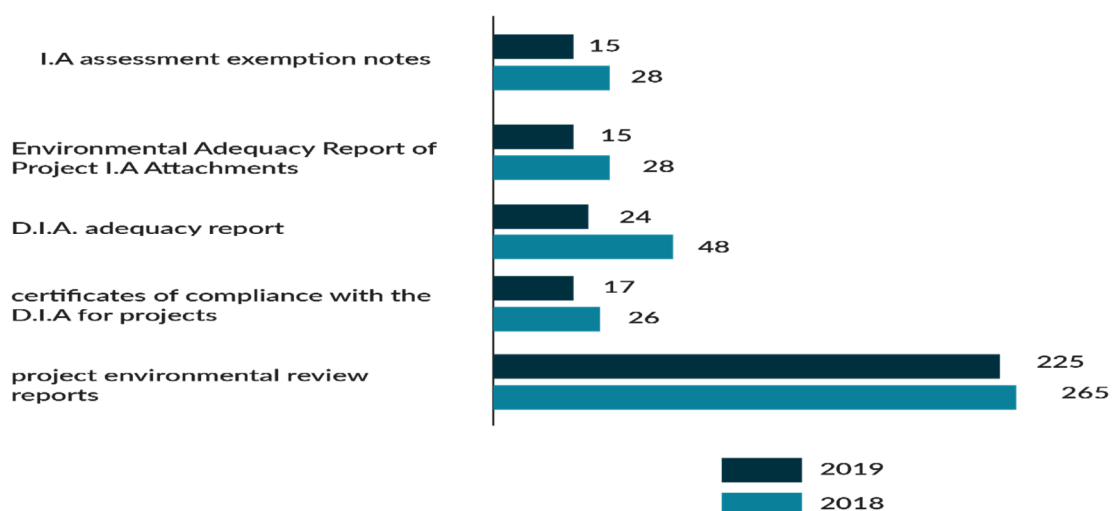
The Ministry of Public Works and Transport has delegated the approval of the projects entrusted to this public business entity to the presidency of Adif-AV. In addition, in accordance with Adif-AV's statutes, this entity is responsible for supervising the projects that are approved by it, and also for certifying compliance with the Declaration or the Environmental Impact Report of the same, if applicable.

Adif-AV, as the substantive body for the purposes set forth in the legislation on Environmental Impact Assessment, plays a fundamental role in ensuring that railway infrastructures comply with the provisions of the legislation, both at the project level and in the works. In this sense, all the environmental integration (E.I.) annexes of the projects are supervised, in order to ensure compliance with the provisions of the environmental legislation in force, the regulations and the internal recommendations of Adif-AV.

The evolution of the indicators related to environmental management in projects over the last two years has been as follows:

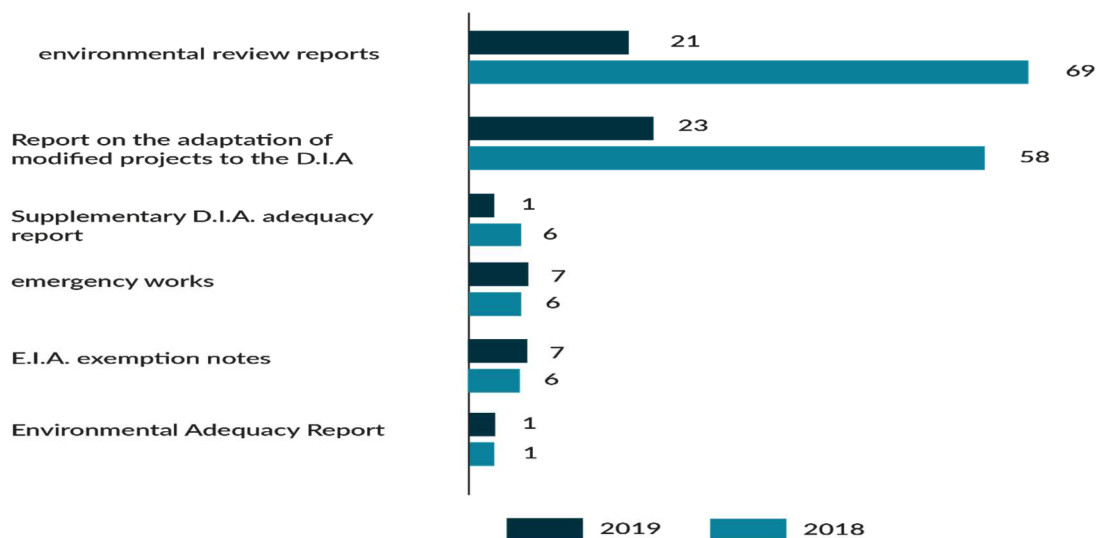
### Design phase:

## ENVIRONMENTAL LAW COMPLIANCE



## Construction phase:

### ENVIRONMENTAL LAW COMPLIANCE

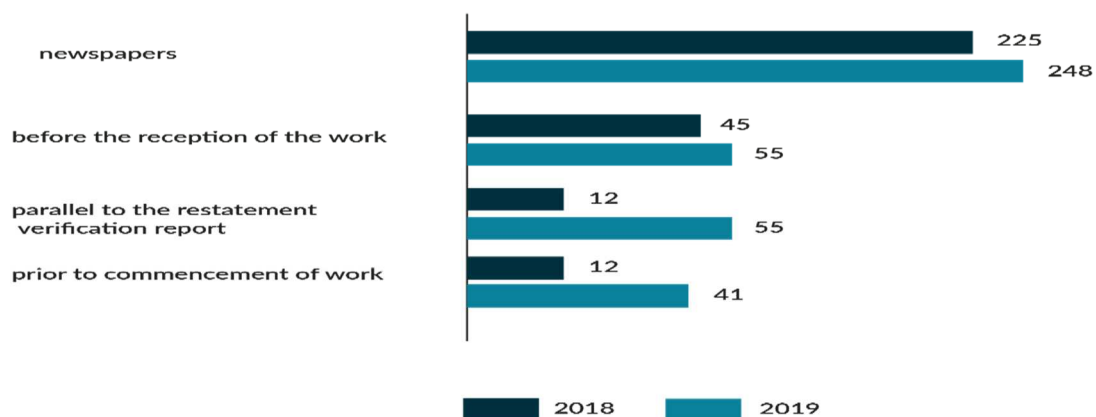


#### ❖ Related to the environmental monitoring of works:

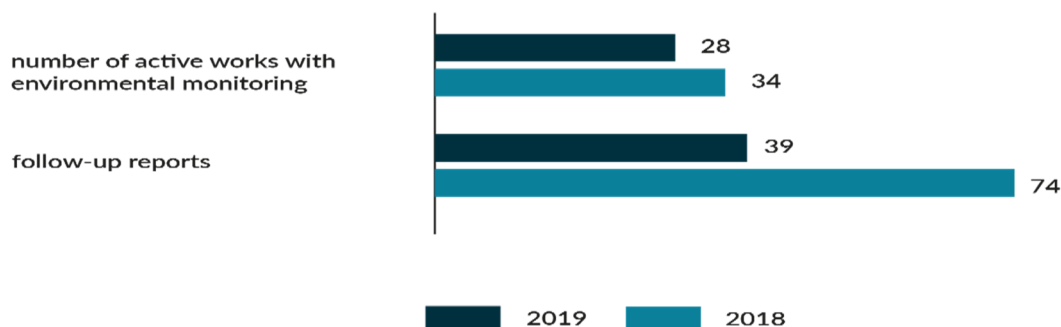
Just as environmental supervision has been carried out since 2005 for works with EISs, through the figure of Environmental Works Directors, since mid-2018 environmental supervision of works without EISs has been consolidated in the maintenance of the AV network by means of Environmental Works Guards, due to the growing presence of this type of action.

The evolution of the indicators related to environmental management in construction over the last two years has been as follows:

### REGULATORY REPORTS OF ENVIRONMENTAL MONITORING OF WORKS WITH D.I.A



## MONITORING OF WORKS NOT SUBJECT TO D.I.A



### ❖ In railway operations

Promoting commitments to continuous environmental improvement based on the implementation, certification and periodic audit of Management Systems based on the ISO 14001 Environmental Management Standard is one of the points of Adif-AV's environmental policy.

Since the creation of Adif-AV in 2014, Adif's environmental certification was maintained in relation to the management of passenger stations and freight terminals; and since that year, Adif-AV has been deepening the scope of the certification, including new facilities. In the last two years, the evolution has been as follows:

	2017	2018	2019
Percentage of passengers in stations certified according to ISO: 14.001 Environmental Management Standard, in relation to the total number of passengers in Adif-AV stations	45.3%*	46%*	59.3%*

(\*) in stations managed by the D.G. for Business and Commercial Operations

## 5.6. Our team

For Adif-AV, its employees are people before more so than employees. With this maxim in mind, it strives to offer its team an attractive environment in which to develop professionally and where personal life and work can be reconciled, with equal opportunities, transparency and health and safety as basic management principles.

In November 2019, Adif AV undertook an organisational restructuring whose most relevant change involved changing the model of the Construction function, moving from a model in which a distinction is made between Conventional Network Construction and High Speed Construction, to another in which a distinction is made between the Construction of European Corridors and Integration in Cities, and the Construction of High Speed Axes.

### EMPLOYMENT PUBLIC OFFER

In 2019 the Call for Public Employment was published. A total of 578 applications were submitted, of which 498 were accepted. This EPO sought to cover a total of 5 positions.

### 5.6.1. Employees

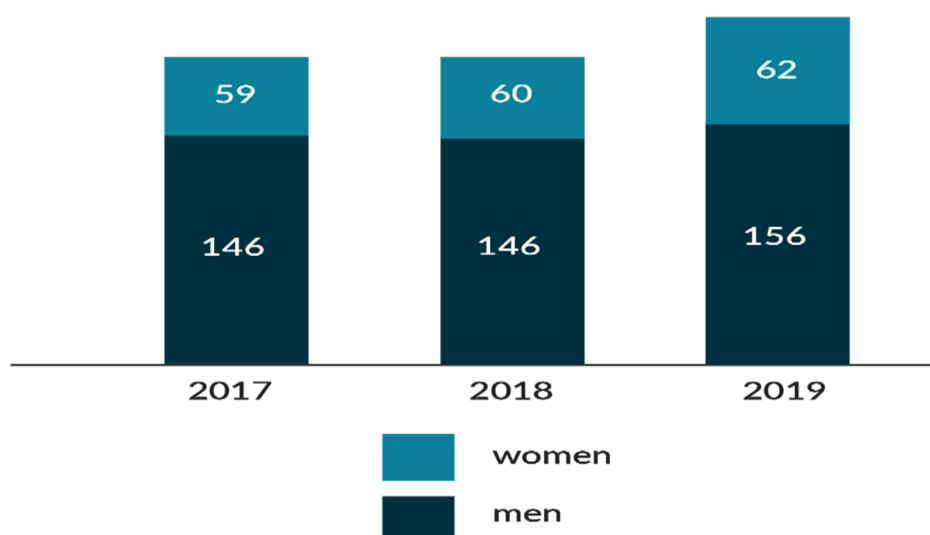
With the fulfilment of the strategic objectives as a basis, the management of people is a fundamental aspect in the activity of the Entity. Adif-AV believes that the satisfaction, productivity, talent and participation of its employees is key to achieving the mission, vision and values defined in the Transforma 2030 Plan. On 31 December 2019, Adif-AV had 218 employees, distributed as follows:

Management areas	Male	Female	Total
<b>Construction A.V.</b>	113	49	<b>162</b>
<b>Telecommunications</b>	31	10	<b>41</b>
<b>Electric Energy</b>	6	2	<b>8</b>
<b>Traffic Safety Directorate</b>	4	1	<b>5</b>
<b>Corporate and General Services</b>	2	-	<b>2</b>
<b>TOTAL</b>	<b>156</b>	<b>62</b>	<b>218</b>

The evolution of the workforce by gender in the last three years is as follows:

In 2019 the Adif-AV workforce consisted of **218 employees**, twelve more than in 2018.

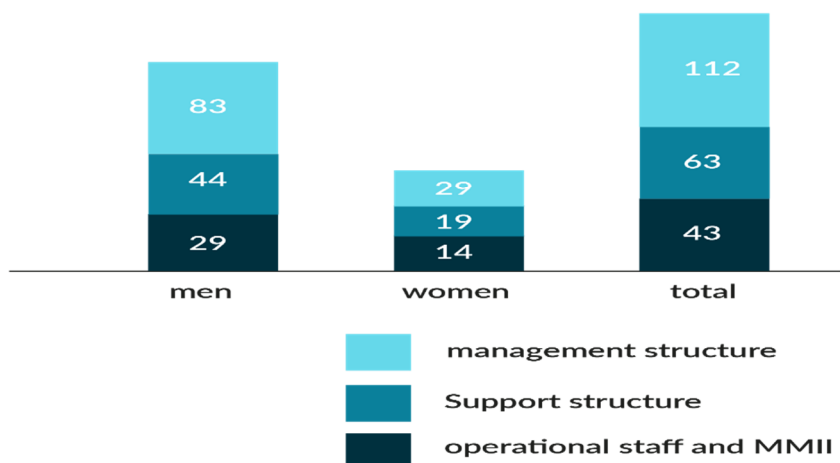
## EVOLUTION OF STAFF BY GENDER



The staff is distributed according to their professional category as follows:

**97.57%** of employees have a **permanent contract** and **97.56%** are full time workers.

## STAFF BY PROFESSIONAL CATEGORY



About **19.72%** are operational staff and middle management, while **80.28%** are in the support and management structure.

The **rate of women** in the workforce is **28.44%**, decreasing slightly from 2018.

The following breakdowns by **age and seniority** can be observed:

Age	Male	Female	Total
Up to 35 years	2.75%	-	<b>2.75%</b>
Between 36 and 50 years old	40.83%	19.27%	<b>60.10%</b>
More than 50 years	27.98%	9.17%	<b>37.15%</b>

Seniority	Male	Female	Total
Between 0 and 11 years old	20.64%	9.18%	<b>29.82%</b>
Between 12 and 19 years old	29.82%	13.30%	<b>43.12%</b>
Between 20 and 27 years old	4.59%	2.29%	<b>6.88%</b>
Between 28 and 35 years old	3.67%	1.83%	<b>5.50%</b>
More than 35 years	12.84%	1.84%	<b>14.68%</b>

Adif-AV employees are **geographically distributed** throughout the Peninsula (average number of workers in 2019):



## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

AUTONOMOUS COMMUNITIES	TOTAL	MALE	FEMALE
GRANADA	2	1	1
MALAGA	3	3	0
SEVILLA	10	8	2
<b>ANDALUCIA</b>	<b>15</b>	<b>12</b>	<b>3</b>
LEON	8	7	1
SALAMANCA	1	1	0
VALLADOLID	3	2	1
<b>CASTILLA LEON</b>	<b>12</b>	<b>10</b>	<b>2</b>
BARCELONA	8	6	2
<b>CATALUÑA</b>	<b>8</b>	<b>6</b>	<b>2</b>
BADAJOS	1	1	0
CACERES	1	1	0
<b>EXTREMADURA</b>	<b>2</b>	<b>2</b>	<b>0</b>
MADRID	168	117	51
<b>MADRID</b>	<b>168</b>	<b>117</b>	<b>51</b>
VIZCAYA	3	1	2
<b>PAIS VASCO</b>	<b>3</b>	<b>1</b>	<b>2</b>
ALICANTE	2	2	0
VALENCIA	2	2	0
<b>COMUNIDAD VALENCIANA</b>	<b>4</b>	<b>4</b>	<b>0</b>
EXTRANJERO	1	0	1
<b>EXTRANJERO</b>	<b>1</b>	<b>0</b>	<b>1</b>
<b>TOTAL</b>	<b>213</b>	<b>152</b>	<b>61</b>

Non-financial information (Law 11/2018, of December 28)	Descriptive text	Indicators of result/impact				
		QUANTITATIVE DATA				
		Indicator description	Units	2017	2018	2019
<b>PEOPLE AND SOCIAL ISSUES</b>	Distribution of employees by professional category	Operating Staff and MMII	No. workers	25	30	43
		Support structure	No. workers	75	69	63
		Management structure	No. workers	105	107	112
	Measures the degree of retention and attraction of the managerial staff. Useful to achieve strategic direction of society.	Management retention rate	(Additions+Withdrawals) * 100/2 / Average workers and without taking into account the staff affected by the sale of tickets that was transferred in 2017 to the RENFE Group	0.47	0.25	1.87

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

Non-financial information (Law 11/2018, of December 28)	Descriptive text	Indicators of result/impact				
		QUANTITATIVE DATA				
		Indicator description	Units	2017	2018	2019
	Measures the turnover rate of the workforce, regardless of the employee's role.	Staff retention rate	(Additions+Withdrawals) * 100/2 / Average workers and without taking into account the staff affected by the sale of tickets that was transferred in 2017 to the RENFE Group	2.84	3.64	7.11
	New additions	New employees (EPO)	Growth of the workforce in the period (number of workers increased)	0	0	8
	Collective negotiation	Collective negotiation	nº collective agreements signed in force	1	1	1
		Employees covered by collective bargaining agreement	% of employees covered by collective bargaining agreement	48.78	48.06	50.96

Adif-AV encourages and promotes stable and quality employment among its employees. As a result, practically all of the staff have a permanent, full-time contract. The distribution of contracts among the staff by gender, age and professional category is as follows:

Distribution of employment contract modalities	2019
Indefinite	214
Temporary	4
Part-time	0
<b>TOTAL</b>	<b>218</b>

Sex	Indefinite	Temporary	Part-time	TOTAL
Male	153	3	0	<b>156</b>
Female	61	1	0	<b>62</b>
<b>TOTAL</b>	<b>214</b>	<b>4</b>	<b>0</b>	<b>218</b>

Age	Indefinite	Temporary	Part-time	TOTAL
Up to 35 years	5	1	0	<b>6</b>
Between 36 and 50 years old	128	3	0	<b>131</b>
More than 50 years	81	0	0	<b>81</b>
<b>TOTAL</b>	<b>214</b>	<b>4</b>	<b>0</b>	<b>218</b>

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

Professional category	Indefinite	Temporary	Part-time	TOTAL
Management Structure	112	0	0	<b>112</b>
Support structure	63	0	0	<b>63</b>
Middle management	32	3	0	<b>35</b>
Operative	7	1	0	<b>8</b>
<b>TOTAL</b>	<b>214</b>	<b>4</b>	<b>0</b>	<b>218</b>

In 2019 the **average salaries by professional category and gender** were as follows:

Average remuneration by professional category and gender		
Management Structure	Average salary	Wage gap*
<b>Female</b>	60,448.67	6.57%
<b>Male</b>	64,697.55	
Support structure	Average salary	Wage gap*
<b>Female</b>	51,293.27	-2.94%
<b>Male</b>	49,826.35	
Middle management	Average salary	Wage gap*
<b>Female</b>	35,134.33	1.97%
<b>Male</b>	35,840.35	
Operative	Average salary	Wage gap*
<b>Female</b>	28,446.69	-17.88%
<b>Male</b>	24,130.14	

(\*) Calculated as:  $\frac{\text{Average pay men} - \text{Average pay women}}{\text{Average pay men}} \times 100$

Average pay by age	Male	Female
<b>Up to 35 years</b>	-	-
<b>Between 36 and 50 years old</b>	54,512.78	52,815.70
<b>More than 50 years</b>	52,371.15	50,815.23

The labour regulations and salary tables applied by Adif-AV prevent any kind of discrimination on the basis of gender. The difference in average pay between men and women is due to the later incorporation of women into the labour market, which also affects Adif and Adif-AV in particular. It is therefore to be expected that the trend in the coming years will be towards a continued reduction in the wage gap, with average wage equality between men and women.

In accordance with article 21 of Royal Decree 1044/2013 of 27 December 2013, which approved the company's articles of association, the members of the Board of Directors do not receive any remuneration in the form of per diems for attending the meetings of the Board of Directors or for any other reason.

With regard to the integration of people with disabilities, in 2019 0.46% of Adif-AV's staff had some kind of disability, i.e. one employee.

In 2019, Adif-AV did not dismiss any employees.

## 5.6.2. Organization of work

The Collective Agreement of Adif and Adif-AV establishes the annual working hours to be complied with. There are different working hours and shifts depending on the job and the tasks to be carried out.

In 2019, the rate of absenteeism, measured as a percentage of absences over the theoretical working hours to be worked, was 2.58% for a total of 1,353 hours, which represents a decrease of 0.39% with respect to 2018. In the last three years, the evolution experienced was as follows:

### ABSENTEEISM RATE



#### INCENTIVES AND SOCIAL BENEFITS

In addition to variable remuneration based on the fulfilment of different objectives to be achieved by the employees (cross-cutting personal, contribution to the team and the catalogue of skills), Adif-AV offers its workers covered by the Agreement a wide range of social benefits to improve their personal and working life, offering its employees non-remunerative benefits or social benefits such as

- Health promotion: medical examinations, preventive medicine campaigns, aid for extraordinary medical expenses, vaccination campaigns, aid for temporary incapacity complementary to Social Security, supplements to temporary incapacity benefits, aid against drug addiction and alcoholism, etc.
- Life insurance.
- Transport tickets with free fares on local and regional trains, and special fares on main lines and high-speed trains.
- Aid for disabled children.
- Ex gratia aid and aid for temporary disability.
- Death benefits.
- Advances: maximum three monthly payments.
- Legal protection: in cases of railway accidents that could lead to criminal liability.
- Foster care and guardianship of elderly disabled persons.
- Common-law couples: regardless of their sexual orientation, they are entitled to the same benefits as those provided by law.
- Coupling to other positions due to loss of faculties.
- Mobility due to the reunion of a spouse or common-law partner.
- Facilities and/or discounts on services: banking, leisure, travel, housing, etc.
- Staff notice board.

In addition to the measures already mentioned, following the signing of the Second Collective Agreement between Adif and Adif-AV, the system of aid for children with intellectual disabilities and death benefits has been substantially improved.

On the other hand, the indicators of the I Equality Plan in Adif-AV did not collect data referring to the number of employees who have used maternity or paternity leave. In the new indicators of the 1st Adif High Speed Equality Plan, they will be included.

	Males	Females
Employees who have taken maternity leave	0	0
Employees who have taken paternity leave	1	0
TOTAL	1	

### 5.6.3. Labour Relations

The dialogue between Adif-AV and its staff is carried out through periodic meetings between the Entity and different committees and modalities of employee representation, which participate in the decision-making process:

- **Works Committees and Staff Delegates:** Committee in Madrid and delegates in Sevilla, León and Barcelona. The Committee holds bimonthly meetings with Management, in which the issues within its territorial scope are discussed.
- **Health and Safety Committee:** This is the participatory body in matters of occupational risk prevention
- **Traffic Safety Commission:** this is the body that consults and deals with technical aspects of traffic safety, approves plans and monitors specific indices.
- **Training Advisory Council:** this Council has been created to prepare and monitor the Adif AV Training Plan.
- **Social Policy and Equality Commission:** this commission manages and monitors the social aid fund, proposes action measures and manages the monitoring of equal opportunity and non-discrimination indicators. In 2019, it approved the 1<sup>st</sup> Adif Alta Velocidad Equality Plan, the first one that the company had as such, which was later ratified with the unanimous approval of the Negotiating Commission of the Agreement and published in the BOE (Official State Gazette).
- **Labour Conflicts Commission:** this commission serves to mediate or resolve conflicts in the interpretation and application of the collective agreement or when a strike is announced.

The Second Collective Agreement is effective from January 1, 2019 until December 31, 2023, with the possibility of extension until December 31, 2015, by agreement between the parties.



The Second Collective Agreement between Adif and Adif-AV was signed on 9 May

The agreement includes, among other measures, those related to flexible working hours, social aspects, equality and labour conciliation that extend those already existing in the labour regulations, it also establishes different committees (employment, regulations, professional management, working hours and schedules and conciliation) that will develop strategic aspects of transformation, among which the elaboration of the new model of professional management

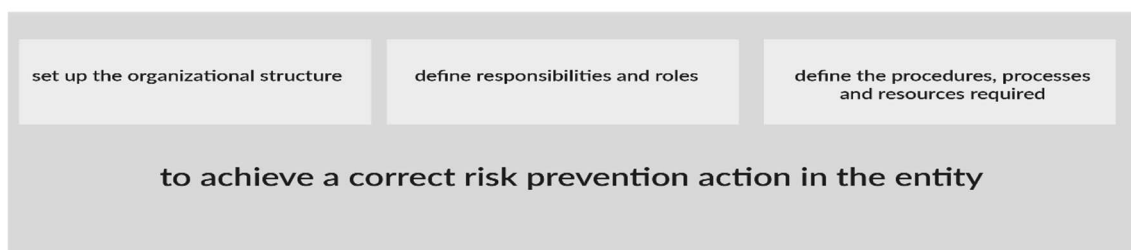
structured in professional groups stands out, adapting the functions and operational environments to face with guarantees the challenges that arise in the future of the entity.

**50.96%** of Adif-AV staff are covered by the **Collective Agreement**.

### 5.6.4. Occupational Risks Prevention

In compliance with the provisions of Article 16 of Law 31/1995, of 8 November, on the Prevention of Occupational Risks, Adif-AV has an Occupational Risk Prevention Plan.

#### OCCUPATIONAL RISK PREVENTION PLAN



In addition, every year Adif-AV carries out the Planning of the preventive activity (Programming of the Prevention Service) with different purposes:

#### OBJECTIVES FOR THE PROGRAMMING OF THE PREVENTION SERVICE



The main actions in the field of Occupational Risk Prevention during 2019 are as follows:

- ORP training: 806 hours of training have been given out of the 1,115 planned, representing 72.3% compliance with the objective.
- A technical seminar on occupational risk prevention was held.
- Internal audit program: 3 programmed audits have been carried out.
- Consolidation and reinforcement of the prevention culture: In order to consolidate the organisation's commitment to the Prevention Management System, a planned consolidation action (information campaign) was carried out in 2019.
- Health Surveillance: Health Examinations and Psychophysical Examinations. In 2019, 13 Health Surveillance examinations were carried out. In addition, 61 Medical Campaigns and 13 Vaccinations have been carried out.

In the year 2019, there has been 1 accident in itinere with sick leave, and no fatalities have been registered.

			Accidents	Acc. In itinere	Relapse	Occupational diseases
2016	Total	With leave	0	1	0	0
		Without leave	0	4	0	0

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

			Accidents	Acc. In itinere	Relapse	Occupational diseases
2017	Total	With leave	3	0	0	0
		Without leave	2	2	0	0
2018	Male	With leave	0	0	0	0
		Without leave	4	0	0	0
	Female	With leave	0	0	0	0
		Without leave	0	1	0	0
	Total	With leave	0	0	0	0
		Without leave	4	1	0	0
2019	Male	With leave	0	0	0	0
		Without leave	2	0	0	0
	Female	With leave	0	1	0	0
		Without leave	2	0	0	0
	Total	With leave	0	1	0	0
		Without leave	4	0	0	0

		2016	2017	2018	2019
Accident Severity Rate*	Male	0	0.01	0	0
	Female	0	0.08	0	0
	<b>Total</b>	<b>0</b>	<b>0.03</b>	<b>0</b>	<b>0</b>
Accident frequency rate**	Male	0	3.74	0	0
	Female	0	20.79	0	0
	<b>Total</b>	<b>0</b>	<b>8.19</b>	<b>0</b>	<b>0</b>
Occupational accident rate***	Male	0	6.62	0	0
	Female	0	33.06	0	0
	<b>Total</b>	<b>0</b>	<b>14.06</b>	<b>0</b>	<b>0</b>

(\*) Severity rate is: (No. of days lost/no. of hours worked) \*1,000

(\*\*) Frequency rate is: (no. of accidents / hours worked) \*1,000,000

(\*\*\*) Incident rate (No. of accidents \*1,000) / No. of average workers

In accordance with the above, there have been no days lost due to accidents at work (not in itinere) or occupational diseases.

		2016	2017	2018	2019
Days lost due to occupational accidents or diseases*	Male	0	3	0	0
	Female	0	8	0	0
	<b>Total</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>0</b>

In 2019, two meetings were held of the Adif-AV Health and Safety at Work Commission, a company body with the highest level of participation on health and safety at work issues, from which the guidelines on these matters emanate.

Indicator description		Units	2016	2017	2018	2019
Social and personnel issues	Preventive Medicine Index	% of employees participating in preventive medicine	25	19.72	21.62	20.42
	Supplementary social assistance	Amount of social aid (for medical expenses) per employee	1,800	1,226	2,472	793

## 5.6.5. Training

Training in Adif-AV is a support activity to achieve the objectives of the areas. The main objective of Adif-AV in terms of training is to promote the professional and personal development of workers, so that they contribute to operational excellence. Training, in addition to focusing on the effectiveness of processes and the optimisation of results, gives importance to the involvement of employees in the key values of the Entity, such as innovation, continuous improvement, excellence, social responsibility and sustainability, among others.

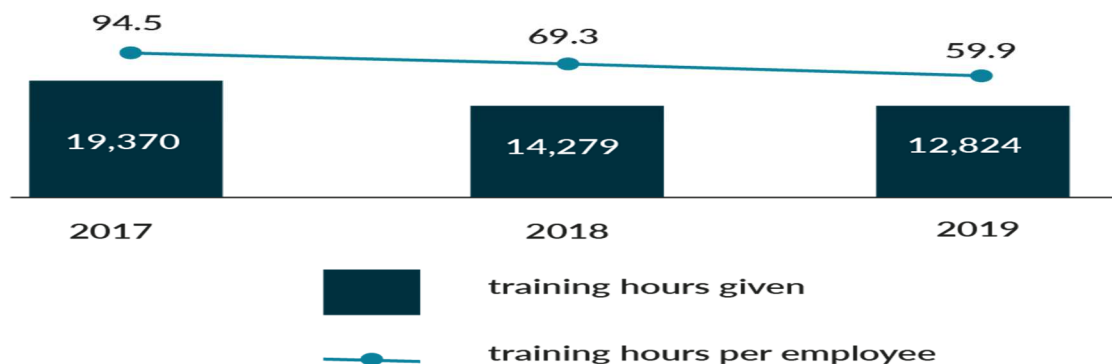
The identification of training needs is carried out jointly by all areas of activity and by the employees' legal representatives. Based on the needs identified, an Annual Training Plan is drawn up, in which the training initiatives to be undertaken during the year are planned, detailed and shaped.

The annual Adif-AV Training Plan for 2019 included an average of 59.9 hours of training per worker, for a total of 12,824 hours of training. This training has been carried out according to the specific competence needs of each business and always in line with the Mission, Vision and Values of the Entity. During the year, meetings were held with representatives of the Training Advisory Council, a consultative body provided for in the labour regulations, made up of company representatives and workers' trade union representatives, and its functions include the supervision and monitoring of the training process.



In 2019 there were **9 hours** less on average per employee than in 2018, which is a total of **1,455 hours** less.

## EVOLUTION OF TRAINING HOURS





Professional category	Training hours	Man's training hours	Woman's training hours
Operational Staff	8.9	2.3	12.8
Middle Managers	77.9	74.8	87.0
Support Structure	75.4	78.6	67.9
Management Structure	47.1	43.1	58.2
<b>ARITHMETIC MEAN</b>	<b>59.9</b>	<b>57.6</b>	<b>61.9</b>

Professional category	Training hours
Operational Staff	71
Middle Managers	2,727
Support Structure	4,750
Management Structure	5,277
<b>TOTAL</b>	<b>12,824</b>

In 2019, **4,227,744** euros have been invested in **training** for **Adif and Adif-AV**.

To carry out an efficient management of the Training Plan, Adif-Alta Velocidad uses several systems or computer applications connected to the network that introduce continuous improvements. Additionally, new methodologies and tools are used to make the training process more effective and efficient, such as the use of simulators, videoconferences or tele-training. Around 65% of the training that is developed uses non-attendance methodologies through different platforms, such as the Virtual Training Centre (VTC), the Virtual Classroom, the Videoconference System, and the TV Training Portal, among others.

### 5.6.6. Talent management and professional development

Adif-AV's personnel selection processes are established in the Labour Regulations for staff subject to a Collective Bargaining Agreement. In 2019, 8 people joined Adif-AV from the Public Employment Service.

The **staff turnover rate** in 2019 was 7.11, up from the previous year, and 1.87 in management, which also increased.

The success of the activity carried out by Adif-AV depends fundamentally on the performance of its workers, while this depends directly on their satisfaction and motivation. In order to achieve this, the drive of the organization's leaders takes on special relevance, with the 3C Management being the methodological system that articulates and develops the Adif Leadership Model, with criteria of transparency, rationality and efficiency.

The model systematically manages the Capacities, Behaviours and Growth of the organisation's leaders, in a context presided over by Commitment (acting as reference models of the obligation contracted with the Mission, Vision and Values of Adif-AV), Collaboration (as a priority axis for improvement) and Creativity (to question and innovate existing paradigms).

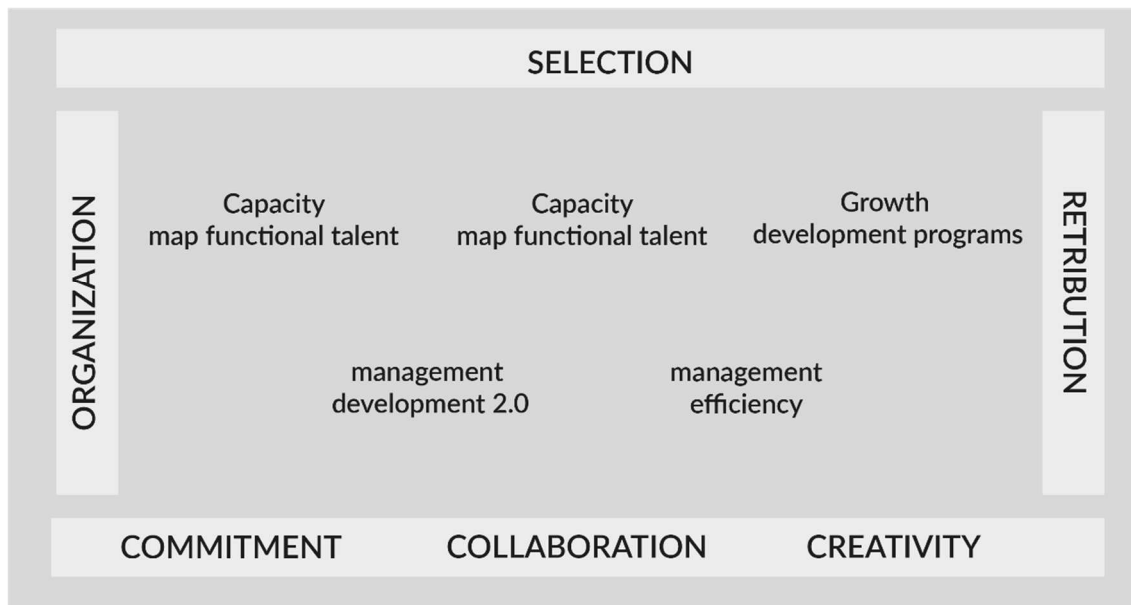


The **Leadership Model: 3C Management** seeks to boost the performance of the organization's leaders.

Since its birth in 2013, there have been numerous projects and activities carried out within this framework, and in order to reinforce the spirit that underlies the model and increase the momentum it provides, we wanted to renew its image by making a nod to the Olympic motto *Citius*

*altius fortius* (faster, higher, stronger), seeking to convey the importance of continuing to improve in order to overcome the imponderables that will inevitably appear along the way, and remembering that one can always go "further" in the development of the Mission, Vision and Values.

### LEADERSHIP MODEL: EXECUTIVE MANAGEMENT



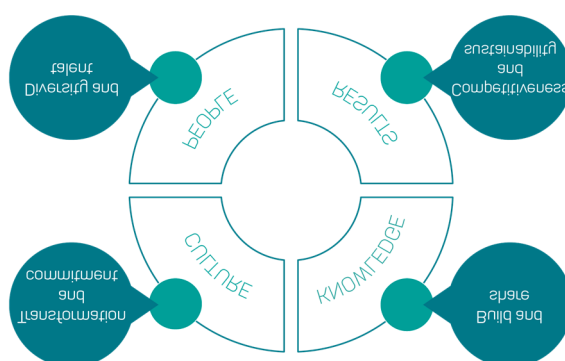
In 2019, we have continued with the deployment of the Competence Management Model - Digital Transformation, which was launched by the Human Resources Management in 2016 to adapt the behaviour of its catalogue to the demands of the new Digital Transformation scenario.

## COMPETENCE CATALOGUE - DIGITAL TRANSFORMATION

In 2016 the competencies catalogue, in force since 2006, was revised, incorporating concepts associated with the digital transformation: agility, flexibility, collaboration and cooperation, efficiency, transparency, participation, speed, etc.

The new catalogue, which will be in force in 2019, is based on four dimensions:

- **Knowledge:** it is not enough just to acquire and maintain it; it is necessary to generate and share it, taking advantage of the possibilities offered by Information and Communication Technologies (ICTs).
- **Results:** competitiveness and sustainability are the axes that support this dimension.
- **People:** capacity to manage diversity, which is increasingly broad, and talent, which is increasingly complex.
- **Culture:** commitment to assume and transmit the scenario of permanent and increasingly accelerated transformation in which we live.



The Competence Catalogue - Transformation, as in the previous year, articulated the 2018 360 Performance Evaluation. The 360 Performance Evaluation model offers different visions (one's own, that of the boss, and that of peers and collaborators) of the behaviours of those evaluated and allows them to become aware of strengths and opportunities, while they can discover aspects of those behaviours that with their vision alone they would not have been able to detect, facilitating continuous improvement and promoting a culture of talent development.

In 2019 the **Average Global Performance of Adif-AV** was **87.26%** and **85 employee evaluations** were carried out, nearly 40% of the workforce.

In addition, in 2019, the Integrated Management by Objectives Model (DPO) continued to be applied, which, supported by three pillars (transparency, coherence and ease), favours the development and deployment of company and area objectives to all personnel subject to the Objectives System, thus generating greater personnel commitment to the Entity's key objectives. Senior Management is directly involved in the elaboration of the company's objectives and all of them are managed with an absolutely transparent form for the evaluator and the evaluated. In 2018\* the degree of achievement of Adif-AV's objectives was 98%, evaluating a total of 191 people, representing 92% of the staff. (\*) *latest available data*

Two outstanding actions have been carried out as a result of this performance evaluation and the Integrated Management by Objectives Model:

- Further implementation of the Management Development Community, integrated within the Conecta 3.0 platform, which generates its own content related to the development of

competencies and promotes the exchange of knowledge and the collective intelligence of the organisation.

- Continue with the preparation of the monthly newsletter entitled "La marmita", which all members of the community receive by e-mail and which includes the main news from the blog. By 2018, 65 editions have been made, with more than 400 blog entries and nearly 200 file shares.

In line with the results of the performance evaluation, and during 2019, the development of the TV Training Portal, Adif's Video on Demand (VOD) platform, which promotes learning, participation and recognition, has continued. Below are the definitions of each of the channels and the accumulated results up to 2019. The most relevant data is that the Billboard of Success, the showcase that displays the premieres of each of the channels, has exceeded 100,000 views in 2019.



**98% of those evaluated** in the Integrated Management by Objectives Model (DPO) have achieved the objectives set.

	SUCCESSFUL EXPERIENCES	IN THE FLESH	THE MANAGEMENT CLUB	MY DAY AT ADIF	SUCCESS STORIES
<b>Definition</b>	Circumstances or professional events experienced by the protagonist that produced successful results (2013)	Management processes as told by their protagonists (2014)	Humour in monologue format as a persuasive tool (2015)	Put a face to the day. A channel destined to universalize the protagonism (2016)	The showcase, hosted by the corporate portal, announcing the premieres of the different TV training portal channels (2015)
Videos	208	36	30	27	550
Displays	52,083	4,486	6,359	6,419	101,371
Comments	4,656	124	809	231	7,733
"I like it"	7,275	106	941	342	11,547
Average	4.48 / 5	4.50 / 5	4.59 / 5	4.53 / 5	4.51 / 5

Finally, in 2019, other unique development programmes have continued to be developed, such as

### PEER-TO-PEER COACHING

Innovative Talent Development practice aimed at enhancing people's experience and management skills through professional support and accompaniment work that is reinforced by self-knowledge and peer learning and based on ethical commitment, collaboration, trust and horizontality.

The program, which began in 2015, has 3 lines of evolutionary training L1 "Peer Coaching", L2 "Coaching Community" and L3 "Internal Coaching" being this last line the one that grants the professional accreditation of "Internal Coach". Currently, the program has 8 accredited internal coaches and 43 people integrated in the 3 training lines. In 2019 the programme has received the Honorary Award in the first AECOP competition "Coaching Culture in the Company" in recognition of the work of disseminating executive coaching.

### PEOPLE WHO CHANGE THE COMPANY

This programme aims to identify future trends within the framework of the Transforma 2020 Strategic Plan, as well as to reflect on the impact of the trend in our sphere of influence, favouring the establishment of close relations between programme participants. The people who participate in the programme select the areas of activity, favouring the participation of the youngest managers.

Recorded monthly conferences are held to encourage the transmission of knowledge and in which the participants worked as a team as a Think Tank, detecting trends for personal improvement, organizational trends and social trends.

In 2019 this programme has been developed giving the absolute protagonism to the participants: "From Spectator to Protagonist", and has completed its third and definitive stage closing the cycle that started in 2017 with the following objectives:

- Identify future trends.
- To reflect on the impact of the trend in our area of influence.
- To establish close relationships between the participants in the programme.

To maintain permanently updated capacities, behaviours and knowledge about the new trends in order to satisfy the needs of the organisational map when necessary.

### LEAVING A FOOTPRINT

In 2019 the second edition of the program "Dejando Huella" has been completed and the third season that will end in 2020 has begun. "Dejando Huella" is a program in which the senior managers of the organization act as transmission agents of knowledge, experience, attitudes and business culture in three formats: something to read (a book), something to tell (a power point presentation) and something to watch (a video).



## EXTERNAL EXAMINATIONS

In 2019, the development initiatives mentioned above have been presented to the different national awards, which recognize the best practices in HR: "Cegos Equipos & Talento" in its 10th edition we presented "Experiencias de Éxito"; "Expansión a la innovación en RRHH" in its 17th edition we presented "Dejando Huella" and to the "Club de Excelencia en la Gestión a las Buenas Prácticas" in its 3rd edition we presented "Formación TV, plataforma de vídeos bajo demanda (VOD) de Adif".



## 5.6.7. Equality

Adif-AV has always shown its interest in and commitment to participating in and carrying out actions in favour of non-discrimination between women and men in employment, as an essential principle of human resources policy.

In this way, the First Adif Collective Agreement, in force in Adif Alta Velocidad since its inception, based on the agreement on guarantees for the segregation of Adif in accordance with RD 15/2013, was a decisive milestone in this area as it included such important issues as conciliation, selection and training measures, the creation of the Joint Commission for Equal Opportunities and Non-Discrimination, measures against gender violence, the preparation of diagnoses of the situation in terms of equality and negotiation and the approval of the first Company Equality Plan.

The Second Collective Agreement between Adif and Adif Alta Velocidad has continued to make progress in these areas, creating technical development committees on issues such as regulations, working hours and schedules and conciliation, as well as matters such as setting the annual working day at 1642 hours, counting as eight hours a day, increasing death benefits and aid for disabled children, leave of absence for care of dependent persons, new system of leave up to the second degree of consanguinity or affinity, unpaid leave of up to one month for the death of certain family members, unpaid leave for assisted reproduction, teleworking, new timetables, incorporation into the body of the collective agreement of the new equality plan when agreed, among many other measures.

The First Adif Alta Velocidad Equality Plan was approved unanimously by the company and all the trade unions represented in the Adif Alta Velocidad Social Policy and Equality Commission and later ratified also unanimously by the Negotiating Commission of the Second Collective Agreement and incorporated into the BOE of 9 November 2019. This agreement includes many actions to be developed in accordance with its different specific objectives: access to employment, equality, working conditions and professional career, training, information and awareness, working time and conciliation, remuneration and gender violence.



## RECONCILIATION MEASURES

Adif-AV classifies the labour regulations applicable to collective bargaining personnel in terms of the reconciliation of work, family and personal life into six groups:

### General

- **De facto couples:** the rights granted to de facto couples are granted regardless of their sexual orientation.
- **Time flexibility:** New regime of flexible working hours and establishment of a time limit of 18:00 in many of the company's premises.
- **Reduction of working hours:** Establishment of a new regime of reduction of working hours agreed with the representation of personnel in accordance with the provisions of the 2018 GMP, consisting of a reduction of 10 days less working hours in 2019 and 2020 under the agreed conditions.
- **Part-time work.**
- **Paid leave:** for marriage (fifteen working days), death of family members (from 2 to 6 days), fulfilment of an inexcusable public and personal duty, transfer of habitual residence, own affairs without justification (three days per working year). After the signing of the Second Collective Agreement, they are extended to the second degree of consanguinity or affinity.
- **Unpaid leave:** between six and ninety days per calendar year.
- **Holidays:** thirty-five calendar days plus public holidays.
- **Voluntary leave:** between four months and five years.
- **Geographical mobility:** for meeting with a spouse or partner and temporary for medical or social-family reasons.

### Specific

- **Maternity protection:** paid leave; change of position when work performance has a negative influence on the health of the mother or child; temporary suspension of the work contract in risky pregnancies; protection against dismissal.
- **Birth of children, adoption-fostering:** reductions in working hours; leave during hospitalisation and continuous treatment; absences or reductions due to premature births; paid leave of 2-3 days for the birth of children; extension of paternity leave, breastfeeding leave; voluntary leave; geographical mobility; protection against dismissal.

### Family Members care

- **Guardianship permits for the elderly disabled.**
- **Reduced working hours** for legal guardianship or care of a relative.
- **Paid leave:** for serious illness or surgery without hospitalisation. And extension of unpaid leave due to the death of some family members.
- **Leave to care for a relative** up to the second degree of consanguinity or affinity.

### Protection against gender violence

- **Reductions in working hours,** leave of absence, geographical mobility, leave of absence, justified absences allowed.

### Training opportunities

- **Preference for choosing work shifts.**
- **Paid leave** to take examinations for a professional qualification.
- **Vocational training** provided by Adif-AV.

With regard to work-life balance, the Equality Plan establishes the initiatives promoted and offered in terms of work-life balance to Adif-AV employees. All the measures for conciliation existing in Adif-AV are included in its labour regulations and their content can be consulted by all employees within the Inicia Portal.



## GENDER EQUALITY INITIATIVES

In 2019 Adif-AV has participated in different initiatives in favour of women and gender equality:

- **Project "Women and Engineering"**: Adif-AV has started the procedures to participate and sponsor the project "Women and Engineering", promoted by the Royal Academy of Engineering (RAI). The project aims to contribute to solving the problem of the worrying shortage of women in the field of science and technology and in MINT professions (mathematics, engineering, natural sciences, technology), with a gender gap that leads to a lack of creative potential and talent needed by companies and society in general.
- **"Paredes que Hablan" (Walls that Speak)** Campaign: this campaign promoted by the Fundación Mujeres aims to raise awareness of the reality of the sons and daughters of victims of gender violence, through the stories of the families that care for the children who are victims. Adif-AV has exhibited four panels with bone conduction technology at different stations so that the recording of the story can be heard by leaning on them.

In addition, the president of Adif and Adif-AV Isabel Pardo de Vera, has participated in some events in 2019 to contribute to the promotion of gender equality in society:

- Event at the Gerardo Diego de Pozuelo High School in Alarcón for the promotion of scientific and technological vocations.
- STEM & Retail Innovation Forum: topics such as the talent deficit in STEM, the most demanding sectors, the current state and the most urgent challenges facing the sector were discussed.
- Round table at the Women NOW initiative (Museo Reina Sofía) with the title: Women & Work: still a world for men?

Finally, with regard to other actions in favour of gender equality, it should be noted that Adif-AV participated in 2019 in the questionnaire "Women's employment in European railway companies", promoted by the European Community of Railway and Infrastructure Companies (ECCI) and the European Transport Workers' Federation (ETF). The aim is to compare with the rest of the companies in the sector in terms of equality, thus promoting continuous improvement.

On the other hand, in addition to promoting gender equality, Adif-AV is against any type of discrimination that may occur in the performance of its activity. The Code of Ethics and Conduct establishes that no employee may exercise or permit degrading treatment against any other employee, regardless of the position they hold. Any action that implies contempt and/or harassment for sexual reasons, religion, ethnicity, race, nation, illness, disability or any other personal, family or social circumstance is totally prohibited.



Adif-AV has drawn up a **protocol for action in the face of possible situations of sexual harassment, gender-based harassment and moral harassment**, with the agreement of all the unions. There is also an action **protocol for dealing with harassment in the workplace**. Both are currently being reviewed.



## 5.7. Customer orientation

Adif-AV works daily to meet service needs and to maintain collaborative relationships with its clients. In addition to users of the railway system, its external customers include railway operators, customers of companies and traders and governments of other countries.

The promotion of accessibility and care for people with disabilities is one of the positive social impacts in which Adif-AV is most involved, always seeking to make the managed infrastructures as accessible as possible for all its customers.

### 5.7.1. Customer Satisfaction

Adif-AV has different channels through which it maintains continuous and updated communication with its users and other external clients. The most widely used channel is its corporate website, where it makes available to all interest groups all the updated information concerning its activity. In addition, and as more direct channels of contact, there are Customer Service Offices, e-mail and telephone.

Depending on the type of customer in question, Adif-AV surveys their opinion in different ways and establishes mechanisms to improve the service:

#### Passenger Stations



In 2019, the result of the study on the Quality Perceived by Users of Travellers' Stations was presented. This study showed a perceived quality of the stations of 7.76 out of 10.

Based on this data, Adif-AV is carrying out a continuous process of improvement of the stations in different aspects to be able to offer the passenger a better service. In this way, work is being done to improve the accessibility of the stations, to enlarge the waiting and boarding areas, and to improve accesses or underpasses.

Indicator description		Units	2016	2017	2018	2019
INFORMATION PERFORMANCE IN SOCIETY AND PRODUCT RESPONSIBILITY	Perceived quality in stations	points/10	7.61	7.55	7.00	7.76
	Perceived quality in freight transport	points/10	5.6	7.3	7.3	ND

*\*Customer satisfaction surveys at Passenger Stations: In 2019 the result of the study on the Quality Perceived by Passenger Stations users was presented. It contains the results of a survey carried out.*

#### Railway operators



- **Periodic contact:** Adif-AV seeks to know first-hand your opinions and expectations and thus identify opportunities for improvement that will favour the development of the business.
- **Biennial satisfaction studies:** on the services provided.

## Retailers



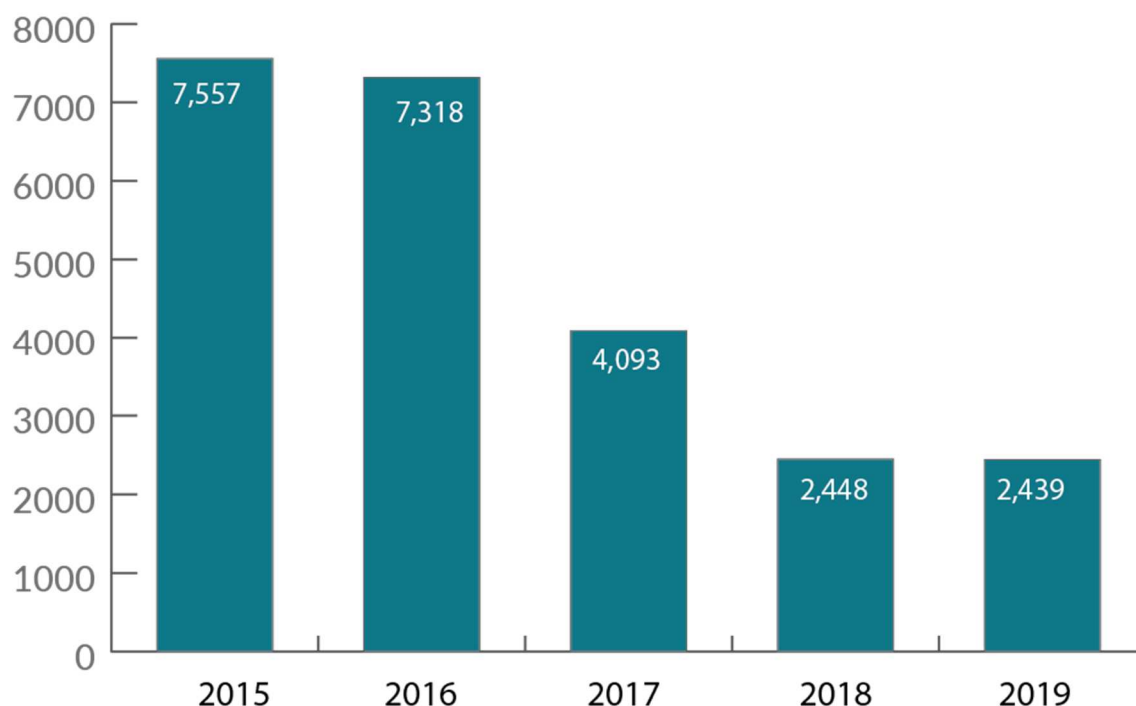
- **Satisfaction surveys:** in 2019 they were not carried out as they are biannual.
- **Management and dynamisation of the station's store** profiles on social networks (Facebook, Instagram, Twitter) where the stores collaborate with promotional content and the end users participate in them and interact with the brands.
- **Annual award for the best establishment** with a station or Vialia Brand

Adif-AV has a complaints and suggestions service that facilitates communication with customers to find out their expectations and detect areas for improvement in management and their correct treatment. A computer application called RECLAMA is used to manage all the files. The answers provided to the users are made in writing to their postal address or by e-mail. Additionally, at the stations themselves, citizens have complaint books where they can express their grievances.

Claims, complaints and suggestions, derived from possible breaches of legal or other requirements, incidents or deviations, facilitate Adif-AV's communication with customers to find out their expectations and detect areas for improvement in our station management. These can be submitted to the Passenger Service Offices at the stations themselves or, in some cases, can be received by e-mail

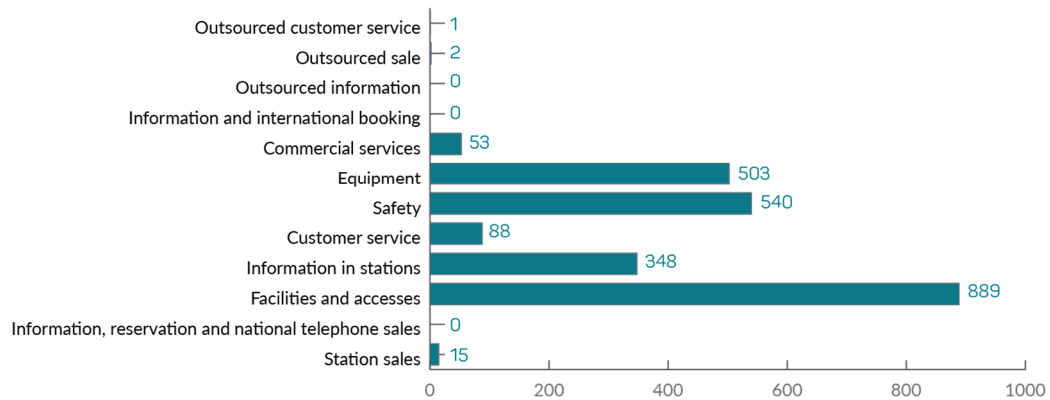
In 2019, 2,439 complaints corresponding to Adif and Adif-AV stations were resolved and 158 suggestions and 36 congratulations were received. This information allows Adif-AV to identify possible areas for improvement in order to achieve a higher level of customer satisfaction.

## COMPLAINTS AT PASSENGER STATIONS



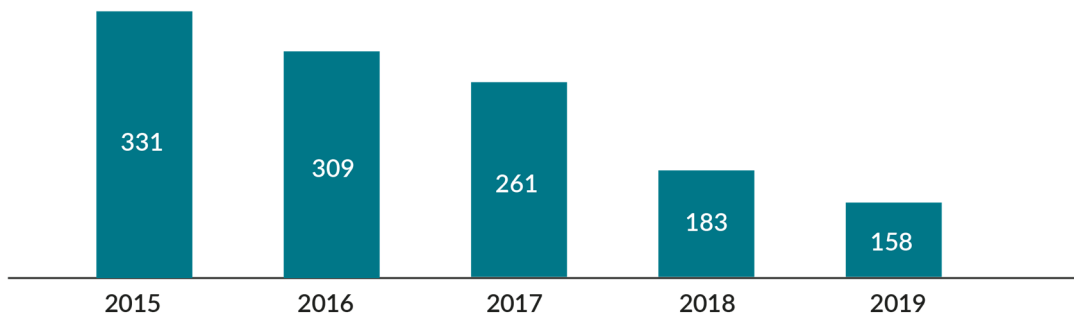
## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

### COMPLAINTS RECEIVED BY SUBJECT

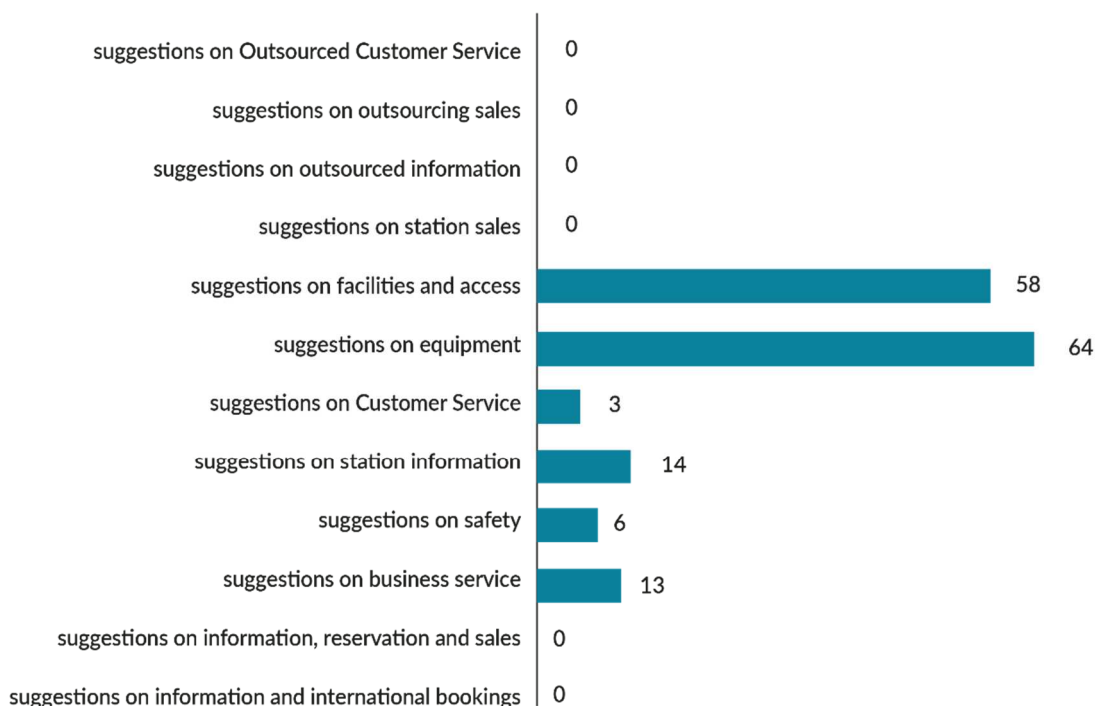


In 2019 there was a **0.37% drop in complaints** compared to the previous year, with complaints about facilities and accesses being the most numerous.

## SUGGESTIONS RECEIVED AT PASSENGER STATIONS



## SUGGESTIONS RECEIVED BY TOPIC



The total number of **suggestions** received at Adif and Adif-AV stations in 2019 **fell by 15.8%** compared to the previous year, with equipment, facilities and accesses being the categories that received the most suggestions.

### 5.7.2. Accessibility

Within the Strategic Objective of social cohesion of the PT2030, all the improvements made in terms of station accessibility are also included, this being an issue of maximum relevance for Adif-AV. Therefore, it is a matter of progressively improving the conditions of accessibility of the stations we manage, thus eliminating the difficulties that may represent discrimination in access to railway transport.

Along these lines, Adif/Adif-AV and Renfe-Operadora are working together to draw up a Master Plan for Railway System Accessibility (Plan Accede 360), which will aim to develop a model in the short, medium and long term (2019-2028) that will define the framework for carrying out actions to improve accessibility, from a global (the whole travel cycle) and integrated (infrastructure-trains) approach, with the ultimate aim of ensuring transport based on criteria of equality, dignity, maximum autonomy, comfort and safety, which is accessible and does not represent barriers for people with disabilities.

It is therefore a tool that can be complemented with the annual action plans defined by each entity, so that it is possible to further specify the actions to be developed in this framework.

To this end, a joint Adif/Adif AV-Renfe Operadora working group was created in 2018, made up of professionals from both entities, with the aim of having a document in place by 2020. The starting point was RENFE's Integral Accessibility Plan 2019-2023 and the actions planned by Adif/Adif AV for the coming years.

The Plan consists of three phases:

- Phase 1. - Legal: development in stations with more than 750 passengers per year or provincial capitals and in their station-train systems (arrival at the station, transit, access-stay-departure of the train, transit, departure from the station).
- Phase 2 - Deployment: progressive development in stations with less than 750 passengers per year. It will be carried out according to the available resources.
- Phase 3 - Continuity and deepening: complete cycle of the journey with actions aimed at informing and raising awareness among the population (communication and information channels before and after the journey).

The Accede 360 Plan will provide Adif/Adif AV for the first time with a planning and action tool to cover, in collaboration with Renfe, the three main needs demanded:

- ✓ The right of people with any type of disability to be able to use public transport such as the Railway to get around.
- ✓ The growing social demand both at the level of social awareness in the country and the guidelines at the international level (EU/UN-SDG).
- ✓ The duty to comply with the applicable regulations in force within the established deadlines

In addition, we have continued to collaborate with representative organizations in the disability sector, such as the State Confederation of Deaf People (CNSE) or the Spanish Committee of Representatives of People with Disabilities (CERMI).

In 2019 the Master Plan is in the final phase of joint drafting between Adif/Adif AV and Renfe. For its validation, it is necessary to provide the Plan with an economic amount that allows its subsequent development and implementation through annual action plans.

Adif-AV has a service for the hearing impaired called DIALOGA, which facilitates communication and access to service information at the stations. DIALOGA consists mainly of a video interpretation service in sign language at the Customer Service Offices and a public address service at the station that is represented textually on the information monitors. Through the information monitors, the most relevant incidents, emergency situations and other general messages are transmitted in sign language. In addition, a telephone information and communication service via text is available for mobile devices.



Through the corporate website of Adif-AV you can consult the Adif stations adapted in their services and facilities to the needs of deaf and hearing-impaired people.

[www.adifaltavelocidad.es](http://www.adifaltavelocidad.es)

In 2019 the **DIALOGA** service has been provided at **20 stations**: Alicante (AV), A Coruña (Multioperador), Albacete Los Llanos (AV), Barcelona Sants (AV), Ciudad Real (AV), Córdoba (AV), Cuenca Fernando Zóbel (AV), Gijón (Multioperador), Girona (AV), León (AV), Madrid Chamartín (AV), Madrid Puerta de Atocha (AV), Málaga María Zambrano (AV), Ourense (AV), Oviedo (Multioperador), Santiago de Compostela (AV), Sevilla Santa Justa (AV), Valencia Joaquín Sorolla (AV), Valladolid Campo Grande (AV) y Vigo Guixar (Multioperador).

Adif-AV is fully aware that much remains to be done in the field of accessibility. At present, of the 1,495 passenger stations in the network owned by the Railway Infrastructure Manager, specifically 841 stations managed by Adif/Adif-AV are accessible (aggregate data), and serve 865.9 million passengers per year; and allow around 85.07% of passengers who transit the entire network to do so autonomously. In the remaining 654 stations that are not accessible at present, work is being carried out in 113 of them (including 4 high-speed stations: Alicante, Loja, Murcia and San Sebastián, which are affected by works), so that when these actions underway are completed, 954 stations will be adapted, which will mean that around 93% of the passengers who travel through the 1,495 stations will do so autonomously.

In 2019, an **investment** of 25.87 million euros (with VAT) has been made in the drafting and execution of works, of which **12.7 million euros (with VAT) correspond to actions related to accessibility**.

Indicator description		Units	2016	2017	2018	2019
INFORMATION PERFORMANCE IN SOCIETY AND PRODUCT RESPONSIBILITY	Accessibility in stations*	of passengers accessing stations with accessible itineraries managed by Adif / Adif-AV*	80.08	81.21	83.19	85.07

\*(Adif and Adif-AV integrated indicator) Universal accessibility for people with disabilities

## 5.8. Commitment to communities

Adif-AV is aware of the relevant impact that the development of its activity has on the communities in which it operates and on the country as a whole. The quality and availability of railway infrastructures, as well as their safety, the impact of these infrastructures on economic development and social cohesion, among many other impacts, have effects on the quality of life of citizens, in line with the purpose of "improving people's lives".

Therefore, it is important to take into account the different impacts generated on citizens and the strategy to deal with them is increasingly positive, covering the purely operational and service dimension, but also the economic, social, environmental and governance dimension of the Entity.

### 5.8.1. Open Station Program

The Open Station Program is a cross-cutting program that will catalyse much of the social action of Adif-AV, being the main instrument to materialize the collaboration with the third sector. In this way, an excellent platform (every year more than 150 million people pass through Adif/Adif-AV stations) is made available to them, free of charge, to carry out activities that help them achieve their objectives, while the stations increase their value to citizens by providing them with cultural, social or environmental content.



The Open Station Program contributes, through its activities, to the fulfillment of Adif-AV's Social Action objectives and to the **Sustainable Development Goals**.

Collaborative work with non-profit organisations is regulated by an internal working procedure ("General Procedure for the Assignment of Space in Stations"). This procedure ensures that responses to requests for space are homogeneous, with explicit and shared criteria, regardless of the channel through which they are received. It also makes the process of attention and response to third sector organisations more agile and transparent.

Within the framework of the Plan Transforma 2030 and located within the strategic pillar of Sustainability, Adif-AV has set itself the objective of **contributing to social cohesion**. This objective is formulated as follows: "To provide an **accessible public service** and contribute to the **improvement of local communities** and **vulnerable groups**".

## SOCIAL COHESION

On the other hand, and in a strategic way, in the actions of the Open Station Program, the groups defined as priorities prevail. The WP 2030 includes in the Strategic Objective "Social Cohesion" two strategic indicators of the Open Station Program:



**Education, culture and values:** number of people impacted (beneficiaries and participants) by education, culture and values campaigns.



**Solidarity campaigns:** direct economic return obtained from fundraising campaigns and partners. In 2019, this return was 146,351 euros, down from 379,124 euros the previous year.

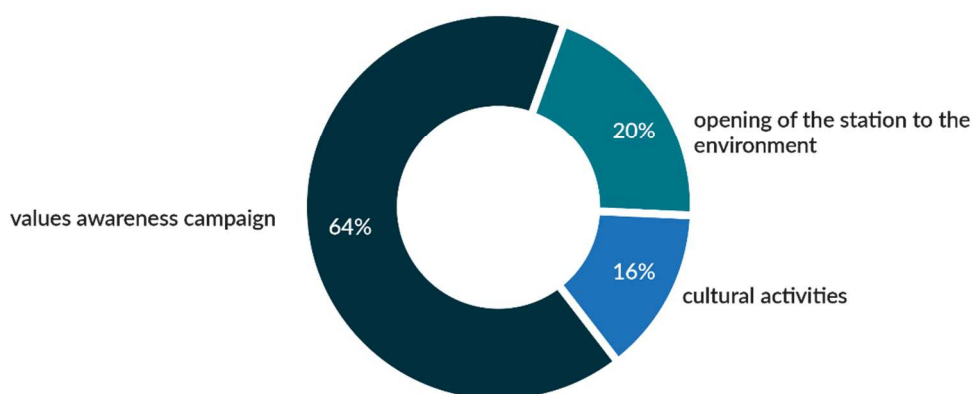
In 2019, the activities carried out increased by 18% with respect to the previous year, with 486\* activities, on 78\* different stations and with an estimated audience of 2.22\* million people (\*Adif/Adif-AV aggregate data). The number of entities that have carried out some activity at the stations follows the same upward trend. In 2019, Adif-AV collaborated with 106 organisations (associations, foundations, town councils, public agencies or ministries), in this case the increase is 1% compared to the 105 entities with which it collaborated in 2018. Adif-AV's indirect contribution to the Open Station Program, measured as lost profits, was 65% more in 2019 than in the previous year, with 958,548 euros due to the increase in the duration of activities at the stations.

In 2019 the number of activities and entities with which Adif-AV has collaborated has increased

The Adif-AV Open Station Program has three lines of action that combine the activities carried out and that can be enjoyed in different stations of the railway network:

- **Opening of the station to the surroundings**, which includes information and dialogue actions with citizens
- **Awareness campaigns in values**
- **Culture**, highlighting artistic events by new artists, concerts, exhibitions, etc.

### OPEN STATION ACTIVITIES 2019



All entities to which Adif-AV assigns space within the framework of this program must complete an action evaluation form from which two indicators are derived, the average assessment of the result of the activity as a whole and the average assessment of the collaboration provided by stations.



In 2019 the **NGO's** evaluated their satisfaction with the activity in this program framework with a 9.3 rating and an 8.8 rating for the collaboration with Adif-AV.

The 2019 evaluations reflect very similar results to those of previous years. The rating given to the collaboration provided by the stations continues to be high, having reached 9.3 and the assessment of the result of the activity as a whole obtains a very satisfactory score of 8.8. In 2019, a great effort has continued to be made to ensure that a high percentage of organisations complete this form. Specifically, 55% of the entities with which we have collaborated have completed it.

Some entities have voluntarily reported the direct return of their activities within the framework of the Open Station Programme. The economic return reported by the participating entities amounts to 19,871.25 Euros (2,547.25 Euros more than in 2018). A different trend is maintained with the recruitment of members, in 2019 1,054 members were obtained (1,961 less than in 2018).

Indicator description		Units	2017	2018	2019
INFORMATION ON PERFORMANCE IN SOCIETY AND PRODUCT RESPONSIBILITY*	Collaboration with NGOs and other non-profit organisations				
	(Education, culture and values)	M people impacted	1.81	2.00	2.22
	(Integrated ADIF - ADIF AV).				



## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

Indicator description	Units	2017	2018	2019
Collaboration with NGOs and other non-profit organizations (Solidarity campaigns) (Integrated ADIF - ADIF AV).	M euros	299.93	379.12	146.35
Sponsorship Contracts signed with non-profit associations	Nº	-	2	2
Membership in national associations (CR)	Nº	3	3	3

\* The company's commitment to sustainable development: the impact of society's activity on employment and local development; the impact of society's activity on local populations and the territory; the relations maintained with local community actors and the modalities of dialogue with them; membership of national and international associations; sponsorship actions; agreed collective agreements.

### 5.8.2. Heritage and Urbanism

Adif and Adif-AV manage the real estate assets they own with the ultimate aim of having a positive impact on the communities in which they are located, generating a shared value that benefits society as a whole. In this way, they contribute to the sustainable development of the railway system and its urban-railway integration in the cities, in line with the policies set by the competent institutions. In 2019, the Madrid Nuevo Norte Project has been continued:



#### MADRID NUEVO NORTE

Pursuant to Clause Twelve of the Amendment Contract of 28 December 2018, the Follow-up Commission was established on 8 March 2019, and it was agreed to create four Technical Committees that have met on a monthly basis.

On 22 April 2019, the Madrid City Council, Adif, Adif-Alta Velocidad, EMT and DCN signed the *General Protocol of Action for the Execution of the Singular Actions Identified in the Modification of the Madrid General Urban Development Plan related to the Areas APE 05.27 Colonia Campamento and APR 08.03 Extension of La Castellana in order to guarantee the Correct Technical Viability of the Operation of the Urban Development Operation called "Madrid Nuevo Norte"*.

On 29 July 2019, the Plenary Session of the Madrid City Council provisionally approved the modification of the 1997 Madrid General Urban Development Plan for RPA 08.03 "Extension of La Castellana" and RPA 05. 27 "Colonia Campamento", for the definition of the determinations and planning parameters of the urban operation "Madrid Nuevo Norte", with the creation of a Planning Area referred to 05.10 "Estación Chamartín" and three Specific Planning Areas called APE 08.20 "Malmea-San Roque-Tres Olivos", APE 08.21 "Las Tablas- Oeste" and APE 05.31 "Centro de Negocios Chamartín".

In addition, the Entity has continued to develop its regular asset management activity, with the following activities being particularly noteworthy:

- **Agreements with other administrations and organisations:** The company has collaborated with other departments in the negotiation of agreements in the cities of: A Coruña (future intermodal station), Lugo (future intermodal station), Vigo (accesses to Vialia and urban tunnels), Barcelona, (new urban planning around the Barcelona-Sants station). A Coruña (future intermodal station), Lugo (future intermodal station), Vigo (accesses to Vialia and urban tunnels), Barcelona, (new urban planning around the Barcelona-Sants station).
- **Urban Planning Reports:** Numerous urban planning reports have been issued, as well as suggestions and/or allegations to different planning instruments, including Barcelona (Initial Approval MPGM Sector Prim), Logroño (Final Approval of the Modification of the PERI Railway), Lleida (Provisional Approval of the POUM) and Valladolid (2nd Public Information of the Revision of the PGOU) Barcelona, (PMU Les Glories). Bilbao (Revision of the Urban Plan). Camargo (PGOU). Irún (Mod nº1 PGOU). Vilafant (POUM).
- **Inventory:** The Annual Real Estate Inventory Incorporation Program for the land corresponding to High Speed lines in service has involved the incorporation of 65 Inventory Units, 15,468 properties with 45,041 associated documents corresponding to 16.7 million m<sup>2</sup>.
- **Property and Urban Planning Reports:** 66 Property and Urban Planning Reports have been issued at the request of other Directorates, 24 of which correspond to High Speed actions. Likewise, several reports have been issued to projects and informative studies of High-Speed actions.
- **Proposals for a Declaration of Unnecessity and Agreement for the Reversal of the Decision:** Reversal proceedings have been carried out on 364,705.79 m<sup>2</sup> of surface area (mostly land used for rubbish dumps or the extraction of material for the AVE, and also for supported expropriations and requests for reversal). Files on the reduction of the building boundary line and the public domain area: 3 files on RLLE in urban areas have been opened and 1 file on the reduction of the public domain area has been resolved.

### 5.8.3. Corporate Group

With respect to the management of the Corporate Group, it should be noted that Adif - AV has stakes in 20 entities (companies, consortiums, foundations, economic interest groups and associations).

The entities and companies in which Adif - AV has participation are the following:

Consulting and Business Companies	Ineco, S.M.E, M.P., S.A. [Adif AV (20,68%)]	
Public-Private Partnerships	Track and Facilities	Albali Señalizaciones, S.A. [Adif AV (10%)]
		Energía Olmedo – Ourense, S.A. Fase I [Adif AV (10%)]
		Vía Olmedo – Pedralba, S.A. [Adif AV (10%)]
Others	International	Hit Rail, B.V. [Adif AV (4,35%)]
	Alta Velocidad Alicante Nodo del Transporte, S.A. [Adif AV (30%)]	
	Almería Alta Velocidad, S.A. in liquidation [Adif AV (40%)]	

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

Integration	Barcelona Sagrera Alta Velocitat, S.A. [Adif AV (30%)]
	Cartagena Alta Velocidad, S.A. [Adif AV (40%)]
	Gijón al Norte, S.A. [Adif AV (30%)]
	León Alta Velocidad, S.A. (in liquidation) [Adif AV (37,50%)]
	Logroño Integración del Ferrocarril, S.A.[Adif AV (30%)]
	Murcia Alta Velocidad, S.A. [Adif AV (40%)]
	Palencia Alta Velocidad, S.A. [Adif AV (40%)]
	Valencia Parque Central, S.A. [Adif AV (30%)]
	Valladolid Alta Velocidad, S.A. [Adif AV (30%)]
	Alta Velocidad Vitoria – Gasteizko Abiadura H., S.A. [Adif AV (40%)]
	Zaragoza Alta Velocidad, S.A. [Adif AV (30%)]
Foundations	Fundación de los Ferrocarriles Españoles [Adif AV (25%)]
Associations	Asociación ERESS

Adif - Alta Velocidad has entrusted Adif with the management of its corporate group. In relation to this assignment, in 2018, Adif launched the "Plan de Posicionamiento del Grupo Societario", with the intention of establishing the role that Adif - AV plays in these entities in which it participates and assessing the importance and the need to continue being part of them, analysing the competitive, economic, legal, operational, social, sustainability and environmental advantages that may arise from this.

This plan is in line with the following SDG:



Within the framework of this Plan, different projects are being developed:

- Reduction and Rationalisation of the Corporate Group, in line with the agreement of the Council of Ministers of 16 March 2012 approving the Plan for the restructuring and rationalisation of the state-owned public business and foundation sector.
- Definition of the Adif - Alta Velocidad Subsidiary Group Model.
- Improvement of the impact of Adif - Alta Velocidad's participation in the different entities (foundations, associations, specific purpose companies and integration companies).
- Development of a new internal regulatory framework to improve the management of the corporate group.

The activity carried out in the area of the **management of the Corporate Group** was as follows:

- The monitoring and control of the different entities, their operating programmes and the annual accounts, as well as the management reports.
- The supervision of the agreements adopted in the governing bodies of these entities, ensuring that these agreements are in line with Adif - Alta Velocidad's strategy.
- The supervision of the technical and economic viability of the different entities, as well as their proposals for action.

In particular, the continuation of the development of the Positioning Plan, and, in particular, the project of "Definition of the Subsidiary Group Model" for which meetings are being held with all the areas of the company in order to capture all the points of view that will serve as a basis for the future definition of the Adif - Alta Velocidad Corporate Group.

Over the next few years it is intended to continue the development of the Positioning Plan with the projects that derive from it and, in the next few months, it is planned that Adif - Alta Velocidad will acquire 12.5% of Emfesa.

#### **5.8.4. Integration companies**

**In relation to the Integration Companies,** it should be noted that Adif AV participates in 13 Railway Integration Companies in the following cities (Alicante, Almería, Barcelona, Cartagena, Gijón, León, Logroño, Murcia, Palencia, Valencia, Valladolid, Vitoria and Zaragoza).

These companies are the result of agreements signed since 2002 between the Ministry of Public Works and Transport and its regional and local administrations, in order to achieve a better integration of the railway in urban areas.

These agreements include all the necessary railway and urban development actions, detailing their costs and method of financing, as well as the powers and obligations of the signatories and of the Company, with the latter's mission being to manage urban development and execute the infrastructure and urban development works corresponding to the land released in the city's various spheres of action.

Furthermore, the Company is responsible for defining the programming and economic balance of the operation, taking into account that all the economic resources obtained as a result of the urban development of the land transferred by the partners and/or private owners of the land will be applied, in the first place, to the payment of the railway works included in the agreement.

The activity carried out in the area of **integration companies** derives from the decisions that had to be taken as a result of the imbalances that occurred in these companies due to the economic and financial difficulties that Spain suffered from 2011 onwards. Therefore, within the framework of the Integration Companies, it has been necessary to reinforce work aimed at guaranteeing the development of the actions committed to in agreements, fundamentally aimed at:

- Making the Integration Societies viable by reviewing the integration plans defined at source, promoting each of the milestones that make up the global project to rethink, modify or extinguish the Agreements, proposing new integration solutions, or adapting the integration model to the current situation.
- Adapt the financing of these operations to the costs defined in the integration solutions.
- To eliminate the bank debt of the Companies in order to minimise the extra costs involved in these contracts.
- Implement different financing methods so as not to link these operations to urban development gains.

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

- To value the disaffected lands in order to obtain economic resources and to return the bank, participative and mercantile debt of the SIF.

To this end, the following documents have been signed for integration operations linked to Integration Companies in 2019:

- Protocol for the integration of the railway in the city of Valencia (9/4/2019).
- Agreement for the integration of the railway in the city of Gijón (8/5/2019)
- Amending addendum to the Convention for the integration of the railways in the city of Murcia (17/5/2019)
- Addendum to the Convention for the integration of the railway in the city of Alicante (1/10/2019).

In addition to the above documents, some of which propose new operations and others modify the agreements that gave rise to the Integration Companies, Adif Alta Velocidad and these companies have signed others necessary for their management or operation, which are listed below:

- Lease contract for the car park located next to Palencia railway station, on 25 February 2019.
- Addendum to the Framework Agreement for the execution of Sant Andreu Comtal station, on 8 July 2019.
- Addendum to the Framework Agreement for the execution of civil protection and safety installations in the Sagrera tunnels, dated 25 June 2019.

Furthermore, in order to improve communication between the central, regional and local administrations, in 2019 the Technical Commissions have been promoted in which all the partners share updated information on the progress of integration actions and also constitute forums for solving possible incidents generated by the execution of these integration actions.

On the other hand, and with the aim of providing improvements in the integration of the railway in the cities, so that these are more sustainable, a preliminary analysis of the situation of the railway in the provincial capitals has been carried out, with a collection of data of a socio-economic, railway and town-planning nature whose ultimate objective is to have information to facilitate the adoption of future decisions regarding the possible solutions for the integration of the railway in the cities in line with the SDG.

Over the next few years, it is planned to continue working on updating the different Protocols or Conventions that need to be updated according to the recommendations of the Court of Audit in 2017, the entry into force of Law 40/2015 on the Legal System of the Public Sector and the new models for integrating railways into cities that guarantee sustainable integration that takes ODS into account.

As for the most relevant actions carried out within the companies during 2019, the following should be highlighted:

- **Alicante Nodo del Transporte:**
  - In October 2019, a Modifying Addendum to the Agreement was signed to promote the completion of urban development actions, contemplating the execution of the rest when funding becomes available.

- **Almería Alta Velocidad:**

- The works for the integration of the railway in the area of El Puche are in progress and the works for the stretch between the River Andarax and El Puche have started (both works belong to Phase 1 of the railway integration).
- Work has begun on the drafting of Phase 2 of the integration project, which consists of the extension of the underground access section to Avda Mediterráneo (1.5 km underground), which includes the adaptation of the intermodal station to the high-speed rail system, with tracks and platforms on the surface.
- Adif and Adif Alta Velocidad have purchased the shareholding of Renfe Operadora in the company Almería Alta Velocidad.

- **Barcelona Sagrera Alta Velocitat:**

- Work on the station structure, accesses and the Garcilaso collector is in progress. In addition, the works contract for the Sant Andreu Sector has been resolved and the pending projects will have to be redefined.
- Signing of the Addenda for the execution of Sant Andreu Comtal station in July 2019 and for the execution of the works of non-railway installations corresponding to the tunnels of Sagrera station and its accesses in June 2019.
- In October 2019, the FR-05 plot in the surrounding area of the Sant Andreu sector was awarded for 10.44 million euros.

- **Cartagena Alta Velocidad:**

In February 2019, the Ministry of Public Works and Transport presented a Feasibility Study and it was agreed to continue with the necessary actions for the arrival of the High Speed Railway along the current access corridor, guaranteeing its compatibility with urban integration solutions for the railway.

It was also agreed that a new Information Study would be drawn up for a variant for freight that avoids passing through urban areas.

- **Gijón Al Norte:**

- In April 2019, the emptying of the Metrotrén tunnel was completed.
- In May 2019, a new agreement was signed that contemplates the completion of the Metrotrén by Adif and the construction of a new station in front of the railway museum and coverage up to La Calzada and Avenida Príncipe de Asturias.
- The Ministry of Public Works and Transport is drafting a new information study for the integration of the railway, comparing the current proposed location in front of the railway museum with that of Moreda.
- Adif is drafting the civil works construction projects for the Plaza de Europa station, the Bibio and Viesques stations and the Viesques-Hospital de Cabueñes section.

- **Logroño Integración del Ferrocarril:**

- In execution the works of the bus station and urbanization of the area financed by the City Council and Society.
- Work is in progress on the transfer of the La Portalada electric traction substation.
- In March 2019, the creation of a working group was approved to analyse the Agreement and the viability of phases 2 and 3.
- In June 2019, the modification of the Special Plan for Interior Reform was definitively approved.

- **Murcia Alta Velocidad:**

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

- Work on Phase 0 of integration (Santiago El Mayor-Senda de los Garres) is underway.
- Work has begun on Phases 1 and 2 (Estación-Barriomar and Nonduermas).
- In May 2019, a Modifying Addendum to the 2006 Agreement was signed, allowing for the execution of all integration actions pending execution, financed by contributions from the partners. The partners have already made the contribution corresponding to the first year through a Participative Loan to the Company.
- **Palencia Alta Velocidad:**
  - The Ministry of Public Works and Transport is analysing a solution for integration in the city by keeping the station on the surface and burying it underground to a lesser extent than initially envisaged.
  - Adif AV and the company have signed a new lease for the station car park, and the latter has signed an agreement for the management of the car park with the City Council.
- **Valencia Parque Central:**
  - In April 2019, a Cooperation Agreement was signed, incorporating the commitments already made by which the Access Channel Phase III is co-financed by the Partners and Adif - Alta Velocidad/Adif assumes the execution of the Eje Pasante and the New Station.
  - The drafting of the basic and construction project of the New Access Channel (Phase III) by Adif - Alta Velocidad is still underway.
  - Regarding the urbanization, the works in the area of the Central Park pending execution have been tendered and the works for the qualification of the plots of Phase 1 A have been tendered and awarded.
- **Valladolid Alta Velocidad 2003:**
  - In April 2019, Renfe began the transfer to the NBMI, which is expected to be completed in the first half of 2020.
  - In May 2019, the City Council initially approved the revision of the PGOU.
  - In relation to the East Bypass, in May 2019 Adif put out to tender the contract for the supply and transport of sleepers for the East Bypass for an amount of 8.036M euros (VAT included) and that of track equipment for an amount of 6.12M euros (VAT included) for the East Bypass.
  - In September 2019, the Company signed the contract for the drafting of the construction project for the underpass in Panaderos y Labradores streets to the company GOC, S.A., which is currently being drafted
  - In October 2019, Adif AV awarded the project for the adaptation and expansion of the station to the company TYPESA, currently being drafted.
  - The 3-wire branch line was put into service in October 2019.
- **Vitoria-Gasteizko Abiadura Handia:**
  - At the Company's Board of Directors meeting on 17 January 2019, a new solution for the integration of the railway in the city of Vitoria was presented, urging the Ministry of Public Works and Transport to draw up a new Information Study.
  - In July 2019, the Ministry of Public Works and Transport published the announcement that the new Information Study for the integration of the railway in Vitoria would be submitted to public information.
- **Zaragoza Alta Velocidad:**
  - In May 2019, Manzana 6 (area G44/2) was sold for an amount of 15.97 million Euro (without VAT).



As of 2019 there are a total of **54 Integration Agreements, Protocols, Addenda, etc. with the companies** in which Adif-AV has participated since its creation.

## **5.9. Supplier Management**

Suppliers are an essential part of the development of Adif-AV's activity and its relationship with them is based on guaranteeing the maintenance of partnerships and legal certainty in the concession and the transparency of the contracting process.

Both Adif and Adif-AV are public business entities and therefore subject to the provisions of **current legislation on public procurement**.

Specifically, Adif-AV's contracts are governed in their preparation, award, effects and termination by Law 9/2017, of 8 November, on Public Sector Contracts, (hereinafter, "Law 9/2017"), in accordance with the provisions of article 3.3 d) of said Law.

In addition, Adif-AV's contracts have the following legal regime:

- Contracts with a value equal to or greater than the thresholds for harmonised contracts established in article 16 of Law 31/2007, of 30 October, on procurement procedures in the water, energy, transport and postal services sectors (hereinafter, "Law 31/2007"), are governed in their preparation and award by the said Law; and in their effects and termination by the rules of Private Law.
- According to the eighth additional provision of Law 9/2017, contracts with a value lower than that indicated in the previous paragraph are governed, in general terms, for their preparation and award, by the rules of non-harmonised contracts established in Law 9/2017 for contracting authorities that are not Public Administration; and in their effects and extinction, by Private Law.

The Adif-AV supplier contracting process is established through the Contracting Policy, which includes rigorous selection parameters, and articulates all purchasing procedures through management based on transparency and security, contemplating all processes and their possible incidents.

### **5.9.1. Responsible Public Procurement**

Adif-AV faces the challenge of making Public Procurement a fundamental and legitimate tool to contribute to objectives related to sustainability and social integration, while at the same time being compatible with the fundamental principles of Public Procurement: competition, freedom of access and transparency, non-discrimination and equal treatment.

For this reason, for each contracting process, Adif-AV carries out a supplier selection process in which suppliers must prove their business solvency, as well as their compliance with social and environmental requirements determined for each approval file. The processes of homologation and evaluation of suppliers in the contracting of Adif and Adif-AV are comparable to the conditions of solvency and capacity that are regulated in articles 65 to 97 of Law 9/2017 (for Adif contracts and, as far as applicable, to the non-harmonized contracts of Adif-AV) and in articles 21 to 31 of Law 31/2007 (for the harmonized contracts of Adif-AV). In addition, the contract specifications



specify the prerequisites to be met by bidders, which must be accredited prior to the awarding of the respective contracts.

In regards to the social, equality and environmental criteria used to select the bidders, these are set by the aforementioned solvency criteria or by the award criteria. Both criteria categories are set by the contracting authority in the contract specifications and are made available to the tenderers prior to the submission of their tenders. In the event of a tie, articles 131.1, and 145 to 148 of Law 9/2017 (for Adif contracts and, in those aspects applicable to contracts below the threshold of harmonised Adif-AV contracts) and articles 60 to 62 of Law 31/2007 (for contracts with an estimated value equal to or greater than those established in article 16 of the aforementioned Law 31/2007) are considered for the tie-breaking process.

#### **CATALOGUE OF SOCIAL AND ENVIRONMENTAL CLAUSES**

As a result of the new Public Sector Contracts Law (LCSP) and, specifically, Article 1.3, which establishes the obligation to incorporate social and environmental criteria in all public contracts in a transversal and mandatory manner, Adif-AV is working on the preparation of a Social and Environmental Clauses Catalogue to be included in the different phases of the contracting process and for each type of contract. Thus, clauses are being defined at three levels:

- Requirements to be met by bidders in the design phase, preparation and drafting of the contract and its specifications.
- Clauses to be applied as evaluation criteria for the contractor selection phase.
- Special execution conditions to be taken into account in the contract execution phase.

In addition, with the aim of enriching the work being carried out, we are counting on the help of the Forética Public Companies Action Group, to be able to incorporate ideas born from similar initiatives into the catalogue.

As a result of all this work, Adif-AV has defined the social and environmental criteria that it will evaluate in the suppliers that present themselves to its purchasing processes. The social criteria will be more transversal while the environmental criteria will be more linked to the nature of the contract:

- Social criteria: equality, conciliation, hiring people with disabilities, hiring people at risk of exclusion/vulnerable groups, hiring and job stability, health and safety protection at work, improvement of salary and working conditions, collective agreements, training, corporate social responsibility, transparency and good tax practices.
- Environmental criteria: waste and emissions, environmental management system, works contracts, cleaning services, security services, consulting and engineering services, maintenance services, fleet vehicle supply, energy supply, supply of other materials.

The contracting procedures of Adif and Adif-AV are subject to the **control of numerous institutions**, such as the General Intervention of the State Administration and the Court of Auditors.

	Indicator description	Units	2016	2017	2018	2019
Information on performance in society and product responsibility	Responsible Purchasing	%	N/D	N/D	100	100
	<i>* integrated indicator for Adif and Adif AV</i>					

## 6. ABOUT THIS REPORT AND GRI STANDARDS

### 6.1. Scope

Since 2006, Administrador de Infraestructuras Ferroviarias has prepared its Sustainability Report. In the 2019 report, Adif-AV gives an account of its commitments and performance in financial and non-financial matters from 1 January 2019 to 31 December of the same year.

The scope of the report covers Adif-AV's activity in the countries in which it operates. Most of the information contained in the report corresponds exclusively to Adif-AV, but in some cases the Entity reports information that includes Adif, as it does not have the information relating to certain aspects of management separately.

### 6.2. International standards

This report has been prepared taking as a reference the guidelines established in the Global Reporting Initiative's Guide for the preparation of Sustainability Reports in its GRI Standards version, in accordance with the essential conformity option. The selection of relevant aspects has been carried out based on the results of the new materiality analysis carried out in 2019 and explained in section 3.1 of this report.

In addition, the requirements established in Law 11/2018 of 28 December on non-financial information and diversity have also been taken into account in its preparation.

The table of contents and GRI performance indicators in the report indicate the pages and coverage of requirements, management approaches and indicators. In the event that the core performance indicators are omitted, the reason for the omission is explained.

Finally, the contents of the Report have been linked to the Sustainable Development Goals, SDG.

### **6.3. Materiality analysis**

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The analysis of materiality and its updating process has been described in section 3.1 Business Strategy.

## 7. GRI INDICATORS

### General contents

GRI indicator	Reference (Page)
102-1 Name of the organization	6
102-2 Activities, brands, products and services	9-12
102-3 Location of the headquarters	C/ Sor Ángela de la Cruz, 3 - 3ª 28020 - Madrid
102-4 Location of operations	11
102-5 Ownership and legal form	137-138
102-6 Markets served	9-14
102-7 Size of the organization	59; 70-81; 160-161
102-8 Information on employees and other workers	101-106
102-9 Supply chain	135-137
102-10 Significant changes in the organization and its supply chain	In the period covered by the report, there have been no significant changes in the organization. Significant changes in the organization are communicated within the corresponding notice periods specified in the agreement.
102-11 Precautionary Principle or Approach	82-83
102-12 External initiatives	125-128
102-13 Association memberships	57-58; 128-135
102-14 Statement from senior decision makers	
102-16 Values, principles, standards and norms of conduct	9
102-18 Governance structure	38-44
102-40 List of stakeholders	54-55
102-41 Collective bargaining agreements	108-109
102-42 Identification and selection of groups and stakeholders	19-21
102-43 Approach to participation	21
102-44 Key issues and concerns mentioned	21-27
102-45 Entities included in the consolidated financial statements	137-138
102-46 Definition of report contents and subject coverage	137-138
102-47 List of material issues	19
102-48 Re-expression of information	Where possible, data for the last three years (period 2017-2019) have been included
102-49 Changes in reporting	137-138
102-50 Reporting period	137-138
102-51 Date of last report	2018
102-52 Reporting Cycle	Annual
102-53 Contact point for questions about the report	rsc@adif.es
102-54 Statement on the preparation of the report in accordance with GRI standards	137
102-56 External verification	This report has not been verified by a third party.

### Management approach

Indicator	Reference
103-1 Explanation of the material subject and its coverage	The aspects reported on refer to the activities carried out by the entity and the possible direct impacts derived from them.
103-2 The management approach and its components	28; 40-41; 42; 44-49; 59-68; 77-81; 117

## Economic performance indicators

Indicator	Reference
201-1 Direct economic value generated and distributed	152
201-4 Financial assistance received from the government	162

## Unfair competition

Indicator	Reference
206-1 Legal actions related to unfair competition and monopolistic practices and against free competition	In 2019 there have been no claims for unfair competition, monopolistic practices or against free competition.

## Materials

Indicator	Reference
301-1 Materials used by weight or volume	87
301-2 Recycled materials used	95-97

## Energy

Indicator	Reference
302-1 Energy consumption within the organization	84-86
302-3 Energy intensity	86-87
302-4 Reduction of energy consumption	85

## Water

Indicator	Reference
303-1 Total water collection according to the source	88

## Biodiversity

Indicator	Reference
304-1 Description of the most significant impacts on biodiversity in protected areas or areas of high unprotected biodiversity value arising from activities, products and services	97-99

## Emissions

Indicator	Reference
305-1 Direct greenhouse gas emissions (scope 1)	88-90
305-2 Indirect greenhouse gas emissions from energy generation (Scope 2)	89-90
305-4 Intensity of greenhouse gas emissions	91
305-5 Reduction of greenhouse gas emissions	93-94

## Effluents and waste

Indicator	Reference
306-1 Total discharge of wastewater, according to its nature and destination	96-97
306-2 Total weight of the waste, according to type and method of treatment	95-97

## Environmental Compliance

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

Indicator	Reference
<b>307-1</b> Non-compliance with environmental legislation and regulations	82-83; 99-101

### Employment

Indicator	Reference
<b>401-1</b> New hires and staff turnover	101; 112
<b>401-2</b> Benefits for full-time employees that are not given to part-time or temporary employees	107
<b>401-3</b> Parental permissions	108

### Health and safety at work

Indicator	Reference
<b>403-1</b> Workers' representation in formal worker-employer health and safety committees	108-109
<b>403-2</b> Types of accidents and accident frequency rates, occupational diseases, lost days, absenteeism and number of deaths due to occupational accidents or diseases	109-110

### Training and education

Indicator	Reference
<b>404-1</b> Average hours of training per year per employee	111-112
<b>404-2</b> Programs to improve employee skills	111-117
<b>404-3</b> Percentage of employees receiving regular performance and career development reviews	114-115

### Diversity and equal opportunities

Indicator	Reference
<b>405-1</b> Diversity in governing bodies and employees	38-44; 101-106
<b>405-2</b> Ratio of basic salary and remuneration of women to men	106

### No discrimination

Indicator	Reference
<b>406-1</b> Casos de discriminación y acciones correctivas emprendidas	49

### Freedom of association and collective bargaining

Indicator	Reference
<b>407-1</b> Operations and suppliers whose right to freedom of association and collective bargaining may be at risk	In 2019, no significant centres or suppliers have been identified where the freedom of association and the right to benefit from collective agreements may be infringed or threatened.

### Local communities

Indicator	Reference
<b>413-1</b> Operations with local community participation, impact assessments and development programs	125-135

### Customer health and safety

Indicator	Reference
<b>416-1</b> Assessment of health and safety impacts of product and service categories	59-68; 123-125

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

### Marketing and labelling

Indicator	Reference
<b>417-3</b> Cases of non-compliance related to marketing communications	No cases of non-compliance with regulations or voluntary codes relating to marketing communications were recorded in 2019

### Customer Privacy

Indicator	Reference
<b>418-1</b> Substantiated claims regarding violations of customer privacy and loss of customer data	121-123

### Socio-economic compliance

Indicator	Reference
<b>419-1</b> Non-compliance with laws and regulations in the social and economic fields	In 2019, Adif-AV has not received any significant sanctions or fines for non-compliance with regulations in the social and economic fields

## 8. OUR CONTRIBUTION TO THE SDG



### •• INNOVATION AND DIGITAL TRANSFORMATION / CHAPTER 3.4

8 9 11 12 13 17

### •• GOOD GOVERNANCE, TRANSPARENCY AND RISK MANAGEMENT / CHAPTER 4

4 5 8 10 16 17

### •• HEALTH AND SAFETY / CHAPTER 5.2

3 4 8 9 11 16

### •• SERVICE IMPROVEMENTS / CHAPTER 5.3

3 7 8 9 10 11

### •• ECONOMIC PERFORMANCE / CHAPTER 5.4

8 9 11

### •• ENVIRONMENT AND CLIMATE CHANGE / CHAPTER 5.5

6 7 9 11 12 13 15 17

### •• HUMAN RESOURCES / CHAPTER 5.6

3 4 5 8

### •• CUSTOMER ORIENTATION / CHAPTER 5.7

3 9 11

### •• COMMITMENT TO COMMUNITIES / CHAPTER 5.8

4 5 8 9 10 11 17

### •• SUPPLIER MANAGEMENT / CHAPTER 5.9

8 9 11 12 17





Accident rate: zero accidents with sick leave  
no person killed or seriously injured in accidents



27.27% women on the Board of Directors  
28.44% of women in total staff  
6.57% salary gap in management positions



energy efficiency: 103.56GWh/year saved



investment in innovation\*: 0.43M  
development of the high-speed network: 75.00km or %.  
collaboration and open innovation\*: 50% of projects developed  
100% responsible purchasing criteria\*



development of the high-speed network: 71.8%  
accessibility to the high-speed network: 67.95%  
catalogue of social and environmental clauses of suppliers\*



Emission reduction compared to 2017: 3,849tCO<sub>2</sub>  
23 R+D+I projects



57 notifications in the ethics mailbox\*  
45.5% women on the Board of Directors



59.9 Training hours per employee  
98% of employees achieve their annual performance targets  
398 employees trained in ethical matters\*.



22.40% reduction in water consumption compared to 2018



execution of investments: 2,224.72M  
percentage of employees on permanent contracts: 97.57%  
accident rate: zero accidents with sick leave



accessibility\*: 84.07% Of passengers  
100% responsible purchasing criteria\*  
27.27% women on the Board of Directors



hazardous waste management: 0.04 Tn/MKm Train  
22,047 m<sup>3</sup> of water consumed  
catalogue of social and environmental clauses of suppliers\*



environmental incidents\*: none  
expenditure on fire prevention: 999.7 thousand



collaboration and open innovation\*: 23% projects developed  
audience of 2.02 million people on the open-station program

(\*) integrated Adif and Adif-AV indicator

## 9. ANNEX: TABLE OF CONTENTS

Index of contents required by Law 11/2018 of 28 December amending the Commercial Code, the revised text of the Law on Corporations approved by Royal Legislative Decree 1/2010 of 2 July and Law 22/2015 of 20 July on the Auditing of Accounts, regarding non-financial information and diversity.

### General Disclosures

Areas		Reporting framework	Reference	Comments / Reason for Omission
<b>Business model</b>	Description of the business model	GRI 102-2 Activities, brands, products and services	9-37; 70-81	
	Business environment	GRI 102-3 Location of headquarters		
	Organization and structure	GRI 102-4 Location of Operations		
	Markets in which it operates	GRI 102-15 Key impacts, risks, and opportunities		
	Objectives and strategies	GRI 102-6 Markets served		
	Main factors and trends that may affect its future development	GRI 102-7 Scale of the organization		
<b>Main risks and impacts identified</b>	Risk Management	102-15 Key impacts, risks, and opportunities	49-52	
<b>Main risks and impacts identified</b>	Analysis of risks and impacts related to key issues	102-15 Key impacts, risks, and opportunities	50	

### Environmental issues

Areas		Reporting framework	Reference	Comments / Reason for Omission
<b>Environmental Management</b>	Current and foreseeable effects of the company's activities	GRI 307-1 Non-compliance with environmental laws and regulations	99-101	
	Environmental assessment or certification procedures	Qualitative description of evaluations and certifications	100	
	Resources dedicated to the prevention of environmental risks	Qualitative description of the resources dedicated to the prevention of environmental risks	99	
	Application of the precautionary principle	GRI 102-11 Precautionary Principle or approach	82-83	

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

Areas		Reporting framework	Reference	Comments / Reason for Omission
	Number of provisions and guarantees for environmental risks	Qualitative description of the provisions for environmental risks	83	
<b>Contamination</b>	Measures to prevent, reduce or repair carbon emissions (also includes noise and light pollution)	Qualitative description of measures to prevent, reduce or repair carbon emissions	91-95	
<b>Circular economy and waste prevention and management</b>	Measures for prevention, recycling, reuse, other forms of recovery and disposal	GRI 306-1 Water discharge by quality and destination	95-97	
		GRI 306-2 Total weight of the waste, by type and disposal method		
	Actions to combat food waste		n/a	Not relevant for the company due to its activity.
<b>Sustainable use of resources</b>	Water consumption and water supply according to local constraints	GRI 303-1 Interactions with water as a shared resource	88	
	Consumption of raw materials	GRI 301-1 Materials used by weight or volume	87	
	Measures taken to improve the efficiency of their use		91-92	
	Direct and indirect energy consumption	GRI 302-1 Energy consumption within the organization	84-86	
		GRI 302-3 Energy intensity	86-87	
	Measures taken to improve energy efficiency	GRI 302-4 Reduction of energy consumption	84-85	
	Use of renewable energies	GRI 302-1 Energy consumption within the organization		
<b>Climate change</b>	Important elements of the greenhouse gas emissions generated	GRI 305-1 Direct (Scope 1) GHG emissions	88-91	
		GRI 305-2 Energy indirect (Scope 2) GHG emissions		
		GRI 305-4 GHG emissions intensity		
	Measures taken to adapt to the consequences of climate change	Qualitative description of the measures taken to adapt to the consequences of climate change	91-92	
	Reduction targets set voluntarily	GRI 305-4 Reduction of greenhouse gas emissions	93-94	
<b>Protection of biodiversity</b>	Measures taken to preserve or restore biodiversity	GRI 304-3 Habitats protected or restored	97-99	
	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	97-99	
		GRI 306-5 Water bodies affected by water discharges and/or runoff		

**Social and staff issues**

Areas		Reporting framework	Reference	Comments / Reason for Omission
<b>Employment</b>	Total number and distribution of employees by sex, age, country and professional category	GRI 102-8 Information on employees and other workers	102-104	
	Total number and distribution of employment contract modalities	GRI 102-8 Information on employees and other workers	103; 105	
	Average annual number of permanent, temporary and part-time contracts by sex, age and professional category	GRI 102-8 Information on employees and other workers	102-106	
		GRI 401-1 New employee hires and employee turnover		
	Number of dismissals by sex, age and professional category	GRI 102-8 Information on employees and other workers	106	
	Wage gap	GRI 405-2 Ratio of basic salary and remuneration of women to men	106	
	Average remuneration by sex, age and professional category	Quantitative description of the average remuneration of the staff by gender, age and professional category	106	
	Average compensation of counsellors by gender	Quantitative description of average remuneration of directors by gender	106	
	Average management remuneration by gender	Quantitative description of average remuneration of directors by gender	106	
<b>Organization of work</b>	Implementation of labour disconnection policies		n/a	Adif-AV does not have a policy of disconnecting from work
	Employees with disabilities	GRI 405-1 Diversity of governance bodies and employees	106	
	Organisation of working time	Qualitative description of the organization of working time	107-108	
	Number of hours of absence	GRI 403-2 Types of accidents and accident frequency rates, occupational diseases, lost days, absenteeism and number of deaths due to occupational accidents or diseases	107	
<b>Health and Safety</b>	Measures to facilitate the enjoyment of conciliation and to promote the co-responsibility of both parents	GRI 401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	107-108	
		GRI 401-3 Parental leave		
<b>Health and Safety</b>	Health and safety conditions at work	GRI 403-2 Types of accidents and accident frequency rates, occupational diseases, lost days, absenteeism and number of deaths due to occupational accidents or diseases	109-111	
	Number of accidents at work and occupational diseases by sex, frequency rate and severity by sex		110-111	

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

Areas		Reporting framework	Reference	Comments / Reason for Omission
Social relations	Organization of the social dialogue	GRI 403-1 Workers' representation in formal worker-employer health and safety committees	108-109	
	Percentage of employees covered by collective agreements by country	GRI 102-41 Collective bargaining agreements	109	
	Assessment of collective agreements, particularly in the field of health and safety at work	Qualitative description of collective agreements and their application in the field of health and safety	108	
Training	Policies implemented in the field of training	GRI 404-2 Programs for upgrading employee skills and transition assistance programs	111-117	
	Total number of training hours by professional category.	GRI 404-1 Average hours of training per year per employee	112	
Equality	Measures taken to promote equal treatment and opportunities between women and men	GRI 405-2 Ratio of basic salary and remuneration of women to men	117-119	
	Equality plans measures taken to promote employment, protocols against sexual and gender-based harassment	GRI 405-1 Diversity of governance bodies and employees	118-119	
	Integration and universal accessibility for people with disabilities	GRI 405-1 Diversity of governance bodies and employees	123-125	
	Policy against all forms of discrimination and, where appropriate, diversity management	GRI 406-1 Casos Incidents of discrimination and corrective actions taken	117-119	

### Information on respect for human rights

Areas	Reporting framework	Reference	Comments / Reason for Omission
Application of human rights due diligence procedures	GRI 102-16 Values, principles, standards, and norms of behaviour	n/a	Due to its activity Adif-AV has not seen the need to apply human rights due diligence procedures
Prevention of risks of human rights violations and, where appropriate, measures to mitigate, manage and redress possible abuses	Qualitative description of measures to prevent the risk of human rights violations	49	
Allegations of human rights violations	GRI 407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	49	
Promotion and implementation of the provisions of the ILO fundamental conventions concerning respect for freedom of association and the right to collective bargaining, elimination of discrimination in employment and occupation, elimination of forced or	GRI 407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	49	

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

Areas	Reporting framework	Reference	Comments / Reason for Omission
compulsory labour and effective abolition of child labour			

### Information on the fight against corruption and bribery

Areas	Reporting framework	Reference	Comments / Reason for Omission
Measures taken to prevent corruption and bribery	GRI 102-16 Values, principles, standards, and norms of behaviour	48	
Measures to combat money laundering	Qualitative description of the measures to combat money laundering	48	
Contributions to foundations and non-profit organisations	GRI 201-1 Direct economic value generated and distributed	126-128	

### Information about the company

Areas		Reporting framework	Reference	Comments / Reason for Omission
Company's commitment to sustainable development	Impact of society's activity on employment and local development	GRI 413-1 Operations with local community engagement, impact assessments and development programs	125-128	
	Impact of society's activity on local populations and the territory	GRI 102-12 External initiatives	128-135	
	Relations with local community actors and the modalities of dialogue with them	GRI 102-43 Approach to stakeholder engagement	54-58	
	Partnership or sponsorship actions	GRI 102-13 Membership of associations	124-128	
Subcontracting and suppliers	Inclusion of social, gender equality and environmental issues in procurement policy	GRI 102-9 Supply chain	135-137	
		GRI 102-10 Significant changes to the organization and its supply chain		
	Consideration in relations with suppliers and subcontractors of their social and environmental responsibility	GRI 102-9 Supply chain	135-137	
		GRI 102-10 Significant changes to the organization and its supply chain		
	Monitoring and audit systems and results	GRI 102-9 Supply chain	137	
		GRI 102-10 Significant changes to the organization and its supply chain		

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

Areas		Reporting framework	Reference	Comments / Reason for Omission
		GRI 407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk		
		GRI 407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk		
Consumers	Measures for the health and safety of consumers	GRI 416-1 Assessment of the health and safety impacts of product and service categories	59-68	
	Complaint systems	Qualitative description of complaint systems	121-123	
	Complaints received and their resolution	GRI 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	121-123	
Tax information	Benefits obtained country by country	GRI 201-1 Direct economic value generated and distributed	152	Adif-AV only taxes in Spain
	Taxes on benefits paid	Quantitative description of the result before and after taxes	151	Adif-AV only taxes in Spain
	Public subsidies received	GRI 201-4 Financial assistance received from government	162	

## 10. FINANCIAL INFORMATION

### 10.1. Analysis of the activity and the result

The main headings in the 2019 income statement of Adif Alta Velocidad compared to previous years are presented below:

Amounts in millions of euros	2018	2019
Operating income	1,101.4	1,168.7
Operating costs	-1,052.3	1,140.5
Operating profit	49.1	28.2
Gross operating profit (EBITDA)	297.9	280.6
Financial result	-272.5	-207.4
Profit before tax	-223.4	-179.2
Result for the year	-223.4	-179.2

The pre-tax result for 2019 reflects a loss of 179 million euros, compared to a loss of 223 million euros in 2018; this represents an improvement of 44 million euros over the previous year and represents 20%.

The most significant changes in the headings of the income statement are as follows:

- The profit from operations in 2019 shows a positive balance of 28.2 million euros compared with 49.1 million euros in 2018, representing a decrease of 20.9 million euros.

The main variations in this heading are as follows:

- Increase in Revenue by 6.79% (38.86 million euros) due to the increase in the collection of fees, basically as a consequence of three effects: the application throughout the 2019 financial year of the rates approved in the General State Budgets for 2018 and that in that year were applied from the month of August; the growth of rail traffic; and, lastly, the amount corresponding to the fees for parking on tracks with platforms in passenger stations (C1) for trains subject to OSP accrued in 2018 and 2019, which totals 14.7 million euros and that they have been registered in the year 2019 as a consequence of the suppression of the 100% bonus that previous Law 38/2015 of the Railway Sector for this type of services until the end of the contracts in force between the administrations and RENFE Operadora..
- Other Operating Revenues increased by 5.91% with respect to the previous year, from 412 million euros in 2018 to 436 million euros in 2019. This increase is largely due to the 28 million euro increase in income from investment activities for third parties, which shows a similar increase in the expenses for this concept borne by the Company. There was also a decrease in income from electricity supplies amounting to 6 million euros, which was partially offset by a fall in energy acquisition expenses.
- Other operating expenses" increased by 83.41 million euros, representing 12.23% on the prior year, of which 61 million euros correspond to the increase in expenses for agreements signed with Adif.



## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

The most noteworthy items relate to the maintenance and repair of infrastructure and stations, as well as surveillance and security costs.

53.51 million, which represents an 18.94% increase over the previous year in the concept of repair and conservation of the infrastructure owned by Adif-AV due to various factors. On the one hand, the high-speed railway section Antequera-Granada will be put into operation in June 2019, which means an increase in costs. On the other hand, in 2019 the costs increase as the transfer of conventional gauge sections from Adif, agreed in various Councils of Ministers in 2018, takes full effect.

In addition, expenditure on external services has risen sharply as a result of the preliminary agreement reached by Adif with Renfe Operadora to set the definitive cost of traction and driving services for line-scanning machines and driving services for work trains on UIC-gauge lines between 2006 and 2019. The recorded expenditure amounts to 21.33 million euros and is included as a cost of the infrastructure maintenance agreement signed between the Entity and Adif.

Finally, in 2019 there was an increase of 24.46% over the previous year (7 million euros) in the costs associated with traffic and passenger services derived from the increase in service levels in security and surveillance in stations and other special facilities.

- The Financial Result in 2019 records a negative balance of 207.44 million euros, compared to a negative result of 272.52 million euros in 2018. The main causes are summarized below:
  - Financial Expenses has decreases by 8% with respect to the previous year, going from 359 million euros in 2018, to 330 million euros in 2019. This fall is basically due to the decrease in the average rate of debt, which has gone from 1.88% in 2018 to 1.79% in 2019. In addition, given the measures adopted by the Company, in 2019 there is a sharp decrease in the estimated provision for financial expenses due to interest on late payments to contractors and expropriations.

Impairment and Gains or Losses on Disposal of Financial Instruments" includes in 2018 an amount of 23 million euros due to the impairment of a non-trade receivable arising from legal proceedings brought against a contractor. The Entity decided to impair the contingent asset as the contractor was in insolvency proceedings, which, together with a reduction in the risk provision for the stake in railway integration companies, explains the variation with respect to 2018, which is 26 million euros.

- Financial income increased by 8%, basically due to the growth in income from the activation of financial expenses attributable to high-speed lines under construction.

After all the above, the **economic value generated, distributed and retained** for 2019 is deducted.

Amounts in millions of euros	2018	2019
<b>Economic Value Generated*</b>	1,110.5	1,187.6
<b>Economic Value Distributed **</b>	1,085.1	1,114.4
<b>Economic Value Retained***</b>	25.4	73.2

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

(\*) *Economic value generated: ordinary + extraordinary income*

(\*\*) *Distributed economic value: operating costs + financial expenses + taxes*

(\*\*\*) *Economic Value Retained: Economic Value Generated - Economic Value Distributed*

In Adif Alta Velocidad, different segments of activity are identified:

- ✓ **Network Administration:** Includes the processes of Capacity Management, Traffic Safety, Network Declaration, Railway Infrastructure Maintenance and Traffic Administration.
- ✓ **Construction:** Includes the construction of the lines it is responsible for.
- ✓ **Management of stations and other assets:** This segment includes the management of stations, understood as the set of activities necessary to develop the provision of services to the end customer; as well as the management of telecommunications and the management of other assets.
- ✓ **Energy:** Manages the supply of electricity.

The following is a breakdown of the 2019 profit from operations of Adif Alta Velocidad by business segment:

(Amounts in millions of euros)	Total	Network Administration	Construction	Station and Other Asset Management	Energy	Common Expenses
Net turnover	610,980	527,385	0	83,595	0	0
Work carried out by the company for its assets	10,184	0	10,184	0	0	0
Procurement	0	0	0	0	0	0
Other operating income	436,241	2,863	33,940	133,539	264,902	997
Staffing costs	(15,817)	(228)	(11,622)	(2,668)	(489)	(810)
Other operating expenses	(765,454)	(329,536)	(37,729)	(109,827)	(268,610)	(19,752)
Income from internal operations	0	(4,165)	(1,504)	(279)	5,948	0
Excess provisions	4,515	3,318	0	0	0	1,197
Depreciation of fixed assets	(354,907)	(310,962)	(74)	(43,095)	(111)	(665)
Allocation of non-financial and other subsidies	106,814	102,814	0	3,998	0	2
Impairment and gains or losses on disposals of fixed assets	(4,360)	(1,470)	0	(643)	(88)	(2,159)
Exceptional Results	0	0	0	0	0	0
Distribution of structural costs	0	(6,874)	(11,391)	(2,398)	(527)	21,190
<b>OPERATING INCOME</b>	<b>28,196</b>	<b>(16,855)</b>	<b>(18,196)</b>	<b>62,222</b>	<b>1,025</b>	<b>0</b>

## 10.2. Economic activity indicators

In the attached table we include some general economic and financial indicators:

	2019	2018
<b>SELF-FINANCING RATIOS</b>		
DEGREE OF FINANCIAL AUTONOMY Indicates the degree of independence from external financing	52.70%	53.33%
FINANCING OF FIXED ASSETS Indicates the % long term resources that finance non-current assets	98.61%	98.17%
<b>PROFITABILITY RATIOS</b>		
TOTAL ASSET TURNOVER Indicates the degree of efficiency in asset management	2.22%	2.14%
FIXED ASSETS TURNOVER Indicates the degree of efficiency in the management of fixed assets	2.25%	2.16%
CURRENT ASSETS TURNOVER Indicates the degree of efficiency in the management of current assets	148.68%	197.61%
<b>LIQUIDITY RATIOS</b>		
LIQUIDITY COEFFICIENT Indicates how many monetary units for every 100 of assets are liquid	1.49%	1.08%
TREASURY COEFFICIENT Indicates the ability of the company to meet its short-term commitments	0.52	0.37
SOLVENCY RATIO Indicates the ability of the company to meet its liabilities based on the assets	2.11	2.14
FINANCIAL PERFORMANCE Indicates the remuneration to the capital	-1.28%	-1.60%
ECONOMIC PERFORMANCE Effective capacity to remunerate all available capital, wholly owned and others	-0.38%	-0.49%
WORKING CAPITAL (million €) Determines if a company can meet its current obligations with its current assets	-643.77	-833.94

Average period of payment to suppliers: Information regarding the 2019 and 2018 financial years on deferrals of payment made to suppliers as established in Additional Provision Three of Law 15/2010, of July 5 and in accordance with the methodology established in the Resolution of the

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

Institute of Accounting and Auditing of Accounts of January 29, 2016, is shown in the attached table:

Payments made and pending payment at December 31		
	2019	2018
	Days	Days
Average payment period to suppliers	50.58	55.53
Ratio paid operations	51.37	57.63
Ratio of outstanding payment transactions	37.42	27.38
	Amount (thousand €)	Amount (thousand €)
Total payments	1,755,053	1,746,167
Total outstanding payments	104,520	130,573

### 10.3. Railway fees

Below is a table detailing revenue by type of fee for 2019 and 2018:

(Amounts in millions of euros)	2019	2018
<b>INFRASTRUCTURE CHARGE</b>	<b>497,618</b>	<b>473,170</b>
<b>Awarded Capacity TOTAL Fee</b>	<b>90,771</b>	<b>87,059</b>
* Allocation Capacity fee	90,252	86,192
* Capacity/Addition Award fee	519	867
<b>TOTAL Railway line usage fee</b>	<b>371,362</b>	<b>358,230</b>
* Railway line usage fee	211,960	203,868
* Use of railway lines / Addition fee	159,402	154,362
<b>TEE installations Use Fee</b>	<b>36,047</b>	<b>34,482</b>
<b>Utility RFIG lines rebate</b>	<b>-562</b>	<b>-6,601</b>
<b>USE OF STATIONS AND OTHER INFRACTIONS FEE</b>	<b>113,100</b>	<b>98,922</b>
<b>passenger stations category 1-5 TOTAL Fee</b>	<b>83,208</b>	<b>83,806</b>
* Passenger stations category 1-5 fee	54,046	53,552
* Passenger stations category 1-5 / Addition fee	29,131	30,243
* Outside station opening hours services fee	31	11
<b>Wide Pass Changers Fee</b>	<b>4,626</b>	<b>4,596</b>
<b>Use of tracks with platform TOTAL Fees</b>	<b>25,266</b>	<b>10,520</b>
* Parking fee for commercial road services	25,141	10,403
* Parking fee other operations	125	117
<b>TOTAL FEES</b>	<b>610,718</b>	<b>572,092</b>

Adif Alta Velocidad collects from railway companies, under the provisions of Law 38/2015 on the Railway Sector (hereinafter LSF), the fees known as railway charges for the use of railway lines belonging to the General Interest Railway Network (GRIN), and for the use of stations and other railway facilities.

The LSF Act incorporates into Spanish law the rules contained in Directive 2012/34/EU of the European Parliament and of the Council of 21 November 2012, which covers almost all areas of railway legislation; among others, those relating to the transparency and sustainability of railway infrastructure financing, a new and more complete classification of railway-related services and the establishment of new and more precise rules on railway infrastructure access charging.

Article 23 of the LSF sets out the functions of general railway infrastructure managers, including the determination, review and collection of railway infrastructure charges, in accordance with the applicable legal and regulatory regime.

For its part, Article 100 of the LSF establishes that the proposal to modify or revise the amounts of the fees must be prepared by the railway infrastructure manager, that this proposal will be submitted to the railway companies for consultation and a report from the National Commission for Markets and Competition, and that it will establish the specific values of the parameters of the fees, which will be sent to the Ministry of Development for inclusion in the preliminary draft of the State Budget Law.

Although the general administrator of railway infrastructures, Adif Alta Velocidad, drew up a proposal for the 2019 tariffs, which was submitted to the railway companies for consultation and a report by the National Commission for Markets and Competition, the tariffs applied during 2019 were the tariffs approved for 2018 by Law 6/2018 on the General State Budget for 2018; as this law was extended until the approval of the General State Budget Law for 2019, which has not been given.

In addition, the fees applicable in 2018 did not come into force until August 1 of that year, by virtue of the provisions of Law 6/2018 on the General State Budget for 2018; therefore, the fees applicable for the first seven months of 2018 were those approved for 2017.

These circumstances must be taken into account when analysing variations in royalty income in 2019 compared to 2018.

The methodology for calculating the fees, as laid down in the applicable European regulations and in the LSF, is aimed at passing on to the rail operator all costs directly attributable to the rail service.

The 2018 fees, applicable as stated above from 1 August 2018 to 31 December 2019, were calculated in accordance with the model for determining railway fees established by Directive 2012/34/EU, the LSF and Regulation (EU) 2015/909; based on the costs directly attributable to the operation of the 2016 rail service (the last financial year closed and audited at the date of preparation of the tariffs), broken down by high-performance lines (A lines) and other lines (NO A lines).

The costs directly attributable to the rail service provided are as follows:

- costs of the capacity allocation process, traffic management, traffic safety and replacement of safety and traffic control facilities (recoverable under mode A).

- maintenance and conservation costs of the railway infrastructure (recoverable under mode B).
- maintenance and conservation costs of electrification installations and their replacement costs (recoverable under mode C).

The financial charges, the replacement costs for the platform, tunnels, bridges, track, buildings and means used for maintenance and conservation, as well as those necessary for the reasonable development of this infrastructure and all those costs which enable the railway infrastructure manager to achieve the economic sustainability of the infrastructure which it manages, may be recovered; provided that the market can accept this, by adding to the total share of the charge for the use of the railway lines (mode B).

The total amount of revenue from fees accrued in 2019 shows an increase of 6.75% compared to 2018, mainly due to the increase in traffic, higher fares and the parking charge on tracks with a platform of trains subject to public service obligations

### 10.3.1. Fees for the use of RFIG lines

Revenue from RFIG usage fees earned in 2019 increased by 5.2% over 2018 due to increased production and a decrease in the bonus to encourage growth in rail transport.

Overall traffic, measured in train-km terms, increased by 4%, exceeding 60 million train-km in 2019 compared to 58 million in 2018.

The table below shows the variations in the number of train-kilometres travelled in 2019 and 2018 on the main Adif high-speed lines:

THOUSANDS OF KM TRAINS USING THE RFIG	2019	2018	VARIATION	% VARIATION
Madrid-Andalucía	18,670	18,005	665	3.7%
Madrid-Levante	7,773	7,540	233	3.1%
Madrid-Barcelona-Frontera Francesa	17,636	17,421	215	1.2%
Madrid-Valladolid-León-Zamora	5,556	5,407	149	2.8%
Other lines	10,708	9,655	1,053	10.9%
<b>TOTAL</b>	<b>60,343</b>	<b>58,028</b>	<b>2,315</b>	<b>4.0%</b>

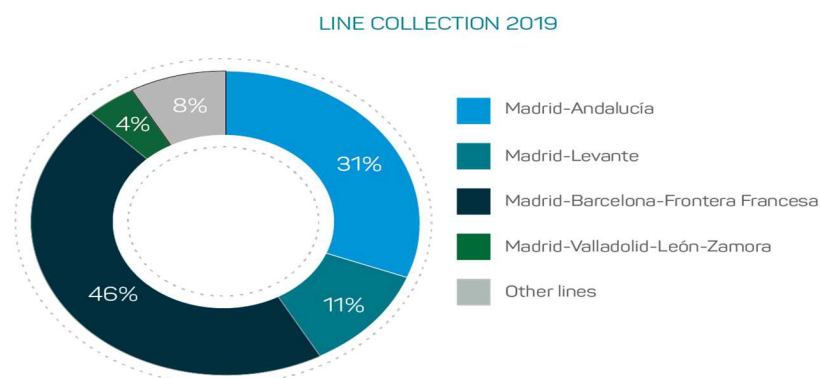
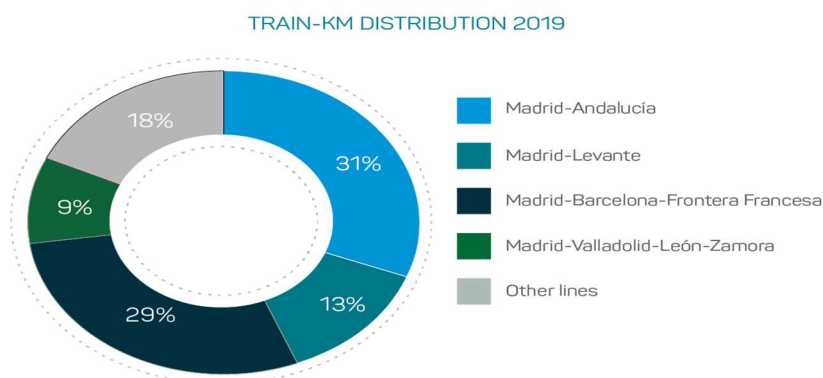
With the aim of encouraging the efficient operation of the railway network and promoting new railway transport services, in accordance with the provisions of Article 97.6 of Law 38/2015, Adif Alta Velocidad established a subsidy for 2019 on the fee for the use of the lines that make up the General Interest Railway Network, modes A and B, for the annual increases in traffic in accordance with the criteria set out in the law itself.

The lines on the Adif Alta Velocidad network that will receive the subsidy in 2019 are the following:

- Axis Lines 11-A.V. Madrid Chamartín - Valladolid - Bifurcación Venta de Baños.
- Axis Lines 12-A.V. Madrid Atocha - Barcelona - Frontera Francia.
- Axis Lines 13-A.V. Madrid Atocha - Levante (actually Valencia/Alicante).
- Axis Lines 14-A.V. Madrid Atocha - Toledo / Sevilla Sta. Justa / Málaga María Zambrano.
- Axis Lines 16-A.V. Olmedo - Medina - Zamora – Galicia.

The bonus generated in 2019 amounted to 0.57 million euros compared to 5.81 million euros in 2018. This decrease in the bonus is explained by the reference and target traffic levels set for 2019.

The following graphs show the distribution of the revenue and the train-km travelled in 2019 between the main Adif Alta Velocidad lines:



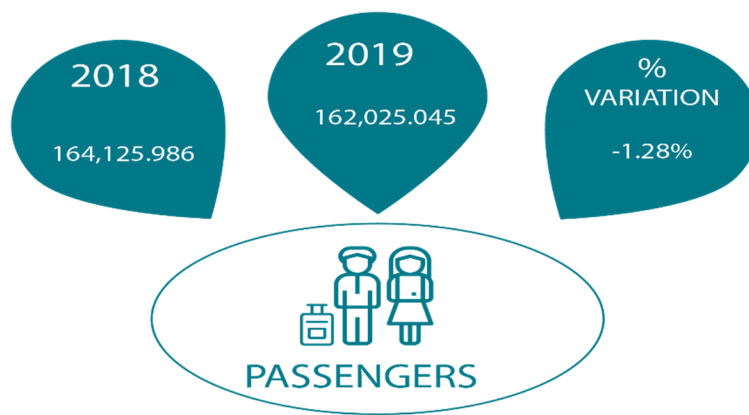
### 10.3.2. Fees for the use of stations and other facilities

Revenue from station fees remained at 2018 levels because the number of train stops at stations remained stable. However, revenues from the Use of Station Addition Fee registered a decrease of 3.7% due to the decrease in the number of passengers.

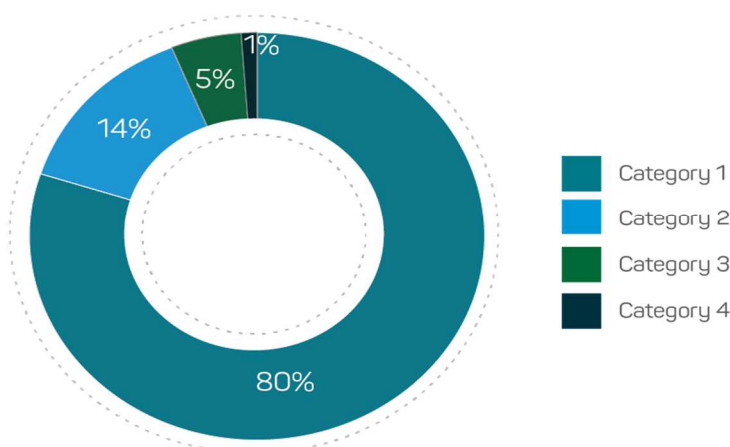
## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

The variation in the number of passengers boarding and alighting at stations in 2019 compared to 2018 is shown below:

The distribution by station category of the fee collected for the use of Adif Alta Velocidad stations is shown in the following graph:



STATION USE FEE REVENUE 2019 PASSENGERS



As regards fees for the use of other facilities, collection has been maintained at 2018 levels.

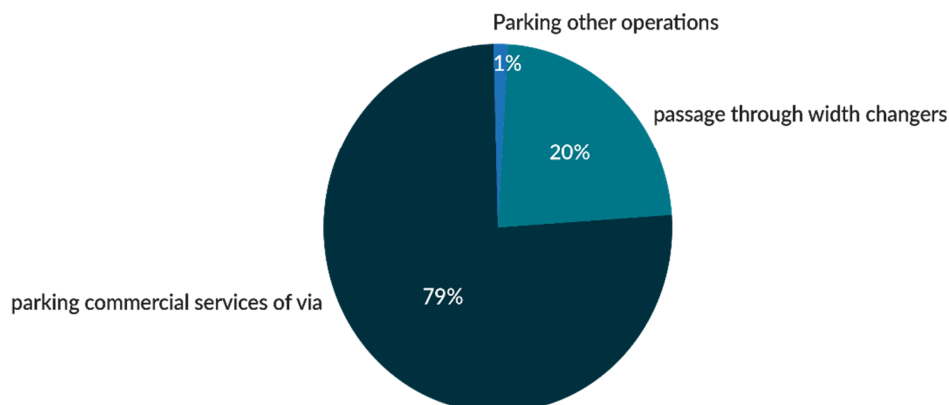
As mentioned above, the extinction of the bonus established in the third transitional provision of the LSF has meant that income from the C1 modality of the fee for use of other facilities has increased significantly.

Consequently, we have proceeded to re-elaborate the assessments of the track occupation charts for 2018 and 2019, taking into account the new circumstances, and to calculate the fees that had not been paid with the application of the subsidy. As indicated above, the amount of these fees for both years is 14.7 million and has been recorded in full in fiscal year 2019.

The distribution of income from fees for the use of other facilities in 2019 is shown below



## REVENUE FROM FEES FOR THE USE OF OTHER FACILITIES



### 10.4. Financing through green bond issues ("GREEN BOND")

#### GREEN BONDS



On 25 April 2019, Adif Alta Velocidad carried out its third issue of fixed income securities under the "Green Bond" format. This transaction falls within the framework of the objectives of our Strategic Plan for the coming years; the Transforma 2030 Plan and the strong commitment the Company has to sustainability, as indicated in previous sections, pointing out that its entire strategy is aligned with the United Nations' sustainable development objectives (SDG); in addition, the Plan includes specific strategic objectives that aim to improve our impact on society from an economic, social, environmental and good governance point of view. Thus, for example, Objective 3.2 of the Adif Alta Velocidad Strategic Plan is "to contribute to environmentally friendly and responsible transport in the use of resources". To achieve this, initiatives have been designed to combat climate change, incorporate circular economy projects, apply ecological purchasing criteria and strengthen the environmental monitoring system.

In this context and to develop its activity as a sustainable issuer, Adif Alta Velocidad, in compliance with the Green Bonds Principles (GBP) of ICMA (International Capital Market Association) renewed in September 2019 the framework it had adopted in 2017, whose objective was to guarantee the transparency, disclosure and integrity of its Green Bonds emissions, maintaining this standard, as well as opening up the possibility of financing through other instruments such as Green Loans.

In the current framework, the entity maintains the commitment to allocate resources from green financing instruments to eligible green projects, which will include both new projects and continuation of ongoing projects, with disbursements from 2 years prior to the issuance of the bonds and up to 24 months from the date of issue. Specifically, Adif Alta Velocidad commits to allocate the funds obtained through these bonds to the two project categories described below:

- a) Investments related to new high-speed rail lines and extensions of existing high-speed lines.

- b) Investments related to maintenance, upgrades and energy efficiency of high-speed rail lines

Likewise, in order to provide investors with an independent assessment of compliance with the "Green Bond Principles", ADIF-Alta Velocidad selected CICERO (Centre for International Climate Research) as a specialized entity to review its framework of actions, and issue a Second Opinion.

The **Adif-AV Green Bonds** have received the **highest rating (Dark Green)** from CICERO.

The Second Opinion issued by CICERO on the new Framework continues to grant the maximum rating of "DARK GREEN", and confirms the compliance with the ICMA Principles in the framework of green financing instruments of Adif Alta Velocidad.

Additionally, CICERO has included in its assessment an analysis of the management structure of the Green Financing Framework, qualifying it as "Excellent".

The main characteristics of the third issue of "Green Bonds" of Adif Alta Velocidad are the following:

- |                      |                  |
|----------------------|------------------|
| ✓ Volume:            | 600,000,000 EUR. |
| ✓ Date of execution: | 11 April 2019.   |
| ✓ Payment Date:      | 25 April 2019.   |
| ✓ Maturity:          | 30 April 2027.   |
| ✓ Rate:              | 0.95% annual.    |
| ✓ Net amount:        | 598,176,000 EUR. |

ADIF - AV has become the leading issuer of green bonds in the Spanish public sector and the third largest nationwide, behind Iberdrola and BBVA.

According to the annual report of the Spanish Sustainable Finance Observatory, the Spanish sustainable finance market is growing, with a volume of green, social and sustainable bonds issued that will reach

which places our country in the top ten in the classification by volume of emissions, consolidating the position it already held in 2018 and which is higher than it would be in terms of its GDP.

To these figures we should add sustainable lending operations, which amount to 13,025 million euros, according to the information available to OFISO. Thus, sustainable financing has grown in 2019 by around 34 percent compared to the previous year.

Finally, it is indicated that, in the third issue of green bonds in 2019, 60 percent of the investors who acquired these securities are socially responsible investors.

## **10.5. Liquidity and capital resources**

The Entity's treasury is managed centrally in order to achieve maximum optimization of resources.

The evolution of the treasury during 2019 and 2018 is reflected below:

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

Amounts in thousands of euros	2019	2018
Cash flows from/ (used in) operating activities	(102,980)	(119,789)
Cash flows from/ (used in) in investing activities	(948,103)	(878,593)
Cash flows from/ (used in) financing activities	1,266,979	881,477
Net increase/decrease in cash and cash equivalents	215,896	(116,905)

The detail of the resources generated by financing activities is shown in the table below:

Amounts in thousands of euros	2019	2018
Grants, donations and equity issuance	103,344	116,620
Increased debts with credit entities	311,574	311,574
Collections and payments of financial instruments	852,061	453,283
<b>Cash flows from financing activities</b>	<b>1,266,979</b>	<b>881,477</b>

The Entity's treasury is managed centrally in order to achieve maximum optimization of resources.

The Adif Alta Velocidad Working Capital Fund went from -833.94 million euros on 31 December 2018 to -643.77 million euros on 31 December 2019, which represents a positive net variation of 190.17 million Euros. This situation does not generate liquidity tensions for the Entity given that the extension of the General State Budget for 2018 for the year 2020 guarantees the collection of the foreseen equity contributions and the possibility of having external financing in accordance with the authorised debt limit. In addition, at December 31, 2019, the Entity had subscribed and undrawn short-term credit facilities with financial institutions for a total amount of 510 million euros. These credit facilities mature at short term, with annual tacit renewal for some of them, with an established renewal limit.

It should also be noted that the Entity, in accordance with a policy of optimising its financial costs, reduced the use of external credit to a maximum in 2019, so that, although it was authorised to increase its long-term debt in nominal terms by a total of 1,890 million euros, it only increased that debt by 627 million euros.

The debt, both with credit institutions and through bond issues, includes the debt contracted by Adif Alta Velocidad, mainly with the European Investment Bank, to finance the investments in tangible fixed assets contemplated in the Multi-annual Action Plan (MAP) in previous years.

On November 15, 2019, the information leaflet on the EMTN Program was renewed at the Irish Stock Exchange for a nominal amount of 8 billion euros, and was filed with the CNMV on the same date.

The combination of the evolution of interest rates and the diversification of financing sources has placed the average interest rate of Adif Alta Velocidad's liabilities, contracted for long term, at 1.79% per year, as of December 31, 2019, for an average life of 9.82 years (1.88% per year, as of December 31, 2018, for an average life of 10.30 years).

## 10.6. Coverage Ratio ESA (European System of Accounts)

The Royal Decree-Law 15/2013, of 13 December, on the restructuring of the public business entity "Administrador de Infraestructuras Ferroviarias" (Adif) and other urgent measures in the economic order, includes a first additional provision which regulates the criteria and procedures to ensure compliance with the principle of financial sustainability of the new public business entity Adif Alta Velocidad and consequently the requirements demanded by the national accounting regulations.

Specifically, the additional provision states that:

- Adif Alta Velocidad, in accordance with the principle of financial sustainability, will ensure that the ratio of coverage of production costs to sales revenue, as set out in the national accounting regulations, allows it to be classified as a public unit included in the "Non-Financial Companies" sector.
- The budgeting and execution of the investments will be adjusted in time and amount so that in no case may investments be made that would put at risk the consideration of Adif Alta Velocidad as a non-financial company for national accounting purposes.

In application of this additional provision, the value of the ESA 2010 coverage ratio is calculated at 31 December 2019, taking into account the amendments proposed by the IGAE in this respect:

- The information on financial income has been broken down, distinguishing between those corresponding to the return on financial investments and those recognised by capitalisation of financial expenses, showing the ratio of 50%, without netting the income from capitalisation of total financial expenses. In order to compare the figures in homogeneous terms, the same criterion has been applied to the scenarios on the basis of which the segregation was decided.
- For the purposes of calculating the ratio, the amounts relating to Mode A, the Addition of Mode A and the Addition of Mode B have not been considered within infrastructure charge revenues, as they refer to MCV services linked to Public Service Obligations not accepted by Eurostat as market revenues.
- An increase coefficient has been applied to the accounting depreciation in the terms proposed by the Intervention for adjustment to straight-line depreciation. The value of this coefficient for 2018 is 0.80; this value has been applied provisionally to the 2019 amounts as recommended by the IGAE.

The values obtained at 31 December 2019 are as follows

National Accounting Income	970,653
National Accounting Expenses	1,713,668
Ratio ESA 2010	56.64%

### 10.6.1. Investments made during the year

In 2019 (compared to the previous year) the investments shown in the accompanying tables, detailed by nature and line, were made:

## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

NATURE	2019 THOUSAND € (VAT included)	2018 THOUSAND € (VAT included)
ELECTRIFICATION AND TELECOMMUNICATIONS	71,185	88,029
PLATFORM	453,024	700,106
SIGNS AND SAFETY FACILITIES	101,898	98,636
EQUIPMENT AND OTHER OPERATIONS	213,966	195,630
TRACK	298,637	174,649
STATIONS AND GOODS TERMINALS	60,848	53,328
<b>TOTAL</b>	<b>1,199,557</b>	<b>1,310,378</b>

LINES	2019 THOUSAND € (VAT included)	2018 THOUSAND € (VAT included)
VANDELLÓS-VALENCIA	24,357	32,581
L.A.V. LEVANTE	60,212	83,423
L.A.V. ALMERIA-MURCIA	38,590	21,379
L.A.V. BOBADILLA-GRANADA	36,120	73,241
VANDELLOS-TARRAGONA	19,258	39,091
PALENCIA-AGUILAR DE CAMPOO	4,315	586
CABCERA NORTE DE CHAMARTIN	12,268	857
L.A.V. ASTURIAS (VARIANTE DE PAJARES)	68,903	67,234
L.A.V. VENTA DE BAÑOS-PALENCIA-LEÓN-ASTURIAS	34,304	18,580
L.A.V. VALLADOLID-BURGOS-VITORIA	17,711	48,337
L.A.V. VITORIA-BILBAO-SAN SEBASTIÁN	111,467	68,155
L.A.V. MADRID-EXTREMADURA	162,531	139,286
L.A.V. GALICIA (OLMEDO-LUBIÁN-ORENSE)	362,645	487,652
L.A.V. ZARAGOZA-PAMPLONA (CASTEJÓN-PAMPLONA)	30,656	7,953
CONEXIÓN U.I.C CHAMARTÍN-ATOCHA-TORREJÓN	19,157	36,329
EJE ATLÁNTICO (CORUÑA-VIGO)	17,453	30,532
IMPUTABLE AL CONJUNTO DE LA RED	74,761	47,488
INVERSIÓN EN LINEAS EN EXPLOTACION	74,213	95,084
VARIANTE DE OURENSE	14,472	1,393
STATIONS AND OTHER ASSETS	16,163	11,197
<b>TOTAL</b>	<b>1,199,557</b>	<b>1,310,378</b>

## 10.6.2. Information on the recruitment carried out

Below is detailed information on Recruitment activity during the 2019 financial year:

<b>SUMMARY OF TENDERS</b>				(Amounts without VAT in Millions of Euros)
<b>Management</b>	Nº internal works	Amounts	Nº Total Tenders	Total Amount Tendered
General Management AV	0	.	.	1.00
Construction Management	88	118.07	315	1,131.24
Energy and Fibre Network Management	4	2.18	22	21.84
Technical performance Management	3	0.49	7	4.25
Sub-directorate of Traffic Safety	0	0.00	1	0.01
AV and Station Project Management	2	0.54	5	11.99
<b>Totals</b>	<b>97</b>	<b>121.28</b>	<b>354</b>	<b>1,170.33</b>

<b>SUMMARY TABLE OF CONTRACTS</b>				(Amounts without VAT in Millions of Euros)
<b>Management</b>	Nº internal works	Amounts	Nº Total Tenders	Total Amount Tendered
General Management AV	0	0.00	4	0.97
Construction Management	88	118.07	378	2,224.72
Energy and Fibre Network Management	4	2.18	18	20.75
Technical performance Management	3	0.49	3	0.49
Sub-directorate of Traffic Safety	0	0.00	1	0.01
AV and Station Project Management	2	0.54	2	0.54
<b>Totals</b>	<b>97</b>	<b>121.28</b>	<b>406</b>	<b>2,247.48</b>

<b>SUMMARY OF TENDERS BY PROCEDURE</b>				(Amounts without VAT in Millions of Euros)
<b>Procedure/Criteria</b>	Nº Filings	Amounts	% Amo.	
<b>Open</b>	<b>167</b>	<b>1,010.72</b>	<b>86.4%</b>	
• Open Criteria Price	38	82,16	7.0%	
• Open Multiple Criteria	129	928,56	79.3%	
<b>Restricted</b>				
• Restricted Multiple Criteria				
<b>Negotiated</b>	<b>84</b>	<b>35.52</b>	<b>3.0%</b>	

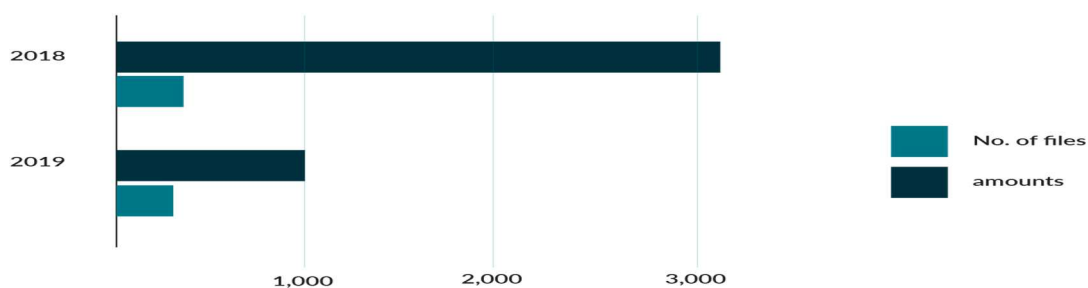
## MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019

SUMMARY OF TENDERS BY PROCEDURE			(Amounts without VAT in Millions of Euros)
Procedure/Criteria	Nº Filings	Amounts	% Amo.
• With Advertising	2	19,11	1.6%
• Without Advertising	82	16,41	1.4%
Order from Framework Agreement	6	2,81	0.2%
<b>Total Tenders</b>	<b>257</b>	<b>1,049,05</b>	<b>89.6%</b>
<b>Nº internal works</b>	<b>97</b>	<b>121,28</b>	<b>10.4%</b>
<b>TOTALS</b>	<b>354</b>	<b>1,170.33</b>	<b>100.0%</b>

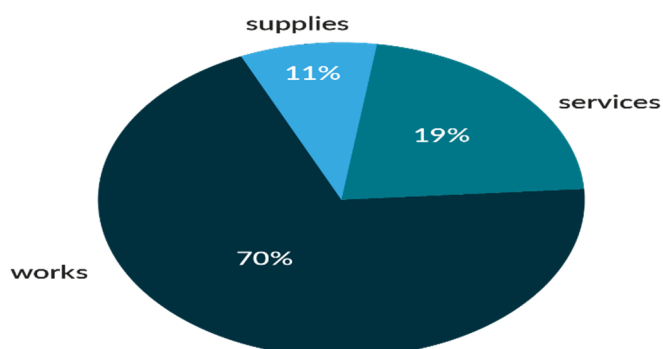
<b>Contract Type</b>	<b>354</b>	<b>1,170.33</b>	<b>100.0%</b>
• Works	79	820.75	70.1%
• Services	241	219.70	18.8%
• Supplies	34	129.88	11.1%

<b>Investment / Operation Contract</b>	<b>354</b>	<b>1,170.33</b>	<b>100.0%</b>
• Investment	321	1,068.47	91.3%
• Operation	33	101.86	8.7%

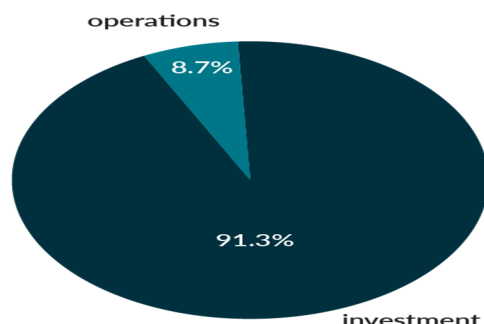
### CONTRACT ACTIVITY - TENDERS



### TENDERS BY TYPE OF CONTRACT



## TENDERS: INVESTMENT – OPERATIONS



## 11. SUBSEQUENT EVENTS

The appearance of the Coronavirus COVID-19 in China in January 2020 and its recent global expansion to a large number of countries, including Spain, has led to the viral outbreak being classified as a pandemic by the World Health Organization since March 11.

To address this serious and exceptional situation, the Government has declared a State of Emergency by Royal Decree 463/2020 of 14 March.

In its article 14, the aforementioned Royal Decree establishes a series of measures in the field of transport, among which the following reductions in rail traffic should be highlighted:

- a) For public rail transport services, which are not subject to public contracts or public service obligations (PSOs), transport operators shall reduce the total supply of operations by at least 50 %. By decision of the Minister for Transport, Mobility and the Urban Agenda, this percentage may be changed and specific conditions laid down.
- b) Public passenger transport services that are subject to a public contract or PSO shall reduce their total operating offer by at least the following percentages:
  - i. Medium-distance rail services: 50 %.
  - ii. Medium- distance rail services-AVANT: 50 %.
- c) Suburban rail services shall maintain their offer.

In this context, the Entity, as a critical infrastructure manager, has developed the necessary contingency plans to give continuity to its activity in all its areas of action and its management is constantly monitoring the evolution of the situation in order to successfully deal with any possible financial or non-financial impacts.

At this time, it is not possible to reliably determine the impact that this health crisis will have on the Entity due to the uncertainty about its short, medium- and long-term consequences.

In any case, in the economic and financial sphere, ADIF Alta Velocidad's Management believes that it has the necessary cash flow and credit lines to deal with any liquidity pressures and credit restrictions that may arise in the coming months. The company estimates that



## **MANAGEMENT REPORT ADIF ALTA VELOCIDAD 2019**

although this crisis may have a negative impact on its turnover and commercial activity, it will not be significant.

In Madrid. 26 March 2020

President