

MANAGEMENT REPORT

2020





State-owned enterprise Adif Alta Velocidad 2020 Management Report.
Includes non-financial statement.

/ MESSAGE FROM THE CHAIRWOMAN

The year 2020 has been marked by the **pandemic situation** experienced as a consequence of COVID-19, an event of global relevance of such magnitude that, in line with Adif AV's commitment to transparency, makes it necessary to reflect and analyze its effects on the Entity's activity. Nevertheless, the results support the fact that the Entity has been able to face the adversities imposed, without losing at any time the main objective of providing a safe, reliable and efficient railway network, generating added value through the collaboration with other entities, institutions and companies and having sustainability as one of the main pillars of the Company.

Despite the current uncertainty and the difficulty of forecasting its evolution, with this Report the Company seeks to show how it creates value in the short, medium and long term. In order to present this information in a truthful, relevant and accurate manner, in accordance with the most recognized reporting practices (**GRI Standards of the Global Reporting Initiative**), the economic and financial information of the Entity contained in the annual accounts is complemented with the Statement of Non-Financial Information relating it to environmental, social and corporate governance aspects (known as ESG aspects), which facilitates its understanding and, at the same time, improves and broadens the level of disclosure and transparency.

The **2020 materiality analysis** involves an update of the issues identified in the previous year, understanding that, due to the special circumstances that occurred during the year, it was necessary to adapt it to the 2020 context and proceed to its reformulation, understanding those changes to be included in the list of key issues, as well as in its own external and internal assessment, with a special focus on the possible effects on the public sector and the service sector.

A highlight during 2020 has been the work to update the **2030 Strategic Plan**, which will provide a solid and effective response to the global challenges that the Company will face in the next decade, which will also promote the contribution to the Sustainable Development Goals (SDGs). This Plan is focused on promoting people's mobility, improving existing networks, building more resilient, inclusive and sustainable infrastructures, contributing to mitigate the effects of climate change, promoting sustainable innovation and the incorporation of new technologies, as well as intra-entrepreneurship.

The formulation of a new strategy implies the need to realign objectives, indicators, goals and initiatives of the new plan with the material goals and SDGs, an issue that is intended to be

addressed during the year 2021, in accordance with the **firm commitment of the Entity with sustainable development** and the call of the United Nations, given that if the contribution of all actors is not accelerated and increased, the risk of not meeting the SDGs in 2030 is high, even more after the setback in many areas due to the impact of the pandemic that began in 2020. With this fact, the importance of the contribution to the SDGs is reaffirmed, representing an opportunity for Adif AV to improve results and impacts on society, which will necessarily have a positive impact on its social legitimacy and reputation. Likewise, it allows **improving the internal management** of processes and represents **new business opportunities**.

Therefore, as a signatory of the **United Nations Global Compact**, the Entity renews its current support and commitment to the initiative and its principles, based on its commitment to promote a relevant change in the way of approaching and integrating Corporate Responsibility in the Entity's strategy and business operations to improve its performance and impact on society, actively contributing to the achievement of the SDGs, with the ultimate goal of generating value for all stakeholders of the organization and improving the contribution to sustainable development.

It is worth highlighting the **important contribution of Adif AV to the socioeconomic development of the country**, since due to the activity carried out by the Entity in the communities where it develops its operations, qualitative and quantitative impacts are produced with repercussions in different areas. Among the most important impacts of Adif AV, its contribution to the development of rail transport -a strategic factor in terms of connectivity, accessibility, cohesion and territorial connection-, and thus to local development, both economically and socially, stands out. The railroad is the most environmentally friendly means of transport, which is why it is called upon to be the backbone around which sustainable mobility policies revolve. Rail transport has a promising future ahead of it, with a forecast of continuous growth at a rate

of 1% per year through investments in infrastructure, signaling and control, as well as in rolling stock and services.

Adif AV is aware of the concern and urgency existing worldwide to stop and solve one of the main environmental problems, such as climate change. Its adverse effects are becoming more and more evident, with a clear increase in frequency and severity in recent years. In order to increase its contribution to solving this environmental problem, Adif AV (together with Adif) has developed and implemented a **Plan to Combat Climate Change** Change for the period 2018-2030 with actions both in the field of mitigation and adaptation. This strategic initiative is aligned with the main existing international commitments in the fight against climate change, such as SDG 13 "Climate Action" of the 2030 Agenda or the pact reached by the signatory countries with the Paris Agreement. Likewise, the Entity is in line with the European and national policies currently in place aimed at achieving climate neutrality by 2050, as set out in the "Green Deal" of the European Commission. In addition, during 2020 Adif AV has collaborated in the preparation of the **Spanish Circular Economy Strategy 2030** prepared by the Ministry for Ecological Transition and Demographic Challenge, approved by the Council of Ministers, and has participated in the definition of the **I Circular Economy Action Plan 2021-2023**, which is part of this Strategy.

2020 has also been the year in which all possible efforts have been made to complete the entry into force of the **liberalization of passenger transport** based on the Fourth Railway Package. The liberalization of passenger transport could increase traffic on the General Interest Railway Network in the coming years, with an **estimated growth of between 30 and 50% on high-speed lines**. In this way, Spain would move towards an increase in the rates of use of the high-speed network, which is the most commercially attractive and where the railroad is more competitive than other means of transport.



To this end, Adif AV has the **commitment to adapt to the trends** trends that will occur linked to this liberalization process, which represents an opportunity to promote the railroad as a more sustainable means of mobility and the enhancement of the investments that have been made in recent years, as well as the knowledge and technological advances developed.

In terms of security in infrastructures and facilities, in 2020 a **new Security Guideline**, was signed, which was issued in order to meet the legal obligations of the national and European regulatory framework on Information Security, and the precepts of the specific cybersecurity regulations based on the legislation for the entire Entity, whose purpose is to strengthen and expand the bases for the management of Information security. The significant increase in cyber-attacks that have been occurring in the last year in the public sector, as well as the high degree of technological sophistication that they apply, pose an ever-increasing threat to companies.

In the area of financing, during 2020 Adif AV carried out a **new issue of green bonds**, , amounting to €600 million, aimed at financing or refinancing projects that generate environmental or climate benefits. This is the fourth bond issue of these characteristics since June 2017, with the four issues totaling €2,400M.

Another noteworthy fact is the participation of Adif AV in the **ESG Risk Rating of Sustainalytics**, which was carried out for the first time in 2019, placing the Entity as a leader in the transport infrastructure sector, being one of the ten most valued companies out of the 10,026 analyzed by this rater. In 2020, this rating has been revised, maintaining the same score initially obtained by Adif AV and placing it as the twelfth best rated company out of a total of 12,702.

In our commitment to the reliability of the information reported, the content of the statement of non-financial information in the Management Report has been subjected, as required by current legislation, to review by an independent external verifier, with its corresponding degree of assurance. European Quality Assurance Spain, S.L., has issued a verification report with a limited scope of review on the contents regarding non-financial information and diversity required by Law 11/2018 and included in this consolidated management report. The work has been performed in accordance with the best practices contained in the International Standard on Assurance Engagements 3000 (NIEA 3000 Revised), Assurance Engagements other than Audit and Review of Historical Financial Information, and the International Standard UNE-EN ISO/IEC. This report is included as an '**Independent Assurance Report**' within the Statement of Non-Financial Information..

Isabel Pardo de Vera



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An aerial photograph of a high-speed train bridge spanning a lush green valley. The bridge consists of multiple concrete pillars supporting a track with overhead power lines. In the background, there are rolling hills and a prominent, rocky mountain under a cloudy sky. The entire image has a blue-green color cast.

1

NON-FINANCIAL STATEMENT UNDER LAW 11/2018

1. NON-FINANCIAL STATEMENT UNDER LAW 11/2018

This is the second year of effect of Spanish Law 11/2018 on disclosure of non-financial and diversity information, which was published in Spain's official state gazette (Boletín Oficial del Estado) on 29 December 2018.

Adif Alta Velocidad ("Adif AV") already had a history of robust sustainability reporting. Nevertheless, the entry into force of the new Law raised the qualitative and quantitative standards of sustainability reporting in a broad sense (disclosures on how the reporting entity manages environmental matters, social and employee-related matters, respect for human rights, and anti-corruption and bribery) and bolstered the instruments whereby the Board of Directors performs its non-delegable duty regarding Corporate Responsibility and Sustainability in accordance with good business practices and the recommendations of regulatory bodies such as CNMV, the Spanish securities market regulator.

Non-financial reporting, involving more than 70 indicators, is intended to inform and engage our key stakeholders regarding the Company's management, performance and impacts through materiality analysis, taking into consideration the core areas of activity across four domains (business, corporate governance, social, environmental). We set out the main milestones of each year and key lines of activity taking forward our business strategy within the framework of the 2030 Strategic Plan, published annually.

Since 2017, Adif AV, for reasons of business transparency and strategic consistency, has chosen to publish an Integrated Management Report, which includes the non-financial statement and is subject to the same requirements of approval, filing and publication as the management report and the notes within the process of drawing up and issuing the financial

statements. The end of the reporting period is 30 March. The purpose of the integration is to implement the latest trends in reporting and transparency, lending higher visibility to social and environmental outcomes and impacts and thus finding a better balance with the financial data that forms the bulk of the management report.

Law 11/2018 raises the bar for the transparency and reliability of non-financial reporting as a good business practice, and encourages alignment with the guidelines of the Global Reporting Initiative, GRI, as annually updated (G4 GRI). In addition, it links the G4 GRI standards with the Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda that might be impacted by the reporting entity's activities. This provides a global framework for organisations and stakeholders to assess local, regional and global impacts. First, therefore, we prioritised goals according to the Company's sector and type of business to identify the key areas where the organisation can contribute and then embed the relevant goals within our corporate strategy.

From a legislative standpoint, the Company awaits the outcome of the public consultation conducted in June 2020 by the European Commission on the new Non-Financial Reporting Directive, "NFRD". The consultation sought stakeholders' views on proposed changes to Directive 2014/95/EU regarding the presentation of non-financial statements and non-financial reporting obligations. With this new Directive, the European Commission seeks to create a uniform European standard and widen the scope of reporting requirements to large unlisted companies and subsidiaries of reporting entities. This will involve the adoption of a new Non-Financial Reporting Directive that, like its predecessor, will have to be implemented within the jurisdiction



of each Member State at relatively short notice, thus posing a new challenge to reporting entities.

As a state-owned enterprise that operates in the public interest and for the benefit of society, Adif AV is concerned to display exemplary management, guided by principles of transparency, strategic consistency and good governance. With the reporting model now implemented by Adif AV, the Company seeks to become a benchmark for Spanish public utilities in the field of non-financial and diversity reporting and to raise standards of transparency and reliability, with new improvements every year.

The Company is aware that there is room for improvement, and we are working on this with a view to future reporting periods. We are implementing a system of internal control over non-financial reporting ("ICNFR") to create a specific reporting process (generation/writing/reporting or disclosure) and thus enhance effectiveness and traceability when generating NFR indicators. This nurtures increased trust and helps close the reporting circle on the strength of the reliability of our figures.

To ensure that the non-financial disclosures in the management report are reliable, we have had them assured externally by an independent third party under the ISAE3000 standard.

To conclude, non-financial reporting enables us to lend visibility to our Company's contribution to a more sustainable and balanced development model where non-financial factors are on an equal footing with financial factors.

Accurate and transparent non-financial reporting, moreover, helps the Company become better trusted and appreciated among its stakeholders. For Adif AV, what is more, it is especially important to become a benchmark on financial markets as a socially responsible securities issuer.



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ABOUT US

2. ABOUT US

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adif

ADMINISTRADOR DE
INFRAESTRUCTURAS FERROVIARIAS

Adif AV is aware of its **key role of stewardship in the Spanish railway industry**. It is our responsibility to find effective ways to make the railway industry **one of the core socio-economic drivers of the country**. We work hard every day to provide a safe, reliable and efficient railway service while continuously adapting to new challenges.

ADIF AV PURPOSE

The state-owned enterprise Adif Alta Velocidad (“Adif AV”) was formed on **31 December 2013** under a Royal Decree-Law on the restructuring of the former state-owned enterprise Administrador de Infraestructuras Ferroviarias (“Adif”).

Adif AV was founded to develop and manage a high-performance railway infrastructure that is economically **viable, safe, and efficient and delivers high quality**, guided by a strategy to achieve sustainable development.

Our **sustainability-oriented approach** implies that Adif AV’s strategy must integrate economic, social and environmental concerns, looking to the United Nations Sustainable Development Goals as a high-level frame of reference.

In addition, Adif AV aims to increase the market share of rail as a means of transport and create value through partnerships with other companies and institutions. As part of our high-speed rail strategy, we have radically transformed our network, and our travel times are significantly better than those of other high-speed railway lines around the world.

HIGH SPEED NETWORK

Most of the Adif AV network is **UIC gauge (1,435 mm) double track electrified at 25 kV**, compliant with **European technical interoperability (ETI) specifications**. By gradually implementing ETI specifications, we shall be able to provide seamless rail services from Spain to the rest of the European railway network.

POWERS OF ADIF AV

The **duties and powers of Adif AV** are set out in its own charter, under Royal Decree 1044/2013 of 27 December. We highlight the following:

- **Build** high-speed rail infrastructure within the RFIG (the “general interest rail network”) using its **own resources**, following orders given by the Ministry of Development (later renamed the Ministry of Transport, Mobility and the Urban Agenda).
- **Build** high-speed rail infrastructure using **third-party resources** under specific agreements.
- **Manage infrastructure** under its control.
- **Supervise and inspect** rail infrastructure, the related protected areas and rail traffic.
- **Allocate track capacity** to railway companies that request it.
- **Commercially operate infrastructure** under its control.
- **Commercially operate high-speed railway stations.**

- **Buy electricity** to supply the railway system.
- Provide **ancillary services**, including rail transport, on infrastructure under its control.
- Operate **telecommunications and energy** businesses.

MILESTONES OF ADIF AV

Since Adif was formed in 2005 as a state-owned enterprise, there have been several milestones in its history. Crucially, under **Royal Decree-Law 15/2013 the original corporation, Adif, was split into two new companies: Adif and Adif AV.**



Adif AV’s core purpose is to provide a **safe, reliable and efficient railway network** that creates added value. Moreover, one of the Company’s cornerstones is its concern to achieve sustainability.

2005

**CREATION OF
ADIF AND RENFE**

Upon the entry into effect of the Spanish Rail Sector Act (Ley del Sector Ferroviario), RENFE changed its name to Administrador de Infraestructuras Ferroviarias and integrated the public railway infrastructure manager, GIF (Gestor de Infraestructuras Ferroviarias). In that manner, Adif's duties as rail infrastructure and construction manager were formalised. RENFE-Operadora was created in 2005 as a new public service company in charge of rail transport services.

2012

**INTEGRATION
OF FEVE**

Some of the assets and liabilities and the staff of the public entity FEVE (which managed the stock of narrow-gauge rail) were merged into Adif, pursuant to Royal Decree-Law 22/2021 on measures for the rationalisation and restructuring of the rail sector.

2013

**CHANGE IN
NETWORK
OWNERSHIP**

Upon effectiveness of Royal Decree-Law 4/2013, title to the infrastructure comprising the rail network owned by the Spanish state, administration of which had already been tasked to Adif, was also passed to the Company.

2014

**SPIN-OFF OF
ADIF AND ADIF AV**

Following enactment of Royal Decree-Law 15/2013, Adif was split into Adif and Adif AV. As a result, Adif became the entity responsible for the construction, maintenance and operation of the conventional network (including management of its stations and the activities related with its properties, urban integration and logistics services). Adif AV, meanwhile, was tasked with the construction, maintenance and operation of the high-speed network and the related telecommunications, energy and environmental activities). Adif and Adif AV entered into service agreements whereby the two companies tasked each other responsibility for certain technical activities and materials.

2015

**NEW SPANISH
RAIL SECTOR ACT**

Since passage of the Rail Sector Act (Law 28/2015) construction and management of railroad infrastructure corresponds to one or more entities which report to the Ministry of Transport and Public Works. Adif AV has assumed the allocated duties in relation to the infrastructure to which it has been given title.

2019

**NEW
ARRANGEMENTS**

Adif and Adif AV entered into new service arrangements replacing those signed in 2014.

ADIF AV REGULATIONS

The operations of Adif AV are governed by the following laws and regulations:

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



2.1. Key metrics: Adif AV at a glance

 BUSINESS	 GOOD GOVERNANCE	 EMPLOYEES	 FINANCIAL
448.13* million passengers/year (transit in stations with accessible travel routes). 67.31 million passengers in Adif AV accessible stations.	9 Directors.	218 Employees.	€16,570.9 M Face value of borrowings.
691 Trains operating per day on average.	12 Board meetings.	95.87% Permanent contracts.	€806.7 M Revenue.
€2,400 M of green bonds.	27.27% Female board representation.	+20 Work-life balance measures.	€-460.9 M Loss for the year.
3,622 km of railroad under management.	439* Ethics training sessions .	52.75% Covered by collective agreement.	€-8.5 M EBITDA.
166 km of high-speed rail network developed.			

* Adif + Adif AV.

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 with railway infrastructure management, with each of these elements on an equal footing with the rest. Hence, the starting point for our business strategy is our concern to contribute to socio-economic development with actions that mitigate climate change.

Therefore, with a specific corporate purpose, in its 2030 Strategic Plan, Adif AV seeks to advance and achieve the vision, mission and values of the Company. Our vision reflects our goals for the future; our mission encompasses the actions we must take to discharge our assigned duties; finally, our values are the principles that must guide our employees to successfully perform the Company's role.



Adif AV Corporate Purpose

Adif AV's corporate purpose is to help "improve people's lives" through good governance, transparency, equality and an approach that enhances people's well-being.

VISION

To align the entire organisation around the development of sustainable infrastructure so that the generations of today and tomorrow can enjoy better lives.

MISSION

To design, build and manage rail infrastructure that contributes to citizens wellbeing, generating value for our stakeholders across all our areas of activity.

VALUES

The attributes needed to successfully deliver Adif's Mission have been distilled into four:

- Commitment
- Service
- Integrity
- Professionalism

2.3. Business model

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

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

Total managed network
owned by Adif AV

3,622.20 km

High-speed standard gauge
(UIC)

2,781.50 km



**HIGH SPEED AND
HIGH PERFORMANCE LINES**

March 2021

- In service
- Origin or end of line / section stations and provincial capitals

2.3.1. CORE ACTIVITIES OF ADIF AV



CONSTRUCTION

Adif AV continues to make progress on the works and projects commissioned by the Spanish government, connecting the regions up via a high-performance network.

It is developing the European Traffic Management System (ERTMS), the train control and command system designed to ensure Europe-wide compatibility of signalling and communication between track and train.



OPERATION AND MAINTENANCE

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

Key activities commissioned by Adif AV:

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

The concept of infrastructure as an instrument for providing services, places society at the heart of our business. Society is both a present and potential user of our infrastructure and services; our goals are connectivity, mobility and social welfare. Hence Adif AV is committed to providing safe services that ensure social cohesion while supporting reliable and high-quality connectivity and mobility and enhancing social welfare through inclusive and sustainable socio-economic development of the country.



END-TO-END SAFETY IN THE RAILWAYS SYSTEM

We view safety as a cross-cutting concern that affects all facets of railway infrastructure and is crucially shaped by the implementation of the new safety and interoperability directives of the European Union Agency for Railways (ERA).

End-to-end safety involves an, **awareness that every one of our activities** entails ongoing **improvement of safety procedures and the introduction of new methods and technologies**.

Adif AV's safety culture is underpinned by a risk assessment that leads to preventive, corrective and improvement measures towards risk mitigation.

We continue to roll out **end-to-end safety improvements**: in the domains of operations, environment, rescue services, occupational health and safety and cybersecurity.



RAIL TRAFFIC SAFETY

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

SAFETY AND SELF-PROTECTION

We are improving the **safety and security of our facilities using new technologies**. The Company ensures safety and security at its facilities and infrastructure by implementing suitable incident and emergency systems and protocols in partnership with the relevant government authorities.

WORKPLACE HEALTH AND SAFETY

Our policy is to ensure the utmost standards of **safety and security for our users and employees by operating suitable prevention policies**. Our strong health and safety commitment covers our own employees and interactions with contractors and suppliers, with whom we cooperate to ascertain and control the related risks, and all others who work alongside Adif AV over the short or the long term.

CYBERSECURITY

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

ENVIRONMENTAL SAFETY

We enhance **environmental protection by augmenting and improving our preventive measures**.



2.3.2. OTHER AREAS OF ACTIVITY



/ TELECOMMUNICATIONS

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



/ ELECTRICITY

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



/ INTERNATIONAL CONSULTANCY ENGAGEMENTS AND PARTNERSHIPS

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



/ PROPERTY MANAGEMENT AND URBAN INTEGRATION

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



/ INTEGRATION AND GROUP ENTITIES

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

2.3.3. INTERNATIONAL ACTIVITIES: ADIF AV AROUND THE WORLD

The COVID-19 pandemic has hit international activity especially hard owing to internal and cross-border lockdown measures. Most of the scheduled events with institutions and multilateral organisations usually held face-to-face at international venues still went ahead this year because they were run online. However, Adif AV's sales and marketing activity was hit hard: we would normally welcome dozens of visits from international companies that seek out our expertise in building and developing railway networks.

Even so, we found the way to address the difficulties of 2020 by attending online events – even hosting the Rail Live! trade fair. This event is one of the largest in the industry, drawing leading railway companies and engineering and technology firms. It is therefore a major showcase for Adif companies seeking new business. Rail Live – which Adif and Adif AV are closely involved in hosting – was scheduled to take place in Madrid in March. However, travel restrictions required that it be postponed. It was later held online. The outcome was outstanding: more than 4,200 people attended the event, of whom over 2,300 watched Adif and Adif AV's presentations and more than 1,000 listened to the opening interview with the Company chair. Many of our departments took part successfully and actively. We were one of the companies with the most presence, with 6 speakers, 2 panels and an interview.

Adif AV continued to perform technical and operational consultancy engagements for other infrastructure managers. We advised on project implementation, hosted training and technical skills acquisition plans for foreign experts, and took part in international infrastructure and transport projects under interdepartmental agreements entered into by the Spanish Ministry of Transport, Mobility and the Urban Agenda (MITMA). As part of the Spain/Morocco Twinning Project “Hazardous goods transport management”, funded by the European Union, we welcomed a Moroccan delegation to discuss emergency management and logistics terminals.



We provided technical support for the Texas high-speed rail project in the areas of safety and emergency rescue, rail traffic and railway station architecture. In February, we welcomed a delegation of Texas Central Railroad executives. We continued to identify new business opportunities in Korea, Israel, Poland, the Czech Republic, Bulgaria, India, Saudi Arabia and Afghanistan. Adif became more involved in international seminars and forums, where we showcased our expertise and strong results.

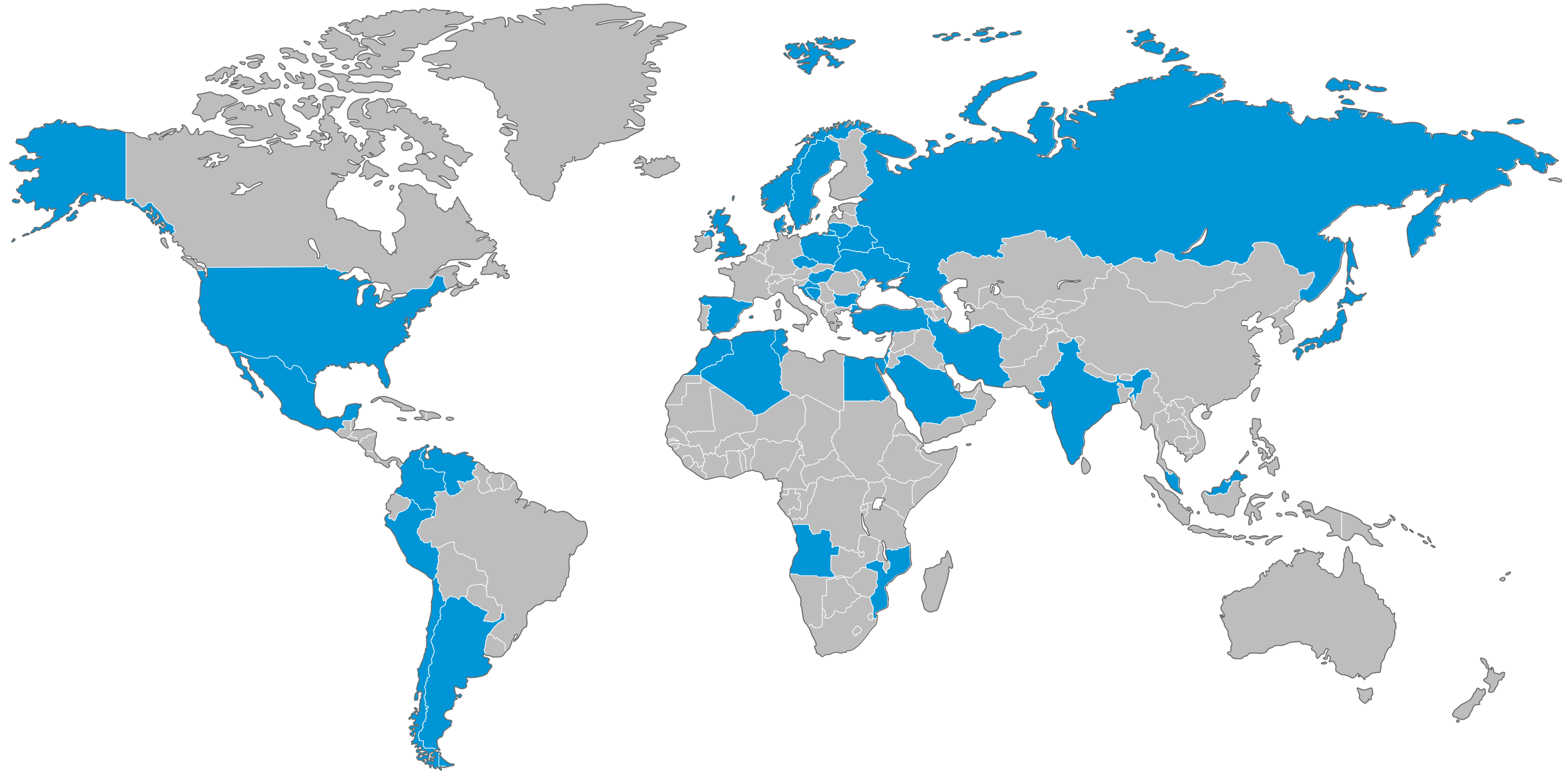
Moreover, representatives of Adif AV are present in the leading international bodies: EIM, UIC (where we are represented by leading experts), AEIEs, RailNetEurope (RNE), and the PRIME Platform of rail infrastructure managers promoted by the European Commission. We also take part in the interoperability initiatives of the ERA, the ERTMS Users Group and the joint European research initiative Shift2Rail, “S2R”.

According to 2020 data, there are more than 70 Adif and Adif AV experts from all our departments participating in activities under the aegis of international bodies. Our employees are also involved in specific projects and partnerships at the headquarters of UIC, EIM, S2R and ERTMS UserGroup. In total, the two companies currently participate in 97 working groups within the four major European associations (55 in UIC, 20 in EIM, 15 in RNE and 7 in PRIME).

This involvement is part of Adif and Adif AV’s international strategy of proactively filling an appropriate role within the international bodies and institutions that make the decisions that finally affect both our firms. The reality is that both companies, Adif and Adif AV, as European infrastructure managers, are increasingly influenced - sometimes even decisively shaped - by the international context and, more specifically, by the laws, regulations, technical standards and procedures originating with European institutions and organisations.

DESCRIPTION OF INDICATORS		UNIT	2018	2019	2020
Disclosures on our performance within society and on product liability	Presence in international associations and organisations (number of meetings attended) (Adif + Adif AV)	No.	218	224	224
	Presence in international projects and activities (no. of activities carried out) (Adif + Adif AV)	No.	158	98	45

PRESENCE OF ADIF / ADIF AV AROUND THE WORLD



MECCA-MEDINA HIGH-SPEED RAILWAY HARAMAIN PROJECT

Our main international highlight is the Mecca-Medina high-speed railway, known as the “Haramain Project”.

Saudi Arabia set in motion the government-funded construction of a 449 km high-speed railway between the cities of Mecca and Medina, the “Haramain High Speed Railway – HHR”, carrying passenger traffic exclusively and comprising five railway stations (Mecca, Jeddah, KAIA, KAEC and Medina). The engagement comprises the design, construction and commissioning of the infrastructure, systems and rolling stock, followed by railway operation and maintenance.

The contract for Phase II of the project was signed on 14 January 2012 between the client and the Al-Shoula Consortium, comprising 14 companies (2 Saudi firms and 12 Spanish firms). During the construction phase, Adif is in charge of coordinating railway construction, trials and commissioning. During the operation phase, within the scope of its engagement, Adif will be in charge of managing rail traffic, technical and commercial operation of the stations and, together with INECO, technical support for infrastructure maintenance. To fulfil its many roles, Adif formed a Saudi subsidiary (Adif-KSA) based in Jeddah, like the subsidiaries of the other Spanish members of the consortium.

In 2020, Adif continued to lead the railway construction works and draw up procedures, management systems and the rules of operation of the future railway (operations plan, traffic regulations, Adif AV employee training plan, and more). We also specified the processes for leasing out retail floor space at the stations. We continued to perform the engagements within the scope of the contract entered into with the client – “Settlement Agreement 2” – for commercial operation of passenger rail. That scope is confined to the available and commissioned equipment and systems.

Commercial operation started on 11 October 2018, but was suspended from 29 September to December 2019 after the roof of Jeddah station burned down. Station building work was then

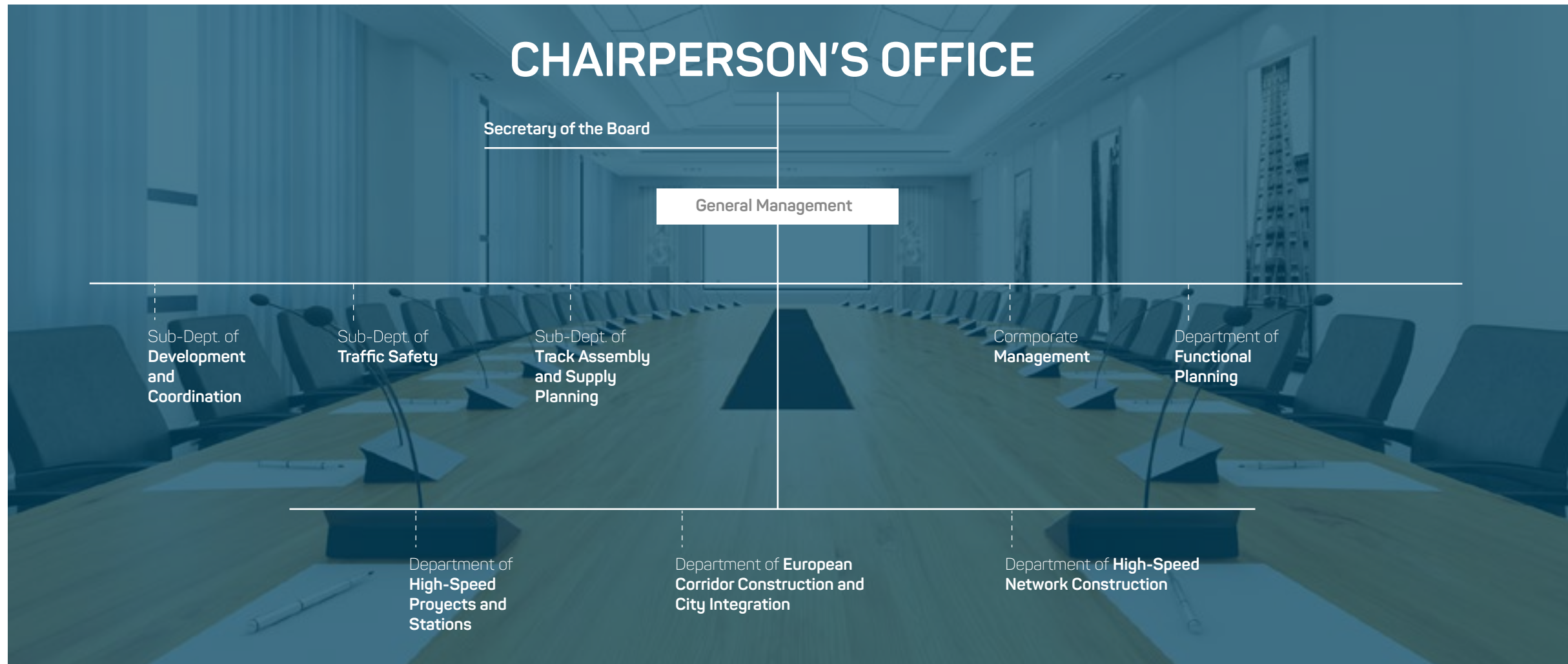
being completed by companies unrelated to the Spanish consortium of which Adif is a member. Having renegotiated with the client the terms of the agreement that was in effect before that incident, commercial service resumed on 11 December 2019. For this purpose, the Spanish consortium built a bypass around the station and other new assets, such as the line to the airport, that allow commercial service at maximum speeds of 3 km/h. The contract extension was put in place until April 2020 and involved payments to consortium members of SAR 83.3 million per month.

In response to the COVID-19 pandemic, the Saudi government decreed a lockdown that included suspension of commercial service on the Haramain railway as from 20 March 2020. Negotiations are now underway with the Saudi authorities to set a new start date for commercial service, which is expected to fall within the first quarter of 2021.



2.4. Organisational structure

The organisational chart below depicts the structure of Adif AV as it stood in December 2020:



2.5. 2020 Materiality assessment

Adif is aware of the need to listen to its various stakeholders in order forge a management approach that is underpinned by its duty to society. The Company defines its stakeholders as any segment of society that could be affected by the organisation's activities and/or could influence its activities.

Adif AV's stakeholders accordingly include the rail operators, rail passengers, citizens, public authorities, employees, governments of other countries, suppliers, business partners and allies and the third sector (NGOs, charitable associations, etc.).

Towards the end of 2020, we updated the materiality assessment conducted in 2019. Owing to the special circumstances that arose over the year, we thought it was appropriate to make changes to the list of key concerns and to the way in which they are assessed internally and externally. We first identified a list of key topics based on in-depth analysis of a range of sources, some of which are specific to the public sector and the railway industry in Spain and internationally. In addition, we examined research and reports on the potential effects of the COVID-19 crisis on the economy and society, focusing especially on the potential effects on the public sector and service sector. Finally, we looked to recent trends and abided by the requirements of Law 11/2018 on disclosures of non-financial and diversity information.

Overall, we identified 5 management areas and 29 material topics – one fewer than in 2019, as we brought similar topics together so as to widen their scope. We also introduced new topics arising from new needs identified in the course of the healthcare crisis of 2020.



MATERIAL TOPICS IDENTIFIED IN 2020

OPERATIONS AND MANAGEMENT	1	Construction of new railway lines and stations
	2	Management of the process of passenger transport liberalisation**
	3	Service standards and customer satisfaction
	4	Innovation and digitalisation of the business*
	5	All-round safety (protection and safety; rail traffic safety and cybersecurity)
	6	Supplier relations and supply chain management
	7	Health and safety in the value chain**
CORPORATE GOVERNANCE AND TRANSPARENCY	8	Public recognition and reputation**
	9	Company governance and strategy
	10	Compliance
	11	Risk management, response to the COVID-19 crisis and adaptability*
	12	Transparency
	13	Ethics and anti-corruption
ECONOMIC DIMENSION	14	Economic sustainability and raising of capital*
	15	Suitable management of public assets
	16	Investment in infrastructure development*
	17	Investor relations
	18	Business development and internationalisation**
	19	Socio-economic impact on communities

ENVIRONMENTAL DIMENSION	20	Managing the impact of infrastructure on the environment and biodiversity**
	21	Fighting climate change and supporting the circular economy*
	22	Managing the environmental impact of operations (waste, noise, fire, discharge, etc.)*
SOCIAL DIMENSION	23	Stakeholder engagement and dialogue
	24	Disabled access at stations and social inclusion of vulnerable groups*
	25	Employee commitment, training, career development and talent attraction**
	26	Work-life balance**
	27	Rules on remote work and the right to disconnect**
	28	Gender equality, diversity management and human rights *
	29	Workplace health and safety

(*) Topic renamed or approached from a new angle with respect to 2019

(**) New topic introduced after 2019

We then assessed these topics in the light of their materiality for the Company and its stakeholders, looking at their impact on strategy, business goals, brand reputation and image, and inherent capacity to create risks and opportunities. We conducted an internal survey involving 129 middle managers and department heads. We followed a range of reporting standards, analysed the sustainability and CSR reports of several foreign railway companies and reviewed topics that had attracted intense media coverage over the year. The outcome of placing internal materiality in relation to external materiality is depicted in the following figure:

As in previous years, key topics included the end-to-end safety of the railway network, service quality, and ethics and anti-corruption.

We did see a rise, however, in the materiality of topics surrounding occupational safety, risk management, adaptability, employee commitment and work-life balance. The materiality of environmental matters edged slightly downwards.

This trend is explained by the COVID-19 pandemic, which the Company and society as a whole were compelled to address. Since the general public is now chiefly concerned with health, companies’ ability to deal with the healthcare crisis and work-life balance, environmental issues have somewhat receded into the background. Nevertheless, the United Nations 2030 Agenda, achievement of the Sustainable Development Goals, the increasing importance of environmental standards and investors’ growing emphasis on companies’ performing sustainably mean that environmental topics should be approached in all seriousness. If companies are to be successful in the short and medium term, all eyes will be on their ability to adapt to the environmental problems already in evidence, and to uphold climate resilience.



3

STRATEGIC APPROACH

3. STRATEGIC APPROACH

3.0. INTRODUCTION: SUSTAINABLE DEVELOPMENT

3.1. BUSINESS LANDSCAPE: CHALLENGES AND OPPROTUNITIES

- 3.1.1. NETWORK MAINTENANCE, OVERHAUL AND UPGRADE
- 3.1.2. ENTRY INTO FORCE OF PASSENGER TRANSPORT LIBERALISATION
- 3.1.3. GLOBAL CHALLENGES AND THE 2030 AGENDA
- 3.1.4. WORKFORCE TRANSFORMATION

3.2. BUSINESS STRATEGY: 2030 STRATEGIC PLAN

- 3.2.1. STRATEGIC PILLARS AND INITIATIVES
- 3.2.2. STRATEGIC INDICATORS

3.3. ADIF AV's CONTRIBUTION TO THE SUSTAINABLE DEVELOPMENT GOALS

- 3.3.1. STRATEGIC APPROACH
- 3.3.2. OUTCOME OF THE IMPACT OF SDGs ON ADIF AV's STRATEGY

3.4. INNOVATION AND DIGITAL TRANSFORMATION

- 3.4.1. R&D MANAGEMENT
- 3.4.2. INNOVATION PROJECTS AND MILESTONES
- 3.4.3. INTANGIBLE ASSETS AND TECHNOLOGY TRANSFER
- 3.4.4. COLLABORATIVE INNOVATION
- 3.4.5. OPEN INNOVATION AND ENTREPRENEURSHIP
- 3.4.6. RAILWAY TECHNOLOGY CENTRE
- 3.4.7. DIGITAL TRANSFORMATION



Sustainable Development

Adif AV sets its strategy in accordance with its responsibility to society as a state-owned enterprise. We have oriented our strategy to sustainable development in the belief that our role is to support prosperity, social cohesion and welfare, and respect for the environment.

3.1. Business landscape: challenges and opportunities

In a complex, swiftly changing society, the future of Adif AV depends on how we deal with emerging challenges and opportunities.

The railways market moves fast. Now and in future, we shall see far-reaching changes that will bring new challenges and opportunities. The Company is getting ready. The business landscape is shifting: technological development, digitalisation, strong internal demand for increasingly safe and high-quality services, interoperability, liberalisation of the European rail passenger market, and wide-ranging global challenges all affect Adif AV's business. We can and must rise to the occasion.

CHALLENGES

Under the 2030 Strategic Plan, Adif AV specified key initiatives to address 4 critical challenges that both we and the railway industry in general must face:

- **SAFETY CULTURE:** Safety culture, a cross-cutting concern that affects all aspects of railway infrastructure. The implementation of the new ERA safety and interoperability directives have shifted the paradigm. Adif AV has reinforced all resources and assets allocated to this cornerstone, which underpins the reliability of the railways system as a whole.
- **LIBERALISATION OF THE RAIL INDUSTRY:** Liberalisation of the rail industry and full implementation of the Fourth Railway Package – all potential railway infrastructure operators must be addressed within the framework of the “network statement”. By widening the available range of transport options, making them more competitive and modernising the industry, rail liberalisation chiefly benefits users. Rail traffic is expected to rise by 30% to 50%. This is both a challenge and an opportunity for Adif AV – it will enable us to make better use of installed capacity and will drive up our royalties revenue.
- **EXTENSION OF THE RAILWAY NETWORK:** Extension of the railway network. In recent years, under-investment in infrastructure has shrunk the capital stock of the system by almost €25 billion. However, the recent upswing in investment in railway infrastructure will, over the next 5 years, lead to the commissioning of new track sections and thus enlarge the high-speed rail network by more than 30% (from today's 2,777 km to almost 3,700 km), and more will be spent to overhaul and improve the conventional and commuter railway networks.

- **GENERATIONAL SUCCESSION:** These three challenges converge on a fourth challenge, and a crucial one: generational succession. Adif – and, to a lesser extent, Adif AV – face a serious structural problem over the long term: an ageing staff. More than a third of our employees will retire within the next five years, and about 60% over the next decade. The issue is exacerbated by the fact that so many job positions require special training and qualifications. Adif must see to it that generational succession successfully assures the reliability and, above all, the safety of the railway system. Moreover, we need to modernise our career progression structure. This issue has been outstanding for more than a decade, and has detracted from the Company's operations in a swiftly changing landscape shaped by technological development and regulatory change. The necessary shift in the rules of career progression is addressed in the process of renewal of the Company's collective bargaining agreement. The aim is to build a modern organisation that effectively adapts its structure to the changes we shall see in future. If we fail, however, the current level of activity cannot be assured in future. Even now, the Company is at a disadvantage, with an ageing and short-handed staff. Going forward, we may be unable to rise to the challenges discussed earlier, and the viability of the system could be in question.

So Adif AV will face critical challenges in terms of organisational structure, creation of new procedures, and acquisition of the human resources required to manage them.

The 2030 Strategic Plan sets out the initiatives needed to rise to these challenges over the next 5 years, with a focus on critical actions that go to the heart of the Company's business: in particular, the new predictive maintenance system, and rail traffic management, which is so closely tied to safety. We shall strengthen this pillar in all respects, while supporting Adif's sustainability and environmental performance.

3.1.1. NETWORK MAINTENANCE, OVERHAUL AND UPGRADE

In 2021, Adif and Adif AV will invest €4,858 million in the railway network.

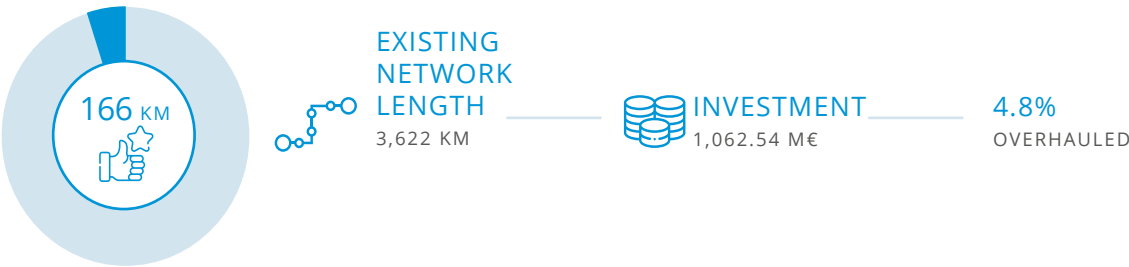
€3,012 million will be allocated to new infrastructure, while €1,846 million will be allocated to overhaul and improvement of the existing network (conventional gauge and metric gauge). In addition, in 2021 we shall spend €930 million on maintenance.

The planned actions are aimed at improving the efficiency and reliability of the existing network and promoting intermodality, while moving forward with the creation of an interoperable Single European Railway Area. This will achieve a meshed railway system that fosters territorial cohesion through intermodal connections, competitive travel times and highly available frequency and service.

The ultimate goal is to achieve the utmost efficiency in railway infrastructure management by maximising utilisation and optimising coordinated use of standard, Iberian and metric gauge track, while enhancing maintenance and operation and upholding safety as the core concern.

The ongoing improvement of the reliability and safety of railway infrastructure is a societal demand that Adif AV is entrusted to meet. Therefore, we engage in a sustained effort to fund maintenance of our infrastructure and facilities. Alongside this, we push forward with specific projects, such as track overhaul, safety and security system automation, replacement of level crossings with other solutions, improved connections between platforms, and more.

HIGH-SPEED RAIL NETWORK (OVERHAUL AND UPGRADE)



NETWORK UNDER ADIF AV's MANAGEMENT 3,622* KM

The network under Adif AV's management is 3,622 km* in total length, as follows:

DESCRIPTION OF INDICATORS		UNIT	2018	2019	2020
Disclosures on our performance within society and on product liability	Total network under management*	km	3,300	3,456	3,622
	Network development over the year	km	148	156	166
	Network development over the year	%	4.5%	4.7%	4.8%
	Standard-gauge (UIC) high-speed track	km	2,514	2,619	2,782

* The network grew with respect to the previous year due to the recent entry into service of the Zamora - Pedralba de la Pradería section of the Galicia high-speed railway, and the Murcia - Beniel fork, which brings high-speed rail to the Region of Murcia: it is included in this report because it is expected to enter service by the beginning of 2021.

3.1.2. ENTRY INTO FORCE OF PASSENGER TRANSPORT LIBERALISATION

Based on the principles of the Fourth Railway Package and their implementing legislation in Spain, in 2020 any passenger rail company could apply for use of the networks managed by Adif and Adif AV for commercial operation.

Viewed overall, our infrastructure is underutilised. However, some nodes – the Madrid and Barcelona hubs especially – are saturated, and have therefore been declared “congested”. This state of affairs, coupled with the high expectations surrounding the arrival of new operators to the network, prompted us to put in place framework agreements granting capacity to at least three new entrants. We set the terms for infrastructure reservation and operation so that those railway firms could acquire rolling stock and undertake expenditure as needed to start operations, while Adif would ensure maximum utilisation of its network.

The goal of this approach is to enhance mobility for members of the public by widening the options on offer and improving the competitiveness of one of the most sustainable means of transport.

The liberalisation of passenger transport from December 2020 onwards could increase traffic on the general interest rail network in the coming years – on high-speed railway lines, by as much as 30% to 50%. Adif AV must ensure that service quality and punctuality are not impaired by the increased traffic, but there is a risk that those indicators will be affected.

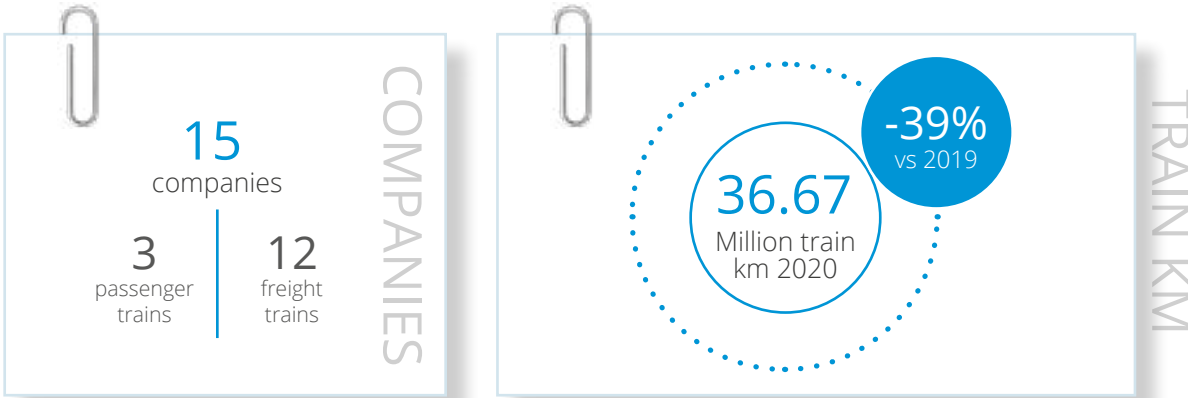
Spain would thus move towards increased use of the high-speed rail network, which is the most commercially attractive aspect of the industry and where rail is more competitive than other means of transport. At present, the Spanish high-speed rail network is used only one fifth as much as the French network and about one third as much as the German and Italian networks.

In 2012, passenger rail transport was liberalised in Italy: this provides a benchmark for Adif AV. Liberalisation was a boost to the industry as a whole. The Italian high-speed market grew by 80%, from 38 million passengers in 2012 to 68 million in 2016.

Estimates of traffic growth in the RFIG, which, as noted above, would be between 30 and 50 percent on the high-speed lines, make it necessary to ensure the quality and punctuality of service on all rail infrastructures.

To achieve this, we must adapt to the new trends that will arise from liberalisation. The process provides an opportunity to promote rail as a more sustainable mode of travel and extract value from our investments of the past few years and our technological developments and expertise. We need to be ready to meet the needs of the actors and stakeholders involved and fulfil their goals for network capacity, energy efficiency, sustainability, innovation and service excellence.

However, a long-term programme should be designed for investment in infrastructure and sufficient funds should be allocated to research, development and innovation (R&D): transport must be adaptable and rise to the new challenges of mobility.



In 2020, 15 companies used Adif AV infrastructure. The traffic volume was 36.67 million train km, down 39% compared to the previous year due to lockdown restrictions in response to the COVID-19 pandemic. Three of these companies focus on passenger services: Renfe Viajeros, Alsa Rail (tourist trains) and Ouigo (trial runs ahead of commercial high-speed passenger operations).

NEW ENTRANTS TO THE RAILWAY MARKET

In May 2020, as a result of negotiations started in 2019, ten-year capacity framework agreements were entered into with three railway companies for new commercial passenger services on the Madrid-Barcelona, Madrid-Valencia/Alicante and Madrid-Seville/Malaga routes:

- Renfe Viajeros
- Intermodal de Levante, S.A.
- Rielsfera S.A.U.

Besides the operators already benefiting from Capacity Framework Agreements (Renfe, ILSA and RIELSFERA), other companies have expressed interest in entering the passenger market. However, the situation is not a straightforward one, as there is not much more capacity available along the routes they are interested in. Nevertheless, the parties are considering services and lines that could offer potential and looking at ways to put in place long-term commitments – which all potential new operators hope to rely on – in a transparent, non-discriminatory way.

All plans to start operations or give the green light to new entrants were delayed by the COVID-19 pandemic. This significantly dampened expectations for increased mobility in the short term, and continues to create uncertainty about developments in the medium term. So far, however, all commitments made by Adif AV and the new railway operators remain effective and in place.

In 2020, passenger services were operated only by Renfe Viajeros, as the new entrants plan to start running trains in 2021. The freight market, on the other hand, has been open to competition for several years, and the Adif AV network has been used by a large number of rail freight operators.

In 2020, we implemented a range of processes to encourage entry to the market by further operators.

Adif and Adif AV alike have considered ways of reorganising current traffic to allow for introducing new entrants in the passenger rail market. The entry of new rail operators who would compete with Renfe, the State-controlled operator, would widen the range of options available and thus enhance quality, lower prices and improve infrastructure utilisation.

The Network Statement lends visibility to available capacity, and provides potential new entrants with legal certainty with a view to entering into framework agreements that guarantee capacity allocation over a term of five years.



DESCRIPTION OF INDICATORS	UNIT	2018	2019	2020
Disclosures on our performance within society and on product liability.	No. of companies operating on the Adif AV network*	13	14	15

No. of companies operating on the Adif AV network: Acciona; ALSA; Captrain; Continental; Ferrovial; Go Transport; Low Cost; Logitren; Medway; Renfe Viajeros; Renfe Mercancías; Tracción Rail; Transitia; Transfesa, Ouigo España (trial runs ahead of commercial operations).



PLAN FOR ALIGNMENT WITH THE FOURTH RAILWAY PACKAGE

Adif and Adif AV have worked intensively and systematically to become aligned with the rules underpinning the process of liberalisation: the EU Fourth Railway Package.

Adif AV's systems and processes are now ready to handle capacity requests and awards in accordance with the applicable regulations and under the oversight of the CNMC, Spain's competition watchdog. Our process was approved by the European Commission's Directorate-General for Mobility and Transport – also known as “DG-Move” – and rated as one of the most active mechanisms within the European Union in introducing competition and creating a single railway market. Competition among at least three operators on a single network is a unique situation that is likely to be followed with great interest.

After adapting rail traffic and the process of awarding capacity to the new liberalised scenario, **both entities – Adif and Adif AV – aligned their stations to the needs of new entrants, following four management vectors: non-discriminatory treatment, transparency, flexibility and sustainability.**

The new stations plan makes available to potential new entrants information on offered services, application and award procedures, and prices, which will be made public in the Network Statement. In addition, Adif has set in motion a proactive search for land under its ownership that could be made available to new operators to build their facilities.

Finally, we are creating procedures to link energy usage to each train more accurately, so that we can bill each operator for what their services really consume, Following a trend already in place in other European countries, we are moving towards a billing method based on meters installed on board trains themselves.

Plans are underway to adapt to the new scenario, which is of strategic importance for Adif AV and the industry as a whole. Those plans will require ongoing monitoring in line with new circumstances as they emerge at all levels – legal, technical and business-related. We shall build on the success of the adaptations already achieved, and cooperate with all industry players: railway companies, the MITMA (Ministry of transport, mobility and urban agenda), CNMC (competition watchdog) and AESF (the Spanish railway safety agency).

3.1.3. GLOBAL CHALLENGES AND THE 2030 AGENDA

Since the launch in late 2015 of the 2030 Agenda and its related Sustainable Development Goals (SDGs), governments, public service corporations and private companies and society as a whole have made significant efforts to rise to the challenge of achieving those goals by 2030.

Spain's Action Plan to implement the 2030 Agenda comprises public policies, key measures towards far-reaching change, monitoring mechanisms, accountability and assessment.

The latest available data suggest that most public service companies believe a lack of internal awareness of the 17 SDGs and their significance stands in the way of their becoming a part of corporate strategy. Key tools will be training and identifying cross-cutting skills and competencies.

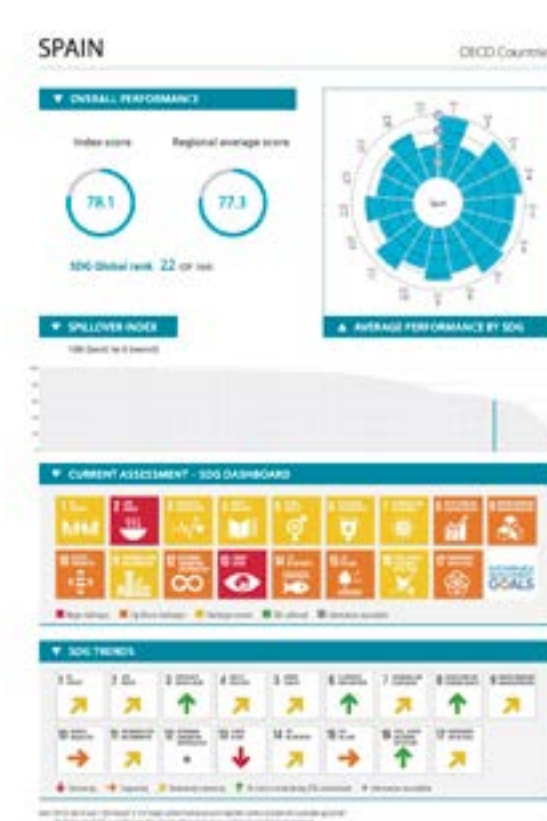
Working towards the achievement of the SDGs will provide an opportunity to improve businesses' performance and impact on society, thus enhancing their reputation and social legitimacy. In addition, we can improve the way we handle our own processes internally, and new business opportunities will be forthcoming.

According to the latest research, as a general rule Spain is keeping abreast of the forward steps of the European Union to achieve the 2030 Agenda. According to the 2020 edition of the SDG Index and Dashboard Report, worldwide Spain is in the top quartile of countries closest to achieving the goals, in 22nd place out of 166.



Spain ranks 22nd out of 166 for the achievement of the Agenda 2030.

COVID-19 will have a severely adverse impact on many countries' SDG Index performance. The effects have not yet shown through in the data available so far. The world faces the worst economic and health crisis of the last hundred years. The pandemic is a body-blow to the world's ambition to achieve the SDGs, especially for less developed countries. The long-term consequences of the pandemic remain highly uncertain.



Website: <https://www.sdgindex.org/>.

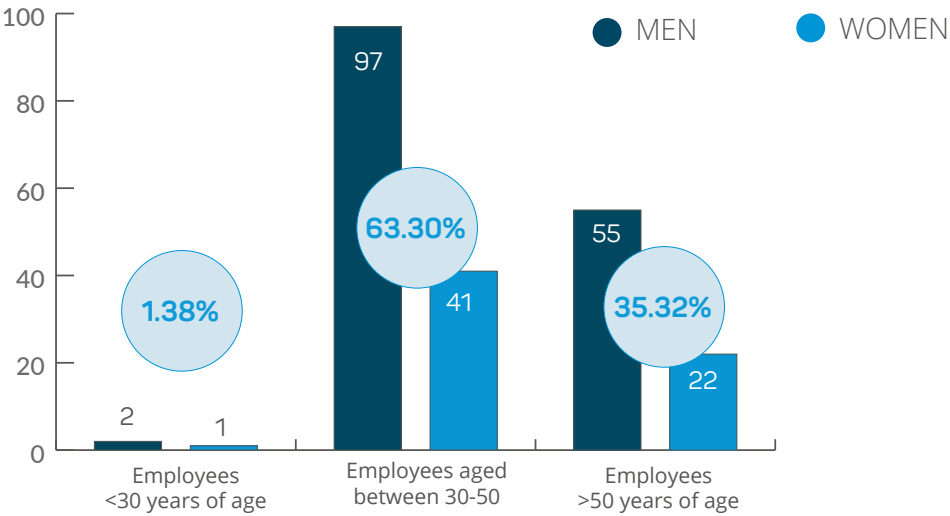
3.1.4. WORKFORCE TRANSFORMATION



The greatest challenge we face internally is the age pyramid of our workforce. At Adif AV, most employees are 41 to 50 years old (50% of the total, up 2% compared to 2019). The average age of employees is 48.85 years old ⁽¹⁾. So Adif AV has a major challenge to face, now and in the coming years: rejuvenation of its workforce and assured transfer of knowledge in key positions. We have accordingly set in motion a range of initiatives: partial retirement; a voluntary departures scheme; and public employment recruitment processes. Our goal is to speed up generational replacement without losing the benefit of knowledge and experience, which crucially underpin the effectiveness of our business.



In Adif AV most employees are 41 to 50 years old

BREAKDOWN OF HEADCOUNT BY AGE



BREAKDOWN OF HEADCOUNT BY GENDER		2018	2019	2020
 MEN		146	156	154
 WOMEN		60	62	64
TOTAL		206	218	218

⁽¹⁾ For further information about the distribution of the workforce by age and length of service, see section 5.5. Employees)



3.2. Business strategy: 2030 Strategic Plan

3.2.1. STRATEGIC PILLARS AND INITIATIVES

In 2020, we updated our Strategic Plan to deliver an effective response to the wide ranging strategic, operational and business challenges that the Company will face over the coming decade.

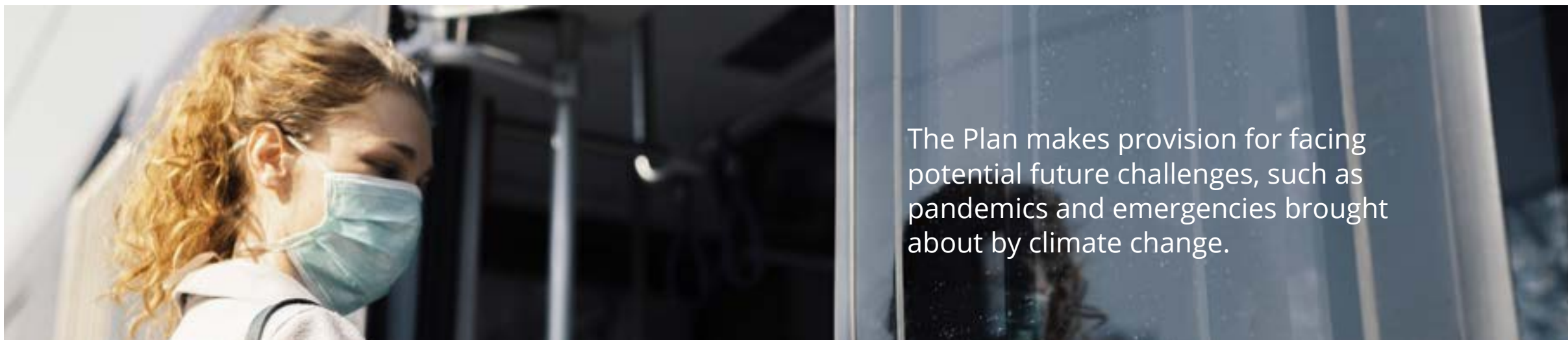
The Strategic Plan, in alignment with the Sustainable Development Goals (SDGs), is designed to encourage travel by individuals, improve existing networks and build more resilient, inclusive and sustainable infrastructure that helps mitigate the effects of climate change. It also supports sustainable innovation, the introduction of new technologies and intrapreneurship.

The new 2030 Strategic Plan is aligned with the United Nations Sustainable Development Goals (SDGs) and the Spanish Government's Agenda for Change, as further specified by the Ministry of Transport, Mobility and the Urban Agenda for a Safe, Sustainable and Connected Mobility Strategy.

The 2030 Strategic Plan is designed to place Adif AV in a competitive and sustainable position in railway infrastructure management and operation, within the framework of the infrastructure policy of the Ministry of Transport, Mobility and the Urban Agenda. There are four key goals:

1. Safety.
2. Sustainable, competitive and intermodal mobility.
3. Stable government investment.
4. Optimal impact of infrastructure on economic growth over the medium term, improving quality of life among the general public and reinforcing social and territorial cohesion.





The Plan makes provision for facing potential future challenges, such as pandemics and emergencies brought about by climate change.



11 PANDEMICS AND EMERGENCIES

NEW CHALLENGE

We shall minimise situations of exposure and potential contagion.

We shall roll out a strategy to identify and manage positive factors.

We shall move task online to raise productivity and avoid exposure to risk.

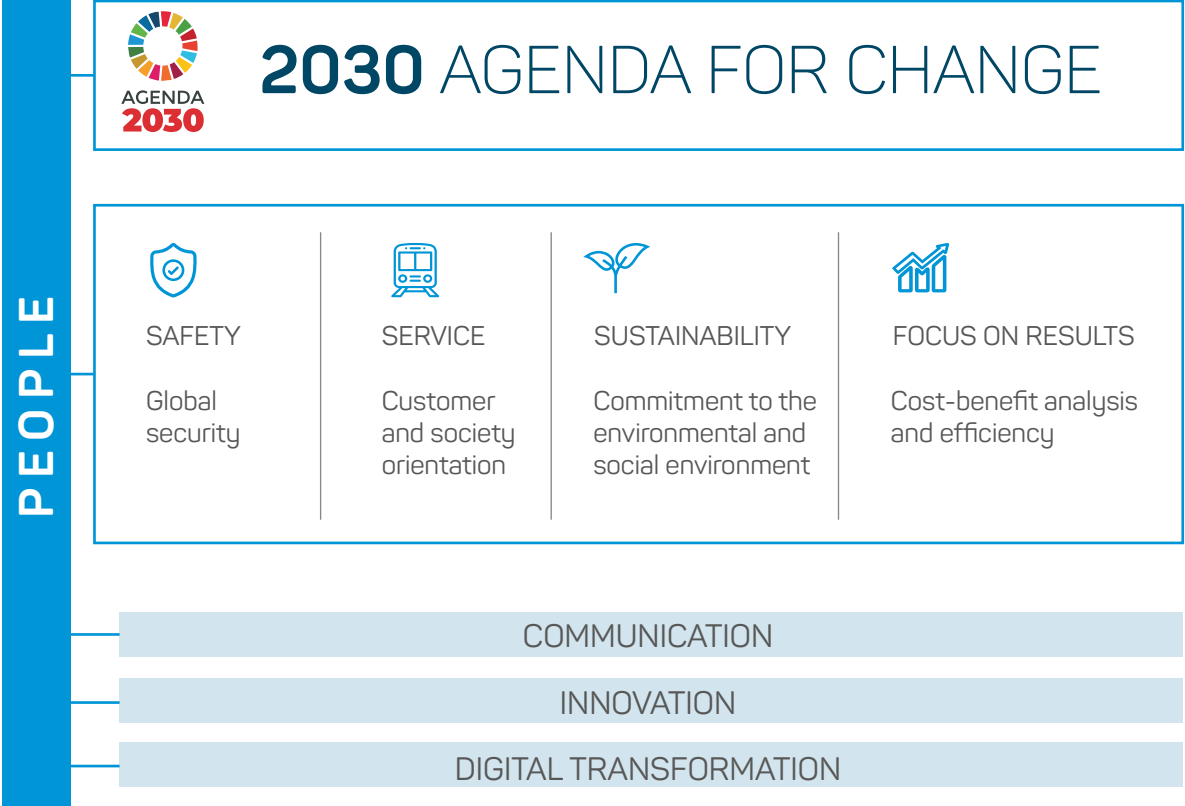
We shall put forward measures to mitigate the impact on employees' mental health and stress levels.

We shall design processes, assign responsibilities and allocate resources to meet the challenge of any future "lockdowns".

SINGLE ENGINE: OUR PEOPLE

The 2030 Strategic Plan rests on four pillars: safety, service, sustainability and focus on results. These four pillars are fully aligned with our Mission, Vision and Values.

The pillars are supported by three levers towards achievement: digital transformation, strategic innovation and communication. The whole is driven by a single engine: our people.



The 2030 Strategic Plan will focus on a range of strategic initiatives that are inherent in the Company's business. Those projects will be implemented and rolled out in the new settings that society now demands. We shall accordingly monitor implementation of these initiatives using technological tools. We shall take a highly practical approach, seeking involvement and buy-in across the organisation and following a data-driven vision, which will embrace good governance of the internal and external data sources available to Adif.

At present, **21 strategic initiatives are in play.**



SAFETY PILLAR

- Rail safety update and improvement plan.
- Initiatives to improve safety at rail intersections.
- Project for a new maintenance system.
- New commercial rail traffic system.
- Integrated risk management development and deployment plan..



SERVICE PILLAR

- Gauges plan.
- End-to-end plan for passenger stations.
- 4th Railway Package adaptation plan.
- Internationalisation plan.
- Plan for Adif's positioning within the company group.



SUSTAINABILITY PILLAR

- Plan to combat climate change.
- Management system review and updating project.
- Transparency and good governance improvement plan.
- Implementation plan for a new asset management model.

DIGITAL TRANSFORMATION LEVER

- Workstation transformation plan.
- BIM methodology implementation plan.
- Electronic administration plan.
- Project for a new traffic regulation platform, SITRA+.
- Project for a single telecommunications operator.

INNOVATION LEVER

- Strategic innovation plan.

PEOPLE DRIVER

- Integrated people management plan.

3.2.2. STRATEGIC INDICATORS

The table below shows the annual trend in the strategic key performance indicators analysed by Adif to track delivery of its objectives for 2018-2020 (2020 data, updated to latest available figures):

/ OPERATIONAL DIMENSION

PILLAR / LEVER	TITLE	UNIT	2018	2019	2020
SAFETY	Significant accidents caused by the infrastructure manager	No. per million train-km	0	0	0.052
	Rail accidents for which infrastructure manager is liable	No. per million train-km	0	0	0.078
	Crimes with an impact on activities	No.	252	101	42
	Accident precursors for which infrastructure manager is liable	No. per million train-km	0.321	0.356	0.680
	Malicious attacks on critical infrastructure	No.	22	9	17
	Incident rate	Lost-time injuries/1,000 employees	0	0	0
	Severity index	Lost workdays/1,000 h worked	0	0	0

PILLAR / LEVER	TITLE	UNIT	2018	2019	2020
SERVICE	Passenger transport liberalisation **	Train-km share of LD/HS services of the new rail companies with respect to the single operator	N/A	N/A	0
	Reliability of facilities	No.	2,508	2,909	2,703
	Availability of facilities	Minutes	71.21	65.97	73.77
	Track quality	Ratio	99.10	99.16	99.10
	High-speed network development	%	71.80	75.00	66.00
	HS expenditure executed in construction work	Ratio of executed expenditure to internal budget	1.10	1.02	1.10 ⁽¹⁾
	Station modernisation	Million passengers benefiting	147.6	139.89	25.09
	Urban integration**	€m cumulative investment	3,877.03	4,067.16	4,194.16 ⁽¹⁾
	Business activity at stations**	€m business revenue	12.85	15.47	19.38 ⁽²⁾

PILLAR / LEVER	TITLE	UNIT	2018	2019	2020
PEOPLE DRIVER	Transfer level**	%	86.7	86.3	87.0

(*) Requested and received (intrapreneurship, engagements in operational areas, collaboration and open innovation)

(**) Integrated indicator for Adif and Adif AV

⁽¹⁾ Provisional value at year-end 2020 provided by the relevant area.

⁽²⁾ Last available value: September 2020

/ ECONOMIC DIMENSION

PILLAR / LEVER	TITLE	UNIT	2018	2019	2020
FOCUS ON RESULTS	Resultado bruto de explotación (EBITDA)	€ million	297.9	282.6	-8.5
	Profit/(loss) for the year	€ million	-223.4	-179.2	-460.9
	Use of Community funds	%	0.73	1.11	1.12

PILLAR / LEVER	TITLE	UNIT	2018	2019	2020
TRANSFORMATION DRIVERS	Closed-out procedures**	Settlements through Contracts SAP	N/A	N/A	0.201 ⁽²⁾
	Collaboration and open innovation**	% implemented ideas and projects*	23	37	48
	Digital strategy**	% adaptation to Office 365 of corporate mailboxes and videoconferencing rooms	N/A	N/A	100

/ ENVIRONMENTAL DIMENSION

PILLAR / LEVER	TITLE	UNIT	2018	2019	2020
SUSTAINABILITY	GHG emission reduction	Tn of CO _{2eq}	17,874	22,712	13,028 ⁽⁴⁾
	Improvement in energy efficiency	GWh equivalent	86.91	103.56	104.18 ⁽⁴⁾

⁽⁴⁾ Provisional value at year-end 2020 provided by the relevant area

/ SOCIAL DIMENSION

PILLAR / LEVER	TITLE	UNIT	2018	2019	2020
SUSTAINABILITY	Passengers boarding / alighting at accessible stations**	% of passengers	83.19	85.07	84.76

$$(**) \text{ Adif} + \text{Adif AV}$$

/ CORPORATION GOVERNANCE DIMENSION

PILLAR / LEVER	TITLE	UNIT	2018	2019	2020
SUSTAINABILITY	Code of Ethics**	No. of notices*	12	16	2
	Transparency	% complaints upheld	7.56	4.88	1.28

(*) Received and resolved through the Whistleblower Channel or any other means that could expose a breach of the commitments under the Code of Ethics





3.3. Adif AV's contribution to the Sustainable Development Goals

3.3.1. STRATEGIC APPROACH

Adif AV is aware of its responsibility as a public service company and of its major on society and the environment, Therefore, our strategy is oriented towards sustainable development. This goal implies a commitment to global and local challenges in inclusive economic development, health, social cohesion, respect for the environment and good governance. The Company is working towards delivering on its commitment to sustainable development by aligning its strategy with the United Nations Sustainable Development Agenda. We believe that one of the cornerstones of Adif's responsibility is to help achieve the SDGs. Therefore, we have created and implemented a model called GoSDG, which integrates the 2030 Agenda with the Company's own Strategic Plan.

The GoSDG Project aims to rigorously embed the Sustainable Development Goals and the related targets into Adif AV's business strategy. Through GoSDG, we seek to reinforce and widen the principle of responsibility and accountability that underpins the Company's Strategic Plan. The venture encompasses operational and management responsibility and our response to the broad challenges faced by society, and involves the entire organisation so as to boost Adif AV's contribution to the SDGs where we can have the most impact: i.e., material SDGs and targets.



The project comprises three phases:

Phase 1 (2017-2018)	Phase 2 (2019-2020)	Phase 3 (2020-2030)
<p>Defining and modelling GoSDG</p> <p>Adif conducted an in-depth analysis of the SDGs and the related targets and mapped them onto all areas of the Company in order to identify our current or potential impacts on the 17 SDGs and their 169 targets. This enabled us to make a first selection of SDGs and material targets relevant to Adif AV.</p>	<p>Integration with strategy</p> <p>During this phase – which started in 2018 – we sought effective integration by aligning our strategic goals, KPIs and Strategic Plan initiatives with material SDGs and their related targets.</p>	<p>Monitoring and improving the model</p> <p>In this final phase, we seek to track and report on our results and adapt the model to any strategic changes, while enhancing the scheme of indicators and targets so that we always have the right level of ambition and implementation throughout the organisation.</p>

In 2020, for the first time we reported to the Board on Adif AV’s contribution to the SDGs. We also provided information on this topic to our stakeholders in the 2019 Management Report.

Creating a new strategy (our 2030 Strategic Plan) requires a realignment of goals, indicators, targets and initiatives under the new Plan with material SDGs and their related targets.

We intend to address this issue in 2021. We hope to move forward with the highest possible ambition towards “impact on SDG targets” in line with the Company’s firm commitment to sustainable development in answer to the call of the United Nations. We are aware that, unless we and all other actors bolster their contribution, there is a risk that the SDGs will not be fulfilled by 2030 – especially in the light of the delays caused across the board by the 2020 pandemic.

European and Spanish institutions alike are already mobilising in order to contribute to delivery of the SDGs by championing a range of initiatives. During 2020, Adif AV took part in SDG Rail Index, a Working Group promoted by the International Union of Railways, UIC, headquartered in Paris. SDG Rail Index is a platform whose members include railway infrastructure managers, holdings, operators and related firms. One of the aims of the platform is to encourage a consensus across the industry to harmonise ESG standards and identify non-financial key performance indicators (24 KPIs) in terms of their contribution to the main SDGs for the railway industry (SDGs 5, 7, 8, 9, 11, 12 and 13).

The outcome of this work will be one of the elements that Adif AV will use in its GoSDG Adif AV process to review and identify indicators and targets for the Company’s 2030 Strategic Plan with a view to making a significant forward stride towards achieving the SDGs.

/ MATERIAL SDGS

Our 2018 assessment identified 10 material SDGs, and classified them into 3 core goals (SDGs 9, 11 and 13) and 7 additional goals (SDGs 3, 7, 8, 10, 12, 15 and 17).

We conducted a review in 2020 and, as a result, added a further 4 material SDGs (SDGs 4, 5, 6, 16).

CORE SDGS IDENTIFIED BY ADIF AV

Within the GoSDG framework, Adif AV identified **three high-priority core SDGs** for the Company:



Adif AV’s business as a whole is oriented towards creating and managing sustainable, high quality, resilient and safe infrastructure. Moreover, Adif is committed to innovation and the modernisation of its infrastructure, with a focus on efficiency.



The strategic commitment to reducing accident rates and incidents helps provide safe transport systems and improve road safety. Elsewhere, the elimination of physical and communication barriers in terms of railway access will help achieve an inclusive transport system. All of that is key in terms of creating a backbone capable of connecting urban, peri-urban and rural areas.



Adif AV helps combat climate change through its very business activity, encouraging the use of a clean mode of transport.

SDGs 9, 13 and 11 are crucial as they relate directly to Adif's business.

SDGs 13 and 9 (innovation) have plenty of room for improvement in Spain.



/ ALIGNMENT OF ADIF AV'S 2030 STRATEGY WITH SDGS AND MATERIAL TARGETS

Over the course of 2021 we shall update the GoSDG model, aligning Adif's strategic goals, KPIs and strategic initiatives as set out in the SP 2030 with material SDGs and related targets. This year we shall, taking a realistic view, look to raise the bar of our ambition facing our sustainability targets, with a focus on the highest-impact areas.



3.3.2. OUTCOME OF THE IMPACT OF SDGS ON ADIF AV'S STRATEGY

INNOVATION AND DIGITAL TRANSFORMATION
(CHAPTER 3.4)



GOOD GOVERNANCE, TRANSPARENCY AND RISK MANAGEMENT
(CHAPTER 4)



HEALTH AND SAFETY
(CHAPTER 5.3)



SERVICE IMPROVEMENT
(CHAPTER 5.4)



ENVIRONMENTAL MANAGEMENT AND CLIMATE CHANGE ACTION
(CHAPTER 5.5)



EMPLOYEES
(CHAPTER 5.6)



CUSTOMER ORIENTATION
(CHAPTER 5.7)



COMMUNITY COMMITMENT
(CHAPTER 5.8)



SUPPLIER MANAGEMENT
(CHAPTER 5.9)



 SDGs PRIORITY

Key performance indicators - Related dSDG

Outperformance in 2020 vs. 2019 Underperformance 2020 vs. 2019 Unchanged or indicators that are not comparable

Priority SDGs



9,984 km of electrified track in service (64.3% of total track in service) (Adif + Adif AV) (+1,70% vs. 2019) - **Target 9.4**

€1,062.54 M invested in developing high speed network (-4.29% vs. 2019) - **Target 9.1**

166 km of lines renovated or upgraded (4.8% of the total network under management) (+6.41% vs. 2019) - **Target 9.4**

39% of output of innovation transferred (efficiency in innovation)(Adif + Adif AV) - **Target 9.5**

- Key initiatives, plans or programmes.



25.09 million passengers benefitting station modernisation - **Target 11.2**

€126.51 M invested in urban integration (Adif + Adif AV) - **Target 11.3**

56 partnerships, agreements, protocols, addenda for integration of Adif AV investees since its creation (+3.70% vs. 2019) - **Target 11.3**

- Ecomilla project.
- End-to-end plan for passenger stations.



€600 M issue of green bonds in 2020. 54.67% green bonds of total bonds issued over the past five years - **Target 13.2**

13,028 TmCO₂ equivalent reduction in GHG emissions (cumulative since 2009) - **Target 13.2**

28.4% reduction in carbon footprint vs. 2019 - **Target 13.2**

- 2018-2030 Plan to Combat Climate Change.
- Freight plan.
- Target to achieve carbon neutrality in 2050.



0.052 significant accidents caused the infrastructure manager per million train-km - **Target 3.6**
No deaths or serious injuries in train accidents - **Target 3.6**

- Crossings safety improvements.
- Traffic safety actions and upgrades.
- Zero accident plan.
- SIGMA project.



87.0% transfer (satisfaction with training received and use on the job) (Adif + Adif AV) (+0.81% vs. 2019 - **Target 4.4**
92.3 hours of training per employee/year - **Target 4.3**
€3.082 M invested in training in 2020 (€264.32 invested in training/employee) (Adif + Adif AV) - **Target 4.3**
23 internship agreements with universities in three years to 10/2020 (Adif + Adif AV - **Target 4.3**

- Annual training plan.



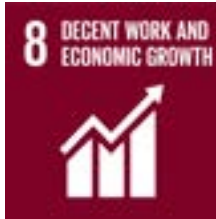
29.36% women employees (+3.23% vs. 2019) - **Target 5.1**
27.18% women managers (+4.98% vs. 2019) - **Target 5.5**
27.27% women board members - **Target 5.5**

- II Adif Equality Plan and I Adif AV Equality Plan.
- LIDERA programme "Mentoring Mujeres Tituladas" (mentoring women graduates) (RAI).



83.59% green energy (GoO) of total energy consumed (-3.12% vs. 2019) - **Target 7.2**
104.18 GWh equivalent/year saved due to energy efficiency (cumulative since 2009) - **Target 7.3**
15.99 MJ/train-km final energy intensity - **Target 7.3**

- 100% of energy consumed by Adif AV certified with guarantees of origin (GoO).



€1,272.57 M of investments executed (+6.09% vs. 2019) - **Target 8.1**

No. lost working days per 1,000h worked - **Target 8.8**

95.87% of employees with permanent contracts (-1.74% vs. 2019) - **Target 8.5**

7.81% pay gap in executive level jobs in favour of men - **Target 8.5**

48% intrapreneurship ideas and projects developed, by the business areas or through collaboration and open innovation (Adif + Adif AV) - **Target 8.3**

- Plan for transition to the 4th Railway Package (liberalisation).



84.76% of passengers on and off at accessible stations (Adif + Adif AV) (-0.36% vs. 2019) - **Target 10.2**

€7.92 M invested in accessibility improvement projects (Adif + Adif AV) - **Target 10.2**

- Support service for people with reduced mobility.
- DIALOG service.



44.57% reduction in water consumption vs. 2019 - **Target 12.2**

0.018 Tm/million train-km of hazardous waste generation intensity - **Target 12.4**

100% of contracts include social and environmental clauses (Adif + Adif V) - **Target 12.7**

- Hazardous waste management system.
- Responsible public purchasing project.



No serious or very serious environmental administrative penalties - **Target 15.1**

€59,854 M of resources earmarked for environmental protection (investment + operation) (latest available data) - **Target 15.1**

€2,898 M marked for fire prevention - **Target 15.5**

- Environmental policy.
- Environmental management systems.
- Environmental monitoring of works.
- Fire prevention plan.



42 crimes committed by third parties with an impact on activities (criminal complaint filed) - **Target 16.1**

17 deliberate attacks on critical infrastructure - **Target 16.1**

2 reports of breaches of the Code of Ethics - **Target 16.5**

1.28% claims upheld by the Transparency and Good Governance Board out of total responses (Adif + Adif AV) - **Target 16.6**

- Integrated risk management development and deployment plan.
- Transparency and good governance improvement plan.
- Corporate anti-fraud policy.



33 (Adif AV + other) 42 (Adif + Adif AV + other) agreements with industry and business associations in force - **Target 17.16**

17 industry association or organisation memberships (Adif + Adif AV) - **Target 17.16**

- Estación Abierta (Open Station) programme.
- Partner / member of :
 - Spanish Quality Association, AEC.
 - Spanish Network of the United Nations Global Compact (REPM).
 - Forética.
 - Spanish Association of Shopping Centers and Commercial Parks, AECC.
 - National Land Transportation Council (travelers' section).
 - UIC.
 - EIM.
 - RNE.
 - PRIME.
 - ERTMS User's Group.
 - ERTMS Stakeholders Platform.
 - ALAF.
 - Atlantic Corridor.
 - Mediterranean Corridor.
 - SEA Vitoria-Dax.
 - Pyrenees high-capacity crossing (Pyrenees TFC).
 - Spain-Portugal High Speed (AVEP).



3.4. Innovation and digital transformation

Since it was created, Adif AV has been strongly committed to research, development and innovation (R&D) work as the means to boosting technology development in the infrastructure arena, an area considered vital to achieving operational excellence. Outside of the firm, the Company sponsors R&D projects carried out by third parties, stimulating new developments with the scope to add value in rail infrastructure management.

3.4.1. R&D MANAGEMENT

In innovation, Adif AV aims to respond to the demands for service and network improvements presented by its stakeholders, which include its owners, such as the Ministry of Transports, Mobility and the Urban Agenda, and customers, including rail service providers and end users. Adif AV's innovation effort is tangible in the number of projects it is working on, the volume of investments channelled into them and the effort made to share technological know-how.

At present the corporate R&D strategy and policy are focused on moving away from traditional in-house innovation models towards the open innovation regime in which Adif AV participates activity in a multisector and multidisciplinary innovation ecosystem, with the ultimate aim of taking a forward-looking approach to meeting stakeholder demands. By asking the market to respond to technological challenges, external innovation is better aligned with the needs of the rail infrastructure we manage, thus generating value.



/ LINES OF INITIATIVE PURSUED UNDER THE UMBRELLA OF THE ADIF AND ADIF AV R&D STRATEGY

The main lines of initiative pursued under the umbrella of the entities' R&D strategy:

- Identifying innovation challenges for Adif and Adif AV that will meet needs in operational areas.
- Introducing and developing rail technology innovations of interest to Adif and Adif AV via project execution, mainly in collaboration with other companies, research centres and universities.
- Transferring the results to both entities.
- Protecting the results.
- Managing Adif and Adif AV intellectual property.
- Reinforcing international business expansion via participation in taskforces and associations, such as the Rail System Forum and the UIC's Research and Innovation Coordination Group.
- Bidding in response to calls for tender under the umbrella of the Horizon 2020 programme.
- Boosting technological intelligence, by constantly monitoring the environment and through specific on-demand innovation initiatives.
- Supporting internal entrepreneurialism, tapping the creativity and talent of Adif and Adif AV professionals.
- Taking part in R&D ecosystem forums such as Transfiere, S-Moving, South Summit and Startup Ole.
- And launching innovation challenges in response to identified needs based on prior market surveys and research.

The goals pursued by Adif and Adif AV for innovation are articulated around the four pillars of this strategy, embracing a broad spectrum of technology:



SAFETY

Predict and detect external factors to boost infrastructure resilience; mitigate operational risk by reinforcing safety at rail intersections and implementing early detection of rail fractures



SERVICE

Digitalise infrastructure management through automated inspection and predictive maintenance; boost goods transport by developing variable gauge wheelsets and introducing operational improvements; enhance the efficiency of the track/electrification ratio to raise infrastructure capacity; and develop the stations of the future to enhance passenger experience.



SUSTAINABILITY

Fight against climate change with our own proprietary developments in user electromobility, alternative energies for traction, and smart rail electric grid; reduce operating costs arising from the infrastructure life cycle.



FOCUS ON RESULTS

Maintaining and improving the open innovation model within Adif by addressing challenges through preliminary market surveys and research, reinforcing technology monitoring and competitive intelligence, promoting internal entrepreneurship, protecting and disseminating results, and strengthening technology transfer. This pillar also includes analysis of aid programmes as co-financing instruments and development of the plan for the successor to Shift2Rail.



During 2020, Adif and Adif AV moved forward on 41 R&D projects, started a further 14 and completed 5 others. 3 of the completed projects successfully transferred to production. **Over time, the cumulative percentage of transferred R&D projects now stands at 39%.**

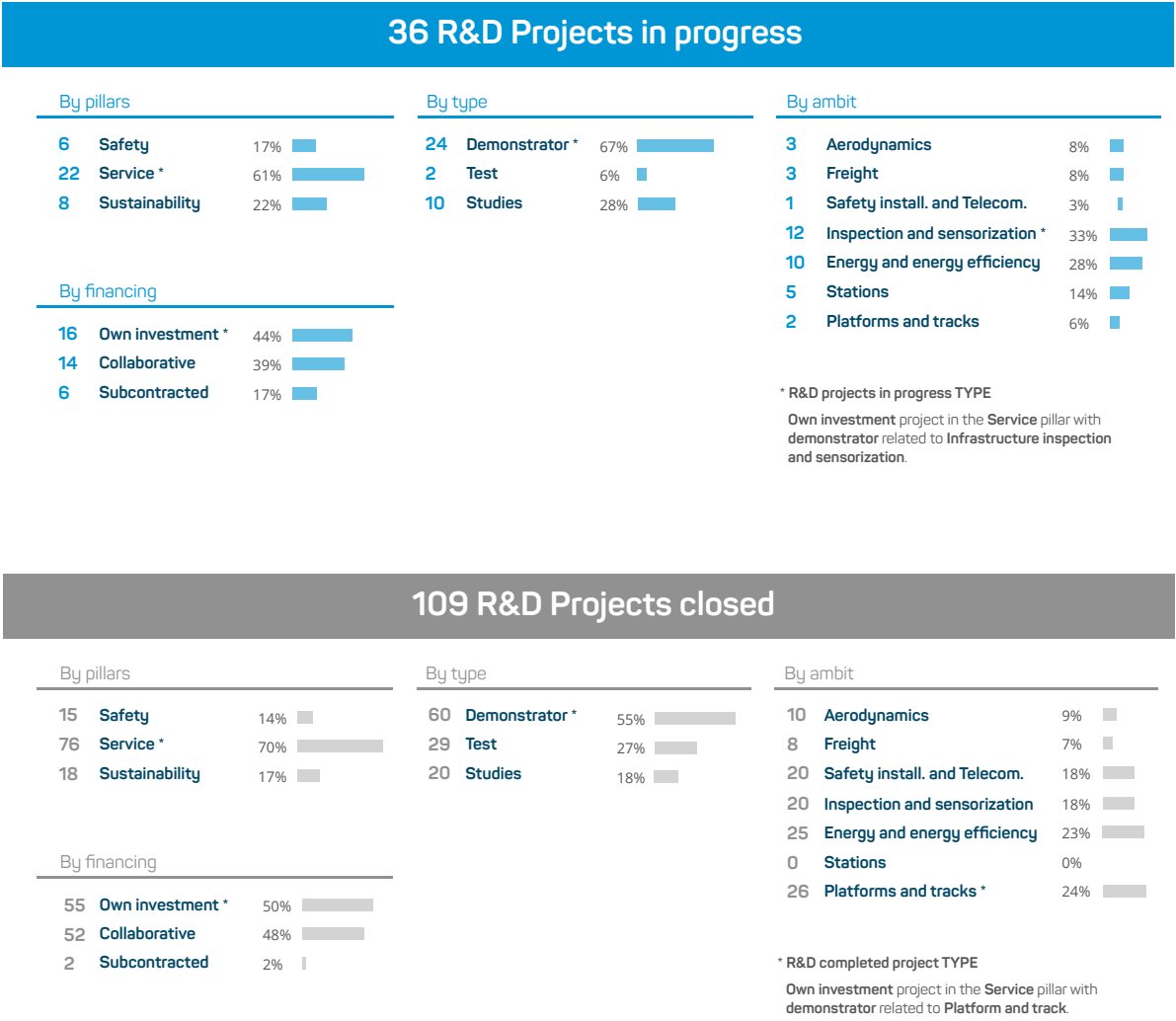
3.4.2. INNOVATION PROJECTS AND MILESTONES

Within the framework of the new open innovation approach, R&D engagements arise from innovation plans external to Adif and from our own internal plans.

The following R&D engagements were undertaken in 2020:

- For the Adif AV Sub-Department of Development and Coordination
 - * Stand-alone BIM modelling of linear infrastructure
- For the Corporate Conservation and Maintenance Department
 - * Demo of a fractured rail detection system based on acoustic technology
 - * Demo of a fractured rail detection system based on DAS technology
 - * Technical analysis and standardisation relating to side-wind impact on infrastructure (UIC)
 - * Demo of a bridge inspection system based on drone and 5G technology
 - * Demo of a satellite-vision terrain deformation detection system
- For the Sub-Department of Technical Coordination of the Corporation Strategic Planning and Project Management Department
 - * Development of a 3D model of our infrastructure
- For the Stations Department
 - * Installation of digital technology demos at the Málaga-María Zambrano station
 - * LIFI technology demo at passenger stations
 - * Demo of a system for people positioning within passenger stations

In 2020, Adif AV started 14 projects and completed 3 projects begun in previous years. The Adif/Adif AV project portfolio comprises 145 ventures, broken down as follows:



COMPLETED 3 PROJECTS

In 2020, we completed 3 projects:

- **ERSAT GGC** (safety facilities and telecommunications area). The results were transferred to the RAILGAP project.
- **GIRALDA RAIL** (infrastructure inspection and sensor-equipped area).
- **SENTINEL** (infrastructure inspection and sensor-equipped area), transferred to production as an assembly guide; results transferred to 3D PILOT project.

14 PROJECTS STARTED

We also started a further 14 projects:

- **AERONOISE**: Technical analysis and standardisation of high-speed rail noise mitigation measures.
- **H2TR**: Technical analysis and standardisation hydrogen use in rail transport.
- **RSMES**: Technical analysis and standardisation of energy storage for rail transport.
- **CARRIL ROTO 2**: Demo of a fractured rail detection system based on acoustic technology.
- **LIFI**: Demo of “lifi” technology (wireless two-way system that transmits data via LED or infrared light) at passenger stations.
- **POSICIONAMIENTO**: Demo of a system for people positioning within passenger stations.
- **SIAMAR**: Demo of an automatic inspection and monitoring system for rolling stock in motion.
- **SMAN BRIDGE**: Demo of a predictive structure maintenance system. The project is funded by the “Innovative Public Procurement Programme” of CDTI, Spain’s state-owned enterprise for technology development.
- **SMAN CROSSING**: Demo of a predictive rail-crossing maintenance system. The project is funded by the “Innovative Public Procurement Programme” of CDTI, Spain’s state-owned enterprise for technology development.
- **SMAN SWITCH**: Demo of a predictive rail-switch maintenance system.
- **SMAN TC**: Demo of a predictive track-circuit maintenance system.

- **BORNA INTELIGENTE**. Development of a “smart” terminal for high-speed track switch heaters.
- **FCH2RAIL**: As part of the Horizon 2020 Programme, the goal of this project is to develop a new hybrid electric/hydrogen battery traction system to enable electric trains to run on non-electrified railway lines.
- **3D PILOT**: Development of a 3D model of our infrastructure to enable us to convert data processed by an asset acquisition system into BIM data.



3.4.3. INTANGIBLE ASSETS AND TECHNOLOGY TRANSFER

In 2020, Adif managed an intellectual property portfolio comprising 22 patents, 8 of which include international extensions. We also managed 5 utility models, one industrial design, 32 Spanish trademarks, 6 EU trademarks and 2 international trademarks. In the copyright category of IP, Adif owns the rights in 7 audiovisual works, 18 software applications, 56 manuals and 63 technical specifications.

With the aim of helping transfer know-how to the productive sector, in 2020, Adif was party to 11 technology transfer and manufacturing/commercial operation licensing agreements which generated €85,587 of royalty revenue for Adif and Adif AV.

Listed below are the licensing agreements signed in the course of 2020, specifying each product and licensee. The amount of royalties paid over the year to Adif and Adif AV is indicated in brackets. All licences are non-exclusive.

- Mechanism cover lid for sleepers: DYFSA (€3,687).
- MIFFO: Focus (€1,500).
- Falling object detector: Logytel (for Dubai, €4,580), Cobra, Thales (€3,000) and Indra.
- Side-wind detector: CAF Signalling (€3,000) and Logytel (€3,000).



In 2020, Adif managed a portfolio of **22 patents** and was part to **11 technology transfer and manufacturing licensing agreements**.

3.4.4. COLLABORATIVE INNOVATION

The competitive environment is driving Adif to search for new ways of organising its internal processes and configuring its relationships with other players in order to pool and share risks and resources. Adif and Adif AV are fostering collaborative and open innovation in order to boost know-how and technology development in the scientific-technology community. By publicly announcing the technology it would like to see developed, it stimulates the research needed to design advanced solutions for the real operating needs identified by Adif AV as a result of the evolving competitive landscape, while contributing to economic development in parallel.

Adif and Adif AV articulate their engagement with the innovation community via participation in specialist forums.

SPECIALIST FORUMS IN WHICH ADIF AND ADIF AV PARTICIPATE



South Summit



S-Moving



Enertic



Startup Olé



Transfiere



3.4.5. OPEN INNOVATION AND ENTREPRENEURSHIP

In 2020 Adif AV took part in two preliminary market surveys on two challenges Adif now faces.

- Implementing predictive maintenance on track circuits and turnout drives (survey organised by Adif).
- Monitoring of bridges, viaducts and turnout devices in rail infrastructure (survey organised by CDTI).

These are additional to five earlier challenges:


- Rail fracture prediction and detection.
- Replace telephone blocking with new technologies.
- Predict and detect external effects on infrastructure.
- Introduce blockchain technology to processes requiring information security.
- New value-added Wifi services at stations.

Adif Talent

In 2020, “intrapreneurship” got a strong boost from our Adif Talent contest. An internal panel of judges selected a shortlist of 30 finalist projects. An independent external panel will then pick the award-winners in each category. In this period, the milestones consisted of appointing the internal and external panels and selecting the contest finalists.

Adif Talent is a new corporate initiative designed to stimulate and raise the profile of our internal talent. This new format seeks to leverage existing potential within Adif and Adif AV with a tighter focus on corporate strategy and its requirements. This was the first year of the contest; the deadline for submitting contest entries ran until 31 March 2020.



 [More information](#)

The Sub-Department of Strategic Innovation manages two different internal creativity mailboxes for Adif and Adif AV members to submit their proposals:

- **Our “innovation ideas mailbox”**, is an Adif in-house channel available to all employees to suggest improvements in management. The channel leverages our people’s experience and knowledge for the benefit of enhanced efficiency and value creation within the Company, making it more competitive.
- **The “R&D ideas mailbox”**, provides an open door to innovation for project proposals and ideas that can be transformed into new R&D projects. This mailbox is also open to outside participants via a link on Adif’s website: rather than limit ourselves to internal creativity, we welcome suggestions from anyone, whether or not they have ties to Adif or Adif AV.



3.4.6. RAILWAY TECHNOLOGY CENTRE

The Railway Technology Centre (Centro de Tecnologías Ferroviarias or "CTF" is an innovation forum with a distinguished history that is now firmly established in the technology sector. The centre is intended as a meeting place for innovators, and as a workplace where venturers who engage in technological initiatives with railway industry applications can take their projects forward with their own people in a shared environment.

The CTF now hosts 21 companies – 16 of which are multinational – that work on their own railway technology projects.

THE RAILWAY INNOVATION HUB SPAIN

In May 2018, Adif AV and the *Railway Innovation Hub Spain* signed a framework protocol in order to collaborate on activities related with scientific research and technology development. Under the protocol, the Hub is headquartered at the CTF and is entitled to use the shared facilities. The initiative has drawn more than 80 companies, 16 of which are physically present at the CTF.





3.4.7. DIGITAL TRANSFORMATION

Adif AV understands digital transformation as the implementation of systems for the smart management of its processes in tandem with reinforcement of its digital interaction with customers. Framed by that perspective, digital transformation implies organisational change and adaptation in how people approach processes. Therefore, while digitalisation and digital transformation are often used interchangeably, it is crucial to keep in mind the distinction between the two concepts:

- **Digitalisation** is the use of technology to bring about change in business models so as to optimise profit and create new opportunities.
- **Digital transformation** comes after digitalisation and builds on top of it. Digital transformation provides a non-technical vision that leads to far-reaching organisational change, enhancing working practices and enabling people to approach their tasks more efficiently.

DIGITAL TRANSFORMATION PILLARS

For Adif AV, digital transformation rests on the following pillars:

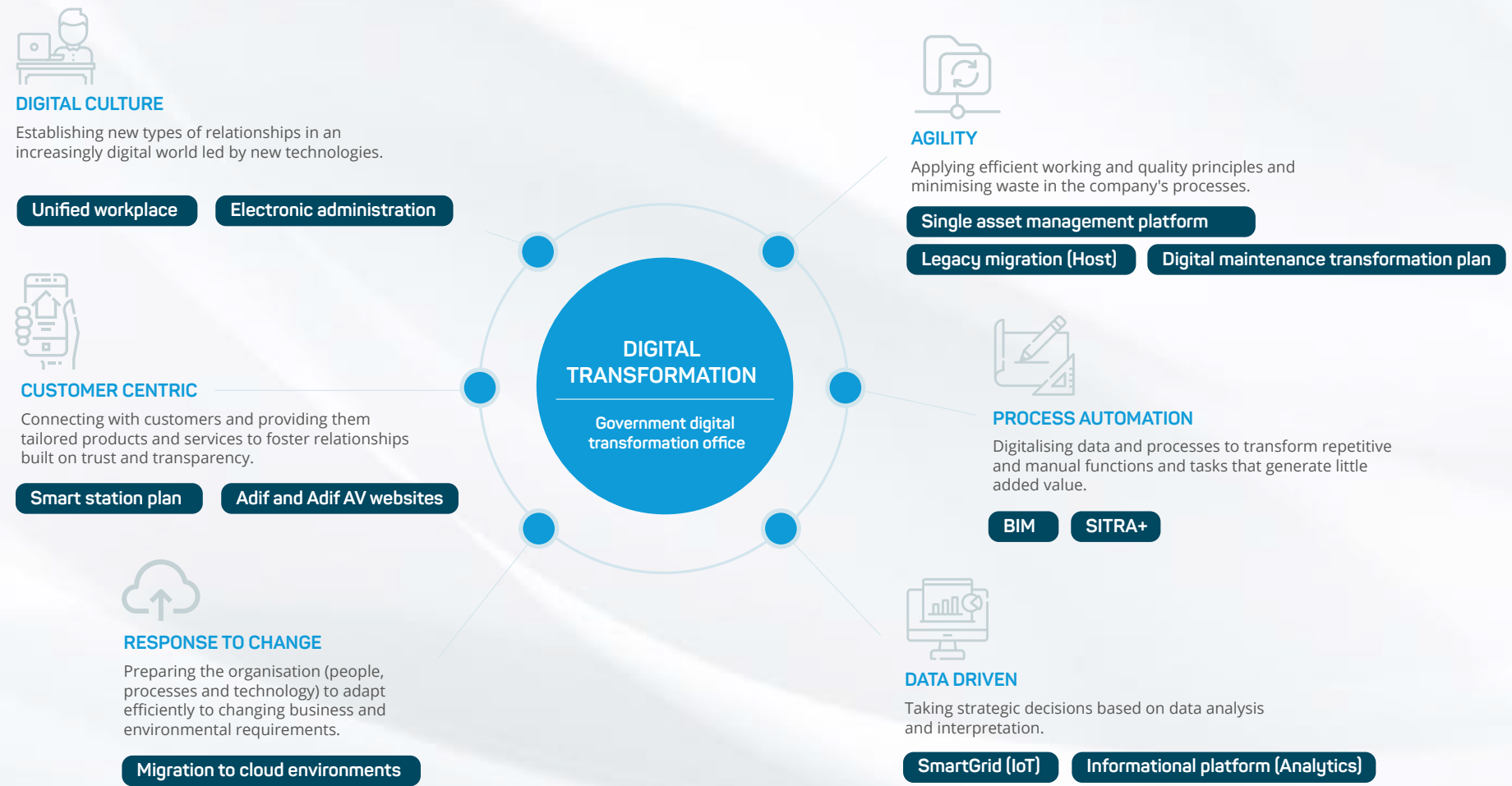
- Digital culture
- Agility
- Process automation
- Data driven
- Response to change
- Customer centric

In 2019, the Company's Digital Transformation and Systems Department's strategy materialised in the rollout of the "Digital Transformation Driver" program, encompassing a series of action plans, with the aim of fully incorporating the Company into the digital society.

The Digital Transformation and Systems Department acts as a lever that provides secure, reliable and sustainable ICT services and solutions that enhance our organisation's operation and management. The Department is a key technological partner for the digital transformation of our business, with a focus on customer service and resource optimisation.

MAIN LINES OF ACTION

The main lines of action relating to the pillars that underpin digital transformation and shape the strategy of the Digital Transformation and Systems Department are the following:



KEY DIGITAL TRANSFORMATION PROJECTS

In 2020, Adif AV continued to drive forward its transformation projects, such as the “Passenger Station Digital Transformation Master Plan” under the ongoing oversight of the **Digital Transformation Office (DTO)**. The goal is to lead the implementation of initiatives within the Master Plan of 2018, while continuously improving management processes and using the support of creative tools and techniques to achieve the intended goals.

At year-end, the Digital Transmission Office was running 23 initiatives out of the 78 under the plan, which is a living document under ongoing review.

Key initiatives related to the liberalisation of the railway sector; e.g. control of boarding area access or the projection of information related to the placement of train carriages along the platform, enabling passengers to board and find their seats faster. Other projects that we are taking forward in their preliminary or execution stages include the “stations neurone hub”, a customer relationship management (CRM) initiative, a shared Adif /Adif AV space – to be gradually introduced at passenger stations – new digital formats, “lost and found” management, further development of our Elcano platform (a core technological pillar that places several plan initiatives in relation to one another), and the pilot initiative led by RED.es for smart buildings, which will enable Adif AV to exchange information across stations and local government bodies.

In 2020, the Digital Transformation and Systems Department leveraged its experience in transformation processes to design a proprietary Adif / Adif AV methodological framework to implement digital transformation plans across all our areas of activity.

Within this framework, we started a Digital Transformation Plan for the maintenance and conservation area, which will be extended to the entire Adif Maintenance Division.

In line with the Company’s digital transformation process, we started and reinforced key projects such as:

- The Adif/Adif AV asset management platform, embedded within our project to specify and implement new end to end asset management model.
- The one-stop “*Digital Workplace*”. The COVID-19 pandemic meant that this initiative required a large scale rollout of equipment and solutions for our employees.
- A new traffic regulation platform, SITRA+.
- The BIM model implementation project of Adif and Adif AV.
- The Adif and Adif AV IoT platform, including the deployment of the SmartGRID solution, which will provide smart management of electricity.
- Digitalisation and automation of key processes around e-government platforms.



4

GOOD GOVERNANCE, TRANSPARENCY AND RISK MANAGEMENT

4. GOOD GOVERNANCE, TRANSPARENCY AND RISK MANAGEMENT

4.0. INTRODUCTION

4.1. GOVERNING BODIES AND INTERNAL MANAGEMENT

4.1.1. BOARD OF DIRECTORS

4.1.2. OTHER INTERNAL MANAGEMENT BODIES

4.1.3. CORPORATE POLICIES AND KPI SYSTEM

4.2. BUSINESS ETHICS AND TRANSPARENCY

4.2.1. ANTI-CORRUPTION AND BRIBERY

4.3. HUMAN RIGHTS PLEDGE

4.4. RISK MANAGEMENT

4.4.1. ENTERPRISE RISK MANAGEMENT SYSTEM

4.4.2. INTERNAL CONTROL OVER FINANCIAL REPORTING (ICFR). COSO III



At Adif AV we believe that is essential to base our management on a governance system underpinned by guaranteed compliance, integration of business ethics into the organisation's culture, with a particular focus on our zero-tolerance stance towards corruption, and transparent management.



Adif AV is a state-owned enterprise under the responsibility of the Spanish Ministry of Transport, Mobility and the Urban Agenda, in accordance with Law 40/2015, of 1 October, governing the public sector. It has separate legal personality, holds title to its assets and has full capacity to enter into binding contracts to achieve its corporate object.

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

4.1. Governing bodies and internal management



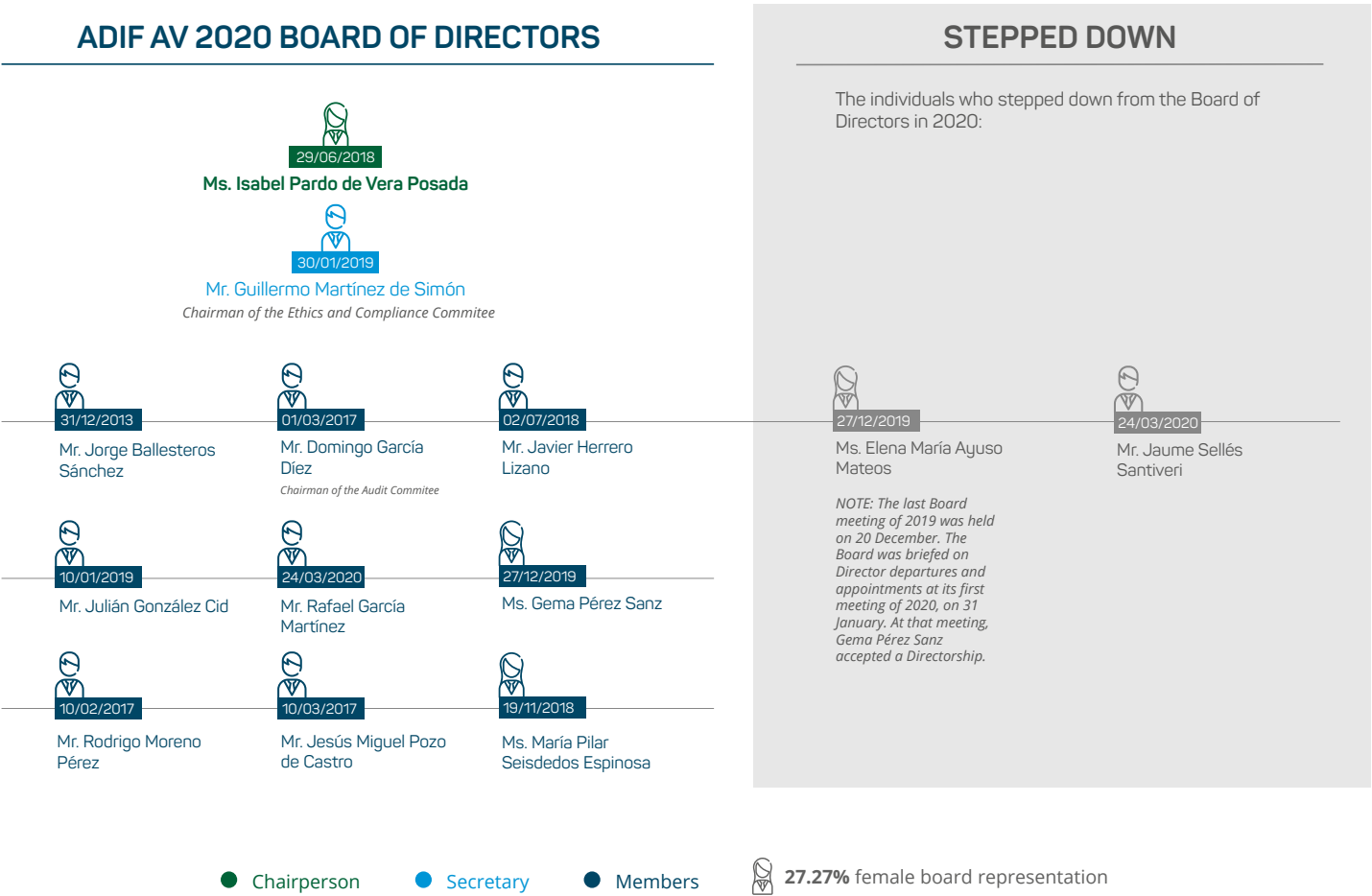
The Board of Directors is Adif AV's highest governing body and has the broadest powers to manage the Company. The Board can decide on its own structure and functioning, adopt annual budgets, financial statements and management reports, and authorise any lending or borrowing by the Company.

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

4.1.1. BOARD OF DIRECTORS



Adif AV's charter provides that the Board of Directors comprises a Chair (who also chairs the board of Adif) and a minimum of nine and maximum of ten Directors, whose appointment and dismissal falls within the remit of the Ministry of Transport, Mobility and the Urban Agenda. The Secretary of the Board of Directors is the same person as the secretary of the board at Adif (Article 25 of the charter of Adif AV). The Secretary can speak at Board meetings, but has not vote - unless he or she is also a Director.



The most noteworthy aspects of how the Board of Directors is organised and operates:



Quorum

To call board meetings to order the following must be present: the Chairwoman and the Secretary and, at first call, at least half of its members and, at second call, one-third. At least one hour must elapse between the first and second call.



Meetings

According to Article 19 of Royal Decree 1044/2013, enacting Adif's charter, the Board of Directors must meet, when called, at the behest of its Chairwoman or at the request of at least half of its members. It must meet as many times as are deemed necessary to correctly fulfil its duties, albeit subject to a minimum of 11 meetings a year.



Proxy voting

Proxy voting is not allowed under the Adif AV charter or the rules and regulations of the Adif AV Board of Directors.



Adoption of resolutions

Board resolutions pass by an absolute majority of Directors present. The Chairwoman has the casting vote in the event of a tie.



Remuneration

Under Article 21 of the Adif AV charter, membership of the Board is unpaid.

DUTIES AND CONCERNS BOARD OF DIRECTORS

The main duties vested in the Board of Directors are the following:

- Determining the Company's structure and the guidelines for modifying its workforce and key remuneration terms.
- Establishing the rules of operation and resolution ratification within the Board.
- Approving annual operating and capital expenditure budgets and the multi-year action plan and presenting them to the Ministry of Transport, Mobility and the Urban Agenda.
- Approving the annual financial statements, management report and proposed distribution of profit or loss.
- Authorising loans and borrowings.



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



More information

ATTENDEES ADDRESSED ISSUES

In 2020, the Board of Directors met on 12 occasions. At those meetings, the attendees addressed issues such as:

- Tenders, contract awards, contract incidents, contract terminations, green lights for expenditure and procurement dropouts.
- Collaboration agreements.
- Addendum to management agreements between the state-owned enterprise Adif Alta Velocidad (Adif AV) and the state-owned enterprise Administrador de Infraestructuras Ferroviarias (Adif).
- Grants of powers of attorney for corporate and asset transactions
- Resolution of the Board of Directors of the state-owned enterprise Adif AV approving the procedure for awarding remaining framework capacity to candidates that have been pre-awarded capacity packages.
- Extended term for the signing of master agreements, as stipulated in the resolution of 27 November 2019 of the Board of Adif AV.
- Approval of fees for certain services (asset commercialisation; track and station apron cleaning; railway material processing, etc).
- Adoption of the proposal for service prices at passenger stations in 2021.
- Approval of the price proposal for access to facilities related to the on-board logistics service for loading and unloading of passenger services (SX-11).
- Approval of the draft terms for the provision of Basic Service SB-10 (PRM assistance service at Adif AV stations) and Auxiliary Service SX-12 (PRM assistance service for boarding and alighting from trains at Adif AV stations).
- Approval of the price proposal for the provision of exceptional additional transport services at Adif AV service facilities for 2021.
- Proposals for the modification and update of the charges applied to the use of rail infrastructure in 2021.
- Approval of the First Additional Protocol to the Licence Agreement dated 28 December 2015.
- Approval of Adif AV's 2019 separate financial statements.
- Adif AV's 2021 budget.
- Approval of the Adif AV Annual Corporate Governance Report for 2019.
- Approval of the procedure for service requests at Adif AV passenger stations.
- The 2020 and 2021 updates of the Network Statement.
- Extension of the deadline indicated in Article 7(2)(c) of Order FOM/897/2005, of 7 April 2005 regarding the request for national rail routes for the 2020/2021 service schedule to update the schedule for the award of national rail routes provided for in section 4.3 of the Network Statement.
- Resolution to amend the Adif AV Network Statement for 2020 regarding the overall capacity statement.
- Resolution to amend the Adif AV Network Statement for 2020 regarding the bonus to encourage rail traffic.
- Replacement of Adif AV representatives at investees.
- Authorisation for borrowings and other financial transactions.



4.1.2. OTHER INTERNAL MANAGEMENT BODIES

/ AUDIT COMMITTEE

The Audit Committee is regulated by the rules of operation approved by the Board of Directors on 27 February 2017. The former audit committee was abolished.

At 31 December 2020, the Audit Committee comprised three Adif AV Directors and 2 Members (Domingo García Díez, as Chairman, Jorge Ballesteros Sánchez and María del Pilar Seisdedos Espinosa). The Secretary of the Audit Committee is Guillermo Martínez de Simón Santos. Its members are named by the Board of Directors of a period of four years, with scope for re-election.

The Audit Committee supervises the Company's financial reporting, reports to the Board of Directors on its work, and addresses other matters of concern.

Due to the corporate structure, scale and complexity of Adif AV, a state-owned enterprise, internal control needs to be strong. To that end, in 2013, the Board of Directors agreed to reinforce the internal audit function to ensure that the decisions taken, the procedures implemented and the controls established by senior management are appropriate, systematic and long-lasting.

Therefore, on 28 March 2019, the Board adopted the rules of procedure of the Internal Audit Department. The rules set out the mission, powers, duty of independence and scope of the Internal Audit unit.

3 Meetings
4 Members

3 Non-executive directors
2 Independent directors

25%
Female

/ ETHICS AND COMPLIANCE COMMITTEE

The Ethics and Compliance Committee is a permanent internal body. Its role is advisory rather than executive. The Committee advises the Board and submits proposals.

The Committee - which was formed by the Board of its own volition, and is not one of the bodies provided for in the charter - has its own powers to take initiatives and oversee matters within its remit. The chairmanship, composition and operating rules of the Ethics and Compliance Committee are set out in its own regulations.

The role of the Ethics and Compliance Committee is to ensure that the commitments and rules of conduct set out in the Adif Code of Ethics and Conduct are complied with. In addition, the Committee advises the Company on how to improve the ethics model going forward.

The role of the Ethics and Compliance Committee are:

- Assess and oversee compliance with Adif AV's Code of Ethics and Conduct
- Oversee the mechanism that enables employees and outside parties to report breaches of the Code of Ethics and Conduct
- Lead enquiries and claims with respect to alleged compliance-related breaches of Adif AV's Code of Ethics
- Propose amendments to the Code of Ethics in order to fine-tune it and adapt it for new circumstances and paradigms
- Propose measures for fostering familiarity and compliance with the Code
- Review compliance policies
- Approve the European Commission's Fraud Risk Self-Assessment and Summary Report
- Carry out any other tasks assigned to it by the Board.

The committee was created with the following composition:

- Guillermo Martínez de Simón Santos – Chairman
- Michaux Miranda Paniagua – Human Resources Member
- Juan Pedro Galiano Serrano – CSR Member
- Lourdes Porta Etessam – Risk Management Member
- Manuel Fresno Castro – Finance Management Member
- Juan Pablo Villanueva Beltramini – Adif AV Member
- Antonio Velázquez Borge – Secretary | Compliance



/ RISK COMMITTEE

The Risk Committee was created on 14 December 2018. It comprises the heads of the business units and the risk management and internal audit units. It has the following duties:

- Create the Company's risk map and update it at least annually and whenever needed.
- Track identified risks and their related controls, indicators and action plans at the required intervals.
- Adopt specific risk management policies as appropriate.
- Determine and review the Company's desired risk profile and ensure that it is aligned with the Company's strategy.
- Report to the Management Committee and submit proposals as required for the proper performance of the risk management function.

/ MANAGEMENT COMMITTEE

The Management Committee, which was formed at the discretion of the Board outside the scope of the Company charter, advises the Chairwoman on executive decisions. It has the following duties:

- Advise the Chairwoman on matters within her remit.
- Advise the Chairwoman on Board matters that must be reported to or approved by her.
- Discuss other matters pertaining to Adif AV added to the agenda at the initiative of the Chairwoman or any member of the Management Committee.

/ INTERNAL CONTROL OVER FINANCIAL REPORTING (ICFR) COMMITTEE

The ICFR Committee was created on 7 July 2017. It is chaired by the Chief Financial Officer, and its members include the "owners" of ICFR processes and the heads of the economic management and financing division, the risk division, the internal audit unit and the economic programming and budgets division.

In accordance with the rules of the Committee, its roles include:

- Delimiting the scope of the ICFR system, i.e., its key processes.
- Conducting an annual review and validation of all ICFR processes.
- Producing annual ICFR progress reports.
- Assessing the Internal Audit unit's ICFR performance.
- If appropriate, proposing that ICFR be subjected to external audit

/ PROCUREMENT COMMITTEE

The Procurement Committee, which was formed at the discretion of the Board outside the scope of the Company charter, advises the Chairwoman on procurement decisions. It has the following duties:

- Advise the Chairwoman on procurement matters within her direct purview or so delegated by the Board and on matters within the purview of the Board that must be reported by it to or approved by the Chairwoman.
- Discuss any other matter pertaining to procurement at the Company.

/ APPOINTMENTS AND REMUNERATION COMMITTEE

At its meeting of 29 January 2018, the Board of the state-owned enterprise Adif AV decided to create an Appointments and Remuneration Committee. The Committee is made up of a Chairwoman (María Pilar Seisdedos Espinosa) and two other members (Domingo García Díez and Jesús Miguel Pozo de Castro).

The duties of the Committee are:

- Setting a target for presence on the Board for the under-represented sex.
- Ensuring that the Directors of Adif AV comply with the duty to avoid conflicts of interest and other states of affairs that would legally bar them from performing their role as a Director.

The Appointments and Remuneration Committee did not meet in 2020.



/ ADIF AV INTERNAL CODE OF CONDUCT FOR SECURITIES MARKET DEALINGS COMPLIANCE COMMITTEE

The Adif AV Internal Code of Conduct for Securities Market Dealings Compliance Committee is a body formed by the Board, going beyond the strict requirements of the Company charter. The Committee comprises a Chairman (Juan Pablo Villanueva Beltramini, as CEO of Adif AV) and three other members, Guillermo Martínez de Simón Santos (as Secretary of the Board of Directors of the Company, acts as Secretary of the Committee), Manuel Fresno Castro (as Chief Financial Officer of Adif) and Javier Torres Gella (Chief Legal Officer of Adif). The latter two Committee members are also Adif executives.

The role of the Committee is specified in section 14 of the Internal Code of Conduct. As the body in charge of overseeing compliance with the Code, the Committee has powers to:

- Assess the effectiveness of internal procedures and oversee compliance with the safeguards surrounding confidential information under the Code.
- Take steps to provide training to employees on matters within the scope of the Code.
- Interpret the rules of the Code, resolve queries as to how to apply it, and adapt it to prevailing laws and regulations.
- Annually report to the Code of Ethics and Conduct Oversight Committee on any significant incidents..

The Code of Conduct Compliance Committee did not meet in 2020.

4.1.3. CORPORATE POLICIES AND KPI SYSTEM

Adif AV is a public service company and as such is obliged to adapt to changes in society and respond to citizens’ needs, in that way contributing actively to transformation of the sector and the Company itself, while guaranteeing the sustainability and public utility of the rail system. To articulate those commitments, it formulates corporate policies that address the matters of relevance to the organisation. Those policies law down Adif AV’s commitments in different areas.

/ CORPORATE POLICIES

- Corporate Anti-Fraud Policy
- Conflicts of Interest Prevention and Management Policy
- Quality Policy
- Environmental Management Policy
- Prevention Policy
- R&D Policy
- Information Security Policy
- Adif AV Code of Ethics and Conduct
- Whistleblower Channel Management Procedure
- Enterprise Risk Management Policy
- Internal Control over Financial Reporting (ICFR) Policy
- Fraud Prevention, Detection and Management Procedure
- Security Policy
- EU Fund Fraud Risk Management Procedure
- Sponsorship Policy



Adif AV uses the following specific performance indicators to monitor compliance with these policies, with a focus on anti-corruption and bribery:

DESCRIPTION OF INDICATORS		UNIT	2018	2019	2020
Anti-corruption and bribery measures adopted	Reports via Whistleblower Channel **	No.	57	60 (*16)	53(*17)
	Conflict of interest disclosures **	No.	794	886	1.050
	Employees receiving ethics training **	No.	542	398	439

(*) Received and resolved through the Whistleblower Channel or any other means that could expose a breach of the commitments under the Code of Ethics.

(**) (Adif + Adif AV)

4.2. Business ethics and transparency

Adif AV's Board approved the Code of Ethics and Conduct in 2009. The Code was revised and updated in March 2015 to factor in regulatory developments in corporate criminal liability and the principles underpinning Ley 19/2013 on transparency, access to public information and governance.

In 2019, framed by the Company's commitment to continuous improvement, Adif AV once again revised and updated its Ethics Model, fine-tuning the Code of Ethics and Conduct and approving a series of policies and procedures



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

Adif AV thus makes sure that all of its employees are familiar and act in accordance with its principles.

/ ADIF AV CODE OF ETHICS AND CONDUCT

The Code lays down the Company's values with the aim of formalising the conduct expected of everyone belonging to the organisation and its governance bodies. The Code also applies to anyone we have dealings with.

The Code sets out the following commitments:

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

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

/ WHISTLEBLOWER CHANNEL

Potential breaches of Adif's Code of Ethics and Conduct can and should be reported to the Whistleblower Channel.

The Whistleblower Channel fields claims from Adif AV employees, via the intranet, and from third parties, via the website. Complaints and claims can be reported anonymously so long as they are accompanied by proof or evidence sufficient to justify initiating an investigation. Adif commits to the following throughout the process of reporting and handling claims via the Whistle-Blowing Channel:

- Keeping the personal data and information received through the Whistle-Blowing Channel confident
- Ensuring there is no retaliation against any person reporting an incident in good faith
- Protection of privacy, legitimate defence and presumption of innocence for all professionals accused of a Code breach

In 2020, Adif AV's **external whistleblower channel drew 2,428 unique visitors** and received **two reports** of alleged breaches of the Code of Ethics.

Adif AV demands that its employees act professionally and with integrity and does not tolerate any conduct that could be construed as corruption or bribery.

In 2020 there were **1,050 (*)** reports of conflicts of interest and 30 queries.

(*) Adif + Adif AV

The Code of Ethics and Conduct embodies the commitment made by Adif AV's employees to act at all times **honestly and with integrity** at work and to report and **avoid any situations that could present a conflict of interest.**



The Citizen's Portal
is accessible via the
corporate website



More information

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

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

Everything that Adif AV does must be aligned with the public interest and the values set out in our Code of Ethics and Conduct. Hence, everything we do and each decision we make must be:

- Legal.
- Ethical.
- In the interests of the Company and of society.
- And each one of us at Adif AV must be willing to be accountable for our actions facing our colleagues, family members and the public.

Moreover, in line with Law 19/2013 on transparency, Adif AV remains strongly committed to reinforcing transparency with respect to its activities, in keeping with best practices in Spain and internationally. That is why it has set up a Citizen's Portal where any interested party can easily access the Company's public documentation. In addition, Adif AV participates in the Transparency Portal of the Ministry of Transport, Mobility and the Urban Agenda, which provides information about public bodies, state-owned enterprises and foundations.

4.2.1. ANTI-CORRUPTION AND BRIBERY

The Corporate Anti-Fraud Policy formulated by Adif AV is framed by its strategic orientation and, specifically, its commitment to creating value for society. Its ultimate aim is to develop a governance and management model that reinforces Adif AV as a state-owned enterprise that is well-managed and governed by stringent ethics and transparency principles.

The policy applies to the Board of Directors, senior management, and in general, without exception and no matter their positions, responsibilities, areas of expertise or physical locations, all Adif AV employees.

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

- A commitment to report any indication of fraud via the channels put in place to that end.
- Fostering of a culture that strongly dissuades against any form of fraudulent conduct.
- Transmission of reliable information in order to create a true and fair view of Adif AV's activities, strategy and economic, social and economic performance.
- Repudiation of misleading, fraudulent or malicious conduct that could lead to unfair or improper advantages for Adif AV.

/ ANTI-FRAUD EFFORT: KEY DOCUMENTS

The effort to combat fraud is one of the cornerstones of Adif AV's compliance model. The key documents articulating that model are:

- Corporate Anti-Fraud Policy
- The Fraud Prevention, Detection and Management Procedure, which establishes the principles and guidelines for preventing fraud
- Institutional Anti-Fraud Statement
- EU Fund Fraud Risk Management Procedure.

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

In 2020, we set in motion initiatives that improved internal proceedings and, where applicable, court proceedings in civil and criminal matters.

The purpose of the EU Fund Fraud Risk Management Procedure is to establish the responsibilities, methodologies and activities carried out by Adif and Adif AV as part of their anti-fraud cycle. That cycle includes all the measures designed to prevent, detect and pursue fraud. The universe of measures articulating the four elements of the anti-fraud cycle pave the way for a proactive, structured, well-guided and comprehensive approach to managing fraud risk, as recommended by the European Commission, thus reducing the risk of the commission of fraud significantly and providing a sufficiently dissuasive culture.

On 26 November 2019, we set up the European Union Funds Fraud Risk Assessment Sub-Committee whose main remit is to prepare, with the frequency established in the related procedure, the Fraud Risk Assessment in terms of impact and probability, using the tools provided by the European Commission and others Adif or Adif AV may wish to create. That Assessment, which encompasses more than 100 controls, must be revised and updated annually.

4.3. Human rights pledge

Adif AV's commitment to treating people respectfully and decently is set down in its Code of Ethics and Conduct. The Code ratifies the principles enshrined in the United Nations Universal Declaration of Human Rights and the International Labour Organization's Tripartite declaration of principles.

All Adif AV employees must respect all of the people the Company engages with, both within and outside the organisation. The prevention of discrimination, provision of equal opportunities and decent treatment of all are essential to nurturing a stimulating and productive work climate at Adif AV that translates into positive relationships and credibility vis-a-vis all of our stakeholders.



Adif AV did not receive any complaints of human rights violations in 2020.



4.4. Risk management

As part of its ongoing commitment to transparent, responsible and sustainable management practices, Adif AV believes that it is of critical importance to have in place a comprehensive, consistent and transparent risk management system that provides a common framework of rules and enables us to identify, assess and manage risks in a standardised way while clearly delimiting roles and responsibilities. For this purpose, we have risk management areas that address specific needs and regulations (rail traffic safety, workplace health and safety, environment, information security, internal control over financial reporting, compliance, etc) and an overarching **risk management system**.

Adif AV has an **enterprise risk management model** so as to be able to establish appropriate information channels and flows to ensure timely communication and foster a culture of proactive risk management in all areas of the Company, while keeping exposure within the defined thresholds.





4.4.1. ENTERPRISE RISK MANAGEMENT SYSTEM

Adif AV has an enterprise risk management system which, aligned with best practice in this field, facilitates the provision of systematic and orderly responses to a universe of risk factors with the complexity and range of an organisation of its nature. The system is framed by the principles established in the board-approved **Enterprise Risk Management Policy**.

/ PRINCIPLES EMANATING FROM THE ENTERPRISE RISK MANAGEMENT POLICY

- Integrating risk into the Company's management by means of a unified vision of its strategic and business objectives and of the associated risks.
- Ensuring that the risks that could affect the Company's strategic targets and their delivery are correctly managed and kept within the established risk tolerance levels.
- Maintaining a consistent and transparent end-to-end risk management system which establishes a common set of rules and facilitates standardised identification, assessment and management of risks, with clear roles and responsibilities.

The policy clearly delimits the rules of the parties involved in the system. On one hand, there are risk management tasks that are inherent in each specific area of activity, while, on the other, we have "coordinating units" that manage and oversee specific risks that cut across the organisation. All such officers and units, headed up by the risks unit, are represented on the Risk Committee, which reports to the Management Committee.

The Risk Committee is responsible for drawing up and monitoring the Adif AV risk map. The map outlines the key threats to the Company's ability to achieve its goals and perform its role.

In 2020, as part of our Enterprise Risk Management process, we paid special attention to the COVID-19 pandemic and its possible future scenarios, and drew up a specific risk map. To ensure the map provides a comprehensive overview, we supplemented it with the rest of strategic and critical risks faced by the Rail Network Manager.

The consolidated risk map for 2020 which we monitored and managed over the year can be summarised into the following categories:

RISK CATEGORY	DESCRIPTION
SAFETY	Risks relating to incidents, accidents or malicious acts that could affect the continuity of the Company's operations, the state of its assets, customers or the environment.
OPERATIONS	Events that could compromise service quality.
PEOPLE	Difficulties in staffing and talent management. The category also embraces risks to which employees are exposed
REPUTATIONAL AND COMPLIANCE	Issues surrounding corporate governance, transparency and accountability in accordance with the role of a state-owned enterprise. This category includes risks arising from breach of applicable laws and regulations and/or voluntarily adopted codes of good practice.
CRISIS RESPONSE	Risks arising from the ability of our business to respond, operationally and in terms of internal rules, to emergencies triggering high uncertainty and volatility.
FINANCIAL	Risks relating to the availability of funds and the financial sustainability of the Company.
INTERNATIONAL	Events arising from the Company's involvement in international projects.

Finally, in 2020 we further evolved our corporate risk model by launching a process to identify **ESG risks** faced by Adif AV.

4.4.2. INTERNAL CONTROL OVER FINANCIAL REPORTING (ICFR)

COSO III MODEL

Adif AV has implemented an Internal Control Over Financial Reporting, hereinafter ICFR, which is a part of the internal control environment and is made up of a compendium of processes which the Company and all of the professionals involved undertake in order to provide reasonable assurance as to the reliability of our financial information.

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

Existence and occurrence

The transactions, events and other developments mirrored in the financial information exist and were recorded at the right time.

Completeness

the information reflects all the transactions, events and other developments affecting the Company.

Valuation

The transactions, events and other developments are recognised and measured in keeping with applicable regulations.

Presentation, disclosure and comparability

Transactions, facts and other events are recognised and measured in accordance with applicable standards.

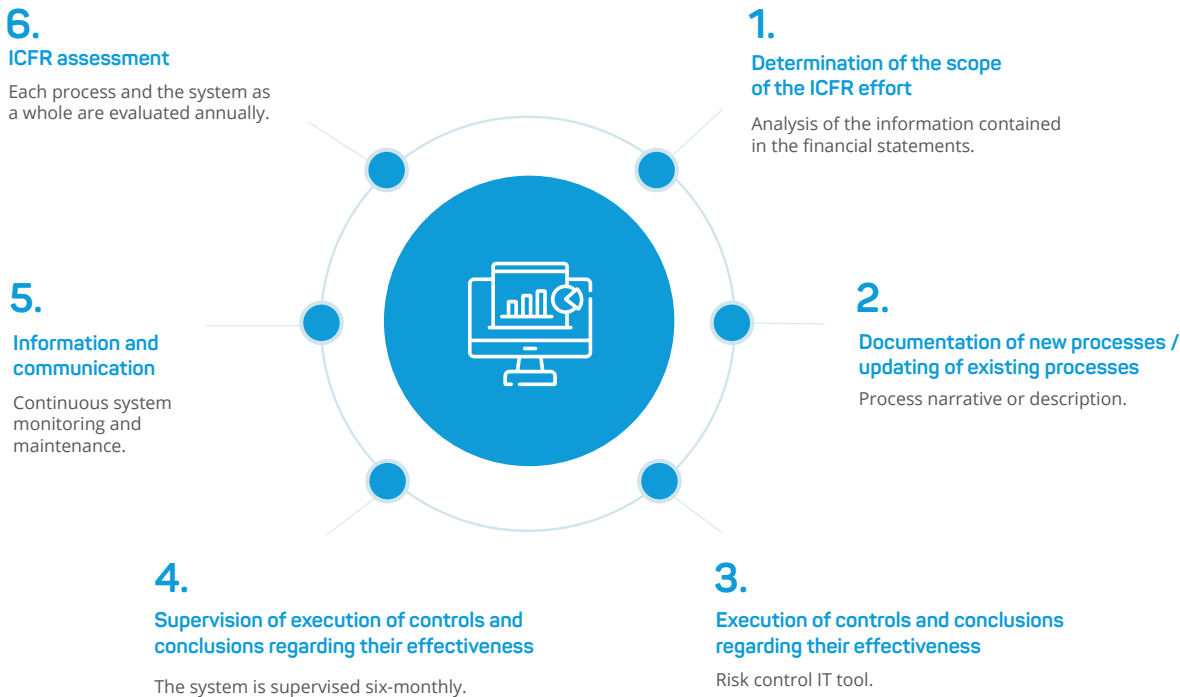
Rights and obligations

The financial information reflects, as of the relevant date, the Company's rights and obligations by means of the relevant assets and liabilities.

Adif AV's ICFR system is inspired by COSO III, an internationally recognised integrated internal control framework, and is underpinned by three core elements: documentation of the controls performed and evidence gathered; continuous assessment over the course of the annual cycle; and the established pyramid of roles and responsibilities. The Company has a Board-approved ICFR policy which establishes the foundational methodology, responsibilities and principles of ICFR at Adif AV.

The system is structured as a cycle that works continuously, thanks to which the system remains permanently updated and valid.

The annual cycle is divided into six phases:



Significant financial reporting processes within the scope of 2020 included:

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

The **ICFR Committee** is chaired by the CFO and is made up of the professionals responsible for each ICFR process, the heads of the Internal Audit, Economic Management and Financing, Planning and Budgeting and Risk divisions. In 2020, the Committee met twice using remote means.

At those meetings, the Committee reviewed the previous year's ICFR effort, approved the scope of the effort for 2020, and monitored and oversaw the 2020 cycle and related developments.





5

IMPACT ON SOCIETY AND SHARED VALUE CREATION

5. IMPACT ON SOCIETY AND SHARED VALUE CREATION

5.0. INTRODUCTION

5.1. STAKEHOLDER ENGAGEMENT

5.2. ESG RISK RATING

5.3. HEALTH AND SAFETY

- 5.3.1. SAFETY AND SELF-PROTECTION
- 5.3.2. RAIL TRAFFIC SAFETY
- 5.3.3. WORKPLACE HEALTH AND SAFETY
- 5.3.4. CIBERSECURITY

5.4. SERVICE IMPROVEMENTS

- 5.4.1. CONSTRUCTION
- 5.4.2. MAINTENANCE
- 5.4.3. RAIL INFRASTRUCTURE OPERATION

5.5. ENVIRONMENTAL MANAGEMENT AND CLIMATE CHANGE ACTION

- 5.5.1. ENVIRONMENTAL MANAGEMENT
- 5.5.2. SUSTAINABLE USE OF RESOURCES
- 5.5.3. COMBATING CLIMATE CHANGE
- 5.5.4. POLLUTION
- 5.5.5. WASTE MANAGEMENT AND CIRCULAR ECONOMY
- 5.5.6. BIODIVERSITY PROTECTION

5.6. THE TEAM

- 5.6.1. EMPLOYEES
- 5.6.2. ORGANISATION OF WORK
- 5.6.3. LABOUR RELATIONS
- 5.6.4. WORKPLACE HEALTH AND SAFETY
- 5.6.5. TRAINING
- 5.6.6. TALENT MANAGEMENT AND CAREER DEVELOPMENT
- 5.6.7. EQUALITY

5.7. CUSTOMER ORIENTATION

- 5.7.1. CUSTOMER SATISFACTION
- 5.7.2. ACCESSIBILITY

5.8. COMMUNITY COMMITMENT

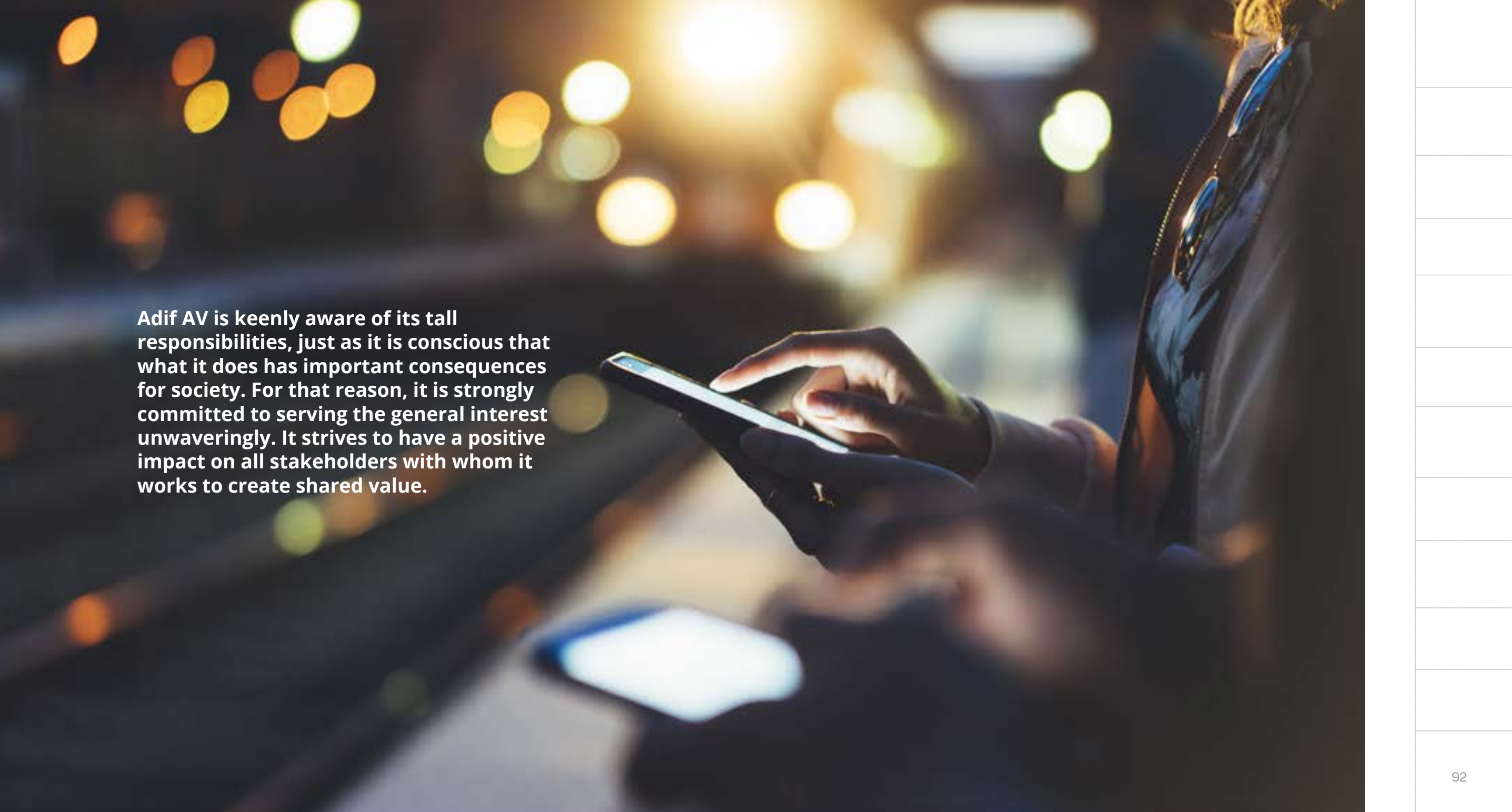
- 5.8.1. OPEN STATION PROGRAMME
- 5.8.2. ASSETS AND URBAN INTEGRATION
- 5.8.3. CORPORATE GROUP
- 5.8.4. URBAN INTEGRATION JVS

5.9. SUPPLIER MANAGEMENT

- 5.9.1. RESPONSABLE PUBLIC PROCUREMENT

5.10. ADIF AV'S CONTRIBUTION TO THE COUNTRY'S SOCIO-ECONOMIC DEVELOPMENT

- 5.10.1. EMPLOYMENT AND LOCAL DEVELOPMENT
- 5.10.2. CONTRIBUTIONS TO FOUNDATIONS AND NON-PROFIT ORGANISATIONS
- 5.10.3. IMPACT ON LOCAL POPULATIONS AND TERRITORIES
- 5.10.4. CLIMATE CHANGE POLICY

A close-up photograph of a person's hands holding and using a smartphone. The person is wearing a dark jacket with a metallic zipper pull. The background is dark with numerous out-of-focus, warm-toned light sources (bokeh) in shades of yellow, orange, and white, suggesting a city street at night. The lighting is soft on the hands and the phone screen.

Adif AV is keenly aware of its tall responsibilities, just as it is conscious that what it does has important consequences for society. For that reason, it is strongly committed to serving the general interest unwaveringly. It strives to have a positive impact on all stakeholders with whom it works to create shared value.



STAKEHOLDER ENGAGEMENT

4,124*

Social media initiatives.

100%*

Of enquiries answered on website.

33

Agreements with industry and business organisations and associations in force.



HEALTH AND SAFETY

0

Lost-time injuries.

2

Workplace health and safety committee meetings.



SERVICE IMPROVEMENTS

€340.39 M

(Excluding VAT) Awarded in construction projects (works, services and supplies).

€26.7 M

(Excluding VAT) Earmarked for operation of the high-speed network.

€295.8 M

(Excluding VAT) Earmarked for maintenance work.



ECONOMIC IMPACT

€805.4 M

of economic value generated.

€1,015.2 M

of economic value distributed.

€-209.8 M

of economic value retained.

* Adif + Adif AV.



ENVIRONMENT

28.4%

Reduction in carbon footprint vs. 2019.

0

Serious administrative penalties.

44.57%

Reduction of water consumption vs. 2019.



EMPLOYEES

218

Employees.

29.36%

Women.

52.75%

Covered by collective agreement.

95.87%

Permanent contracts.

-0.33%

Absenteeism rate.



CUSTOMER FOCUS

-58.88%*

Claims vs. 2019.

-44.49%*

Suggestions vs. 2019.

7.76*

Out of 10 in perceived quality at stations (latest available data 2019).

7.07*

Out of 10 in merchant satisfaction survey (latest available data 2018).



COMMUNITY COMMITMENT

197*

Open Station programme activities.

60*

Open Station programme stations.

56

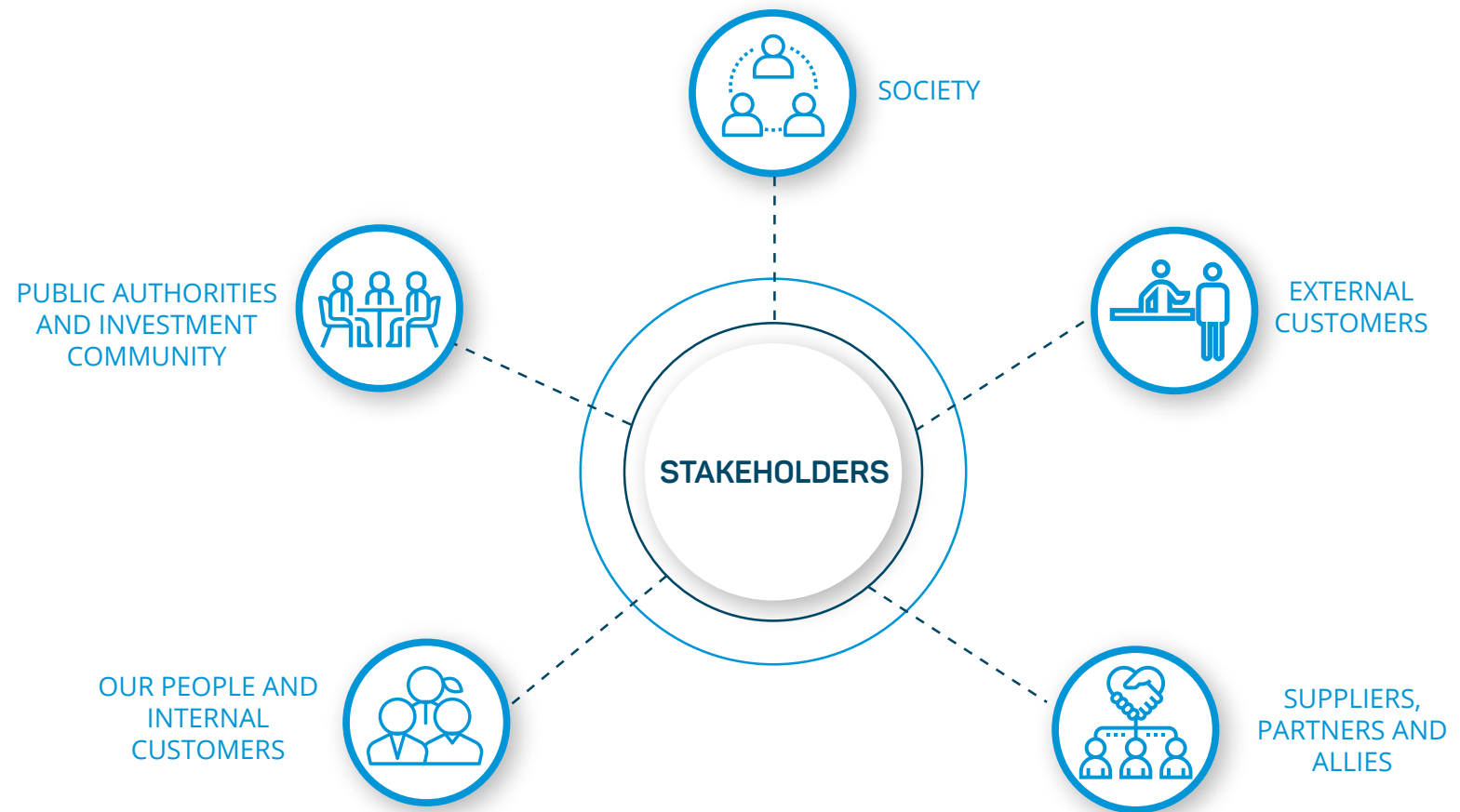
Partnerships, agreements, protocols, addenda for integration with Adif AV investees.

** Adif + Adif AV.*

5.1. Stakeholder engagement

Adif AV strives to predicate its management on its responsibility towards society. As a result, it is crucial to listen to its various stakeholders, with whom it has set up different communication channels.

Adif AV defines its stakeholders as any group that is or could be affected by the Company's activities, now or in the future, and/or legitimately affects or could affect the Company's activities and, by extension, its results. Its stakeholders accordingly include the rail operators, rail passengers, citizens, public authorities, employees, governments of other countries, suppliers, business partners and allies and the third sector (NGOs, charitable associations, etc.). For the 2030 Strategic Plan, the Company grouped a number of groups into five priority stakeholder categories:



Adif AV is aware of the importance of maintaining close, accessible and transparent relations with all of its stakeholders, which is why it ascribes great importance to the active management of its communication channels and the ability to gather feedback about what its stakeholders think about and want from the Company.

To that end, the Company is planning to revitalise its online presence by designing and developing a new corporate website. In parallel, it has been stepping up its media relations effort and has created a Transparency Portal. It also has the Investors' Portal to provide investors, especially socially responsible investors, with information of interest. As in 2019, Adif AV continued to prioritise social media in its stakeholder engagement effort.



Main Communication Channels

The corporate website, its social media presence, the media relations effort, the 24H Network Management Centre, the Transparency Portal and events are the main channels used by Adif AV to reach out to its stakeholders.

The table below summarises the channels in place for communicating with Adif AV's various stakeholders.

STAKEHOLDERS	ESTABLISHED CHANNEL
PUBLIC AUTHORITIES & INVESTMENT COMMUNITY Ministry of Transport, Mobility and the Urban Agenda State government and financial institutions	<ul style="list-style-type: none">• Ongoing communication via the competent authorities (Under-Secretary of State, Secretary of State for Infrastructure, etc.)• Follow-up meetings• Collaboration agreements• Investors' Portal on the corporate website
EXTERNAL CUSTOMERS users of the rail system, rail operators, corporate customers, governments of other countries *	<ul style="list-style-type: none">• Customer Service Offices in Adif AV stations (personalised customer service, grievance and suggestions management, etc.)• Annual satisfaction surveys: passengers and the tenants who lease commercial premises located in Adif AV stations.• Information phone line and e-mail address• Agreements• Grievance and suggestions management mechanism (IT application, claims book, etc.)• Meetings with representatives of groups of citizens with a vested interest in rail infrastructure management in their towns• Website communication inbox• Social media• Adif AV app (real-time information about the status of the network and timetables)
SUPPLIERS	<ul style="list-style-type: none">• Communication via e-mail and phone• Collaboration agreements• Electronic tender portal

STAKEHOLDERS	ESTABLISHED CHANNEL
BUSINESS PARTNERS AND ALLIES	<ul style="list-style-type: none">• Sector-specific agreements and collaborations• General and European assemblies, international delegations• Expert events and forums• E-mail and phone communication
SOCIETY Citizens, associations, NGOs, European and international organisations **	<ul style="list-style-type: none">• Adif AV's annual reports and other publications• Ongoing provision of information to the public via the media• Website communication• Social media• Transparency Portal
EMPLOYEES***	<ul style="list-style-type: none">• Corporate employee portal• Committees on which Adif AV workers are represented• Surveys of workplace climate and engagement with Adif AV• Internal communication• Information about training courses• Suggestion box• Inbox for gathering suggestions about how to do things better

(*) For more information about the relationship with this stakeholder group, refer to the “Customer satisfaction” section

(**) For more information about the relationship with this stakeholder group, refer to the “Citizens” section

(***) For more information about the relationship with this stakeholder group, refer to the “Employees” section



AGREEMENTS AND ARRANGEMENTS

INDUSTRY AND BUSINESS ORGANISATIONS AND ASSOCIATIONS

To better achieve its objectives, in 2020 Adif AV compared the number of agreements and arrangements it has entered into with industry and business organisations and associations and those still in force:

Number of agreements and arrangements with industry and business organisations and associations IN FORCE	2018	2019	2020
Adif AV + Others	34	40	33*
Adif+ Adif AV + Others	27	36	42
Adif + Adif AV	6	9	13

* Decrease in the number of arrangements in force due to application of additional provision 8 of Law 40/2015, on public sector legal regimes.

Number of agreements and arrangements with industry and business organisations and associations SIGNED	2018	2019	2020
Adif AV + Others	9	6	2
Adif + Adif AV+ Others	11	9	8
Adif + Adif AV	1	3	3

The key performance indicators tracking Adif AV's effort to engage with its stakeholders in 2020 are summarised below:

ITEM	2018	2019	2020
No. of social media initiatives*	5,438	5,100	4,124
Percentage of enquiries responded to via the website*	100%	100%	100%
Events managed by Adif AV*	13	20	100%**
No. of initiatives carried out under the scope of the Strategic Communication Plan*	331	355	547
Percentage of media information enquiries answered*	100%	95%***	95%
Percentage of transparency-related claims admitted for processing by the Transparency and Governance Board*	7.56%	4.88%	1.28%

(*) Adif + Adif AV indicator

(**) The Events managed Adif AV indicator changed in 2020 and is now measured as a percentage

(***) The Percentage of media information enquiries answered indicator changed in 2019 and shows responses within a week from receipt

Next, we briefly outline the relationship between Adif AV and some of its most important stakeholder groups:

/ PUBLIC AUTHORITIES AND EUROPEAN ORGANISATIONS

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

Adif AV also engages with regulatory bodies such as the Spanish National Commission of Markets and Competition (CNMC), which oversees and ensures that the rail sector operates properly and that there is fair competition in the rail services market, especially the high-speed passenger travel market; the Court of Audit and the General State Controller, with whom its dealings are governed by prevailing legislation; and with other public bodies such as the State Ombudsman, the state attorney's office, certification bodies, the Spanish National Statistics Office (INE), universities and other public education centres with which Adif AV has collaboration agreements.

Adif AV is also in contact with, and participates in, a number of international organisations:

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

Website: <http://www.rne.eu/organisation/rne-approach-structur>

- **Network of One Stop Shops – OSS:** represents the infrastructure managers (IMs) in international traffic. They constitute as a single point of contact for the entire international route of a rail service, from the initial questions related to network access to international path requests and performance review after a train run.
Website: <http://www.rne.eu/organisation/oss-c-oss/>
- **EIM (European Infrastructure Managers):** this association encompasses the most important European rail infrastructure managers and represents the sector before the European Union's policy-making and legislative bodies; it also conducts studies in support of the modernisation of the rail sector.
- **UIC (International Union Railways):** worldwide association promoting rail transport through technical projects, railway research and standardised solutions.
- **ERA (European Railway Agency):** agency for the development of technical specifications aimed at interoperability and safety in which Adif AV participates through EIM.
- **European economic interest groups (EEIGs):** for the development of cross-border projects related with international rail corridors and the Trans-European Transport Network (TEN-T).
- **PRIME:** a platform of European railway managers for the development of the Fourth Railway Package, established between DG MOVE and the IMs with a view to improving international cooperation among railway undertakings, supporting the implementation of a European railway policy, and exchanging best practices through performance benchmarking. Adif AV is participating in the elaboration of a universe of indicators that will enable oversight of the main activities and improved management.



This is our **Communication on Progress** in implementing the principles of the UN Global Compact.

We welcome comments on its content.



/ SUPPLIERS

Suppliers are a core element of Adif AV's business strategy. Supplier relations are based on guaranteeing transparent tendering and legal certainty.

The contracting procedure is framed by applicable procurement legislation, which includes stringent selection criteria and articulates all procurement procedures around transparency-based management, factoring in all processes and possible incidents.

Each time it puts a tender out to call, Adif AV selects suppliers after they have certified their business and technical expertise and solvency, as well as certain social and environmental criteria, which are determined on a case-by-case basis.

Adif AV now largely uses electronic tendering as an essential tool in its contracting procedures.

/ BUSINESS PARTNERS AND ALLIES

This stakeholder group encompasses all 21 entities with which Adif AV engages (e.g. subsidiaries and investees, foundations, associations, economic interest groups) and its partners in them.

A total of 13 joint ventures have been set up as a management instrument for developing joint operations in certain Spanish cities, since these companies are owned by local and regional governments, and state-owned enterprises attached to the Ministry for Transport, Mobility and the Urban Agenda (Adif, Adif AV and Renfe Operadora).

The governing bodies of the entities making up the Adif corporate group held 147 meetings, of which 50 (shareholder and board of director meetings) were with the integration JVs and 19 were with subsidiaries.

Through its involvement with these undertaking, Adif AV not only seeks to achieve the specific objectives included in their objects, but also enter into alliances with external firms and public bodies, which can take the form of arrangements, protocols, collaboration agreements, etc.

5.2. ESG Risk Rating

Framed by its operations in financial markets as a socially responsible issuer, Adif AV received its first Sustainalytics' ESG Risk Rating score in 2019, ranking atop the leader board in transport infrastructure -out of the 102 companies rated- and the road and rail subsector. It also ranked among the top 10 in scores of the 10,026 companies rated. Its rating was reviewed in 2020 but the score originally obtained by Adif AV was unchanged; it was the 12th highest rated among a total of 12,702 companies.

Implementing responsible investing policies guarantees long-term financial returns. Accordingly, socially responsible investing (SRI) can be addressed using different approaches: the "value" approach, underpinned by ethical or moral considerations; the "risk" approach, to enhance management of reputational, operational, financial and regulatory risk; the "return" approach, leveraging financial opportunities like the energy transition; or the "duty" approach, in line with the investor's fiduciary liability.

Green Bonds

Adif AV carried out a new issue of green bonds in 2020, for €600 million, to finance or refinance projects that have positive environmental and/or climate benefits (see section 10.4). This was its fourth green bond issue after those made in June 2017, April 2018 and April 2019, bringing the total amount issued to €2.4 billion.

The Corporate Finance and Control Department puts out a quarterly newsletter in English for socially responsible investors that includes information on Adif AV's environmental sustainability initiatives and projects, along with information on other socially responsible initiatives and projects. It also has a financial information section.



5.3. Health and safety

Safety, defined in the broadest sense of the word (train traffic, protection against crime and workplace safety), is one of the cornerstones of Adif AV's strategy and a core element of the corporate culture that inspires its decision-making. Safety management starts from the imperative of minimising potential risks to delivering high levels of safety across all aspects of rail infrastructure management and rail traffic. To deliver its corporate objective, the Company embraces its commitment to carrying out its activities safely and efficiently.



Core aspects of Adif's Safety Policy

- Ensuring the implementation and dissemination of the safety culture at all levels of the Company, underpinned by prevention, a proactive attitude and employee involvement.
- Managing the risks associated with the business and operations.
- Fostering a culture of trust, positive safety and continuous learning capable of galvanising all of the organisation's employees into contributing to the safety mission.

Thanks to this cross-cutting approach, the end-to-end safety culture is embedded at all levels of the Company, in all of its processes and at all of the parties that engage with it. It encompasses the safety of the infrastructure managed by the Company, the safety of the rail services than run over its infrastructure and the safety of the people who work at Adif AV, as well as external workers who have labour relations of any kind with the Company. Adif AV is currently immersed in a process of reinforcing its internal safety culture, a process that is prioritising risk analysis in relation to each area of activity, each process and each organisational change planned by the Company. Internally, the effort under way to reinforce the safety culture is tangible in the creation of the Corporate Safety, Processes and Systems Department.

In this manner, Adif AV focuses not only on improving rail traffic safety but also provides particular attention to preventing workplace accidents and helping keep its employees safe, carrying out a host of initiatives to that end. Lastly, in an increasingly digitalised world, cybersecurity is all the more important, both externally (vis-à-vis Adif AV's suppliers and customers that visit its website) and among its own employees.

At Adif AV, end-to-end safety is underpinned by the following cornerstones:

- **Safety and self-protection:** Improving the **safety and security of our facilities using new technologies**. Safety across the Company's infrastructure and facilities through implementation of the opportune systems and protocols in the event of incidents or emergencies, in collaboration with the competent public entities.
- **Rail traffic safety:** Control of risks inherent in rail traffic arising from the operations of Adif and other rail operators, thus fostering user trust in the network. Adif is also responsible for safety at Adif AV.
- **Workplace health and safety:** Our policy is to **ensure the utmost standards of safety and security**, for users and employees alike. We are committed to the health and safety of our employees, collaborating with other firms to learn about and control the risks deriving from its interaction with contractors and suppliers or indeed anyone doing work for Adif on an ad-hoc long-term basis.

- **Cybersecurity:** We constantly strengthen **systems protection and security with new cybersecurity mechanisms.** This protects Adif's management and operational information systems against intrusion, attacks, unauthorised access and/or damage to the organisation's assets. On 22 July 2020, the high-speed railway infrastructure manager (Adif AV) fell victim to a computer attack by the REvil/Sodinokibi cyberorganisation. The attacker threatened to expose Company information and encrypted certain user files. The incident did not have any impact on the Company's operations or the rail infrastructure it manages. The systems supporting its economic and financial activities were also unaffected.

The outcome of the attack was merely the encryption of certain internal files, aside from the potential reputational damage and costs associated with the services and supplies required to bring the situation back to normal. According to a report sent by the Company's Internal Audit Department to the Spanish Data Protection Agency, the amount and relevance of the information were not important.

Adif AV, as operator of critical infrastructure and essential services, has been kept informed from the outset by the competent bodies (CCN-Cert and CNPIC), in line with the procedures in place. It also submitted the appropriate reports to the Spanish national police force's central cybercrime unit.

Cyberattacks on the public sector have risen sharply over the past year and the highly sophisticated technology used poses an increasing threat to companies. Adif AV has drawn up an action plan to mitigate these risks which includes implementing new security measures to reinforce existing ones and further strengthen the protection of the perimeter and IT environments with a view to achieving higher security levels and enhancing its response to new cyberattacks.

- **Environmental safety:** We enhance **environmental protection by augmenting and improving our preventive measures.**



5.3.1. SAFETY AND SELF-PROTECTION

The safety and self-protection front refers to the work performed by Adif AV to guarantee citizen safety, business continuity and safeguarding assets against security threats and in emergency situations. The aim is to create a response system capable of absorbing the impact of a threat without undermining operating capacity.

A number of actions were taken in 2020. The most noteworthy are highlighted below:

/ SAFETY

- Submission of 122 administrative complaints and 325 criminal complaints
- Performance of 1,183 safety inspections and 55 extraordinary interventions
- 1,036 assistances provided to individuals
- 125 assistances provided in accidents
- Recovery of 1,433 items of lost property
- Detection of 15,314 banned objects in luggage security controls
- Score of 39.41 out of 45 in the assessment of the security services.

/ SELF-PROTECTION AND EMERGENCIES

- 29 self-protection plans carried out
- 43 drills performed
- 71 inspections of protective assets and facilities
- 143 training days for internal and external staff, with 1,702 participants



/ TECHNICAL AREA

- Completion of one station protection and safety installation project and documentation of 55 others.

There were 42 crimes with an impact on activity in 2020, 58% fewer than in 2019, extending the steady downward trend in the number of crimes in recent years.



In 2020 **143 courses** were carried out (Adif + Adif AV) and **43 drills** (Adif AV).

KPI DESCRIPTION		Unit	2018	2019	2020	Targets for 2020
DISCLOSURES ON OUR PERFORMANCE WITHIN SOCIETY AND ON PRODUCT LIABILITY	Score for the provision of the surveillance and security services	points/45	39.46	37.55	39.41	> 35
	Deliberate attacks on critical infrastructure	No.	22	9	17	< 25
	Emergency situations covered by the Self-Protection Plan	%	100	100	100	>90%
	Crimes with an impact on activities	No.	252	101	42	< 200

Adif AV's designation as a critical operator by the Secretary of State for Security in the Railway Subsector and in the Urban and Metropolitan Transport Subsector means it is legally obliged to prepare an operator security plan (OSP) for the operator and a specific protection plan (SPP) for each infrastructure designated as critical, and to review these documents regularly, within the established period.

Adif AV as critical operator complied with this legal obligation in 2020. Specifically, it reviewed the Adif AV OSP, which was approved by the Secretary of State for Security, and prepared the seven SSPs outstanding for the rest of the critical infrastructures.

Preparation of the documents was completed and all existing versions were reviewed promptly.



5.3.2. RAIL TRAFFIC SAFETY

The operation and maintenance of the infrastructure owned by Adif AV has been entrusted to Adif via the agreement entered into between the two entities to that end.

Directive 2004/49/EC established a **common regulatory framework for railway safety**, harmonising the content of safety standards, safety certification of railway undertakings, the tasks and roles of the safety authorities and the investigation of accidents.

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 in the Union railway system, infrastructure managers and railway undertakings, should bear full responsibility for the safety of the system, each for their own part. Whenever appropriate, they should cooperate in implementing risk control measures.

Railway safety should be generally maintained and, when practicable, continuously improved, taking into account technical and scientific progress, and the impact of human and organisational factors.

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

Everyone must view traffic safety management as a cross-cutting function touching all Company departments and an essential need that can only be ensured if everyone individually and collectively give their best in their day-to-day work, and by promoting initiatives aimed at achieving this single objective.

Publication of the **Guidelines for the Railway Traffic Safety Policy and Management**, reinforces the Company's internal commitment to the national and European regulatory framework by outlining the criteria and organisational standards for managing traffic safety and strengthening the Traffic Safety Management System.

The purpose of the guidelines is to promote full awareness, at all levels of action and in all services, of the priority to strengthen the foundations for railway traffic safety management within Adif AV, mainstreaming the core principles of the safety policy and the positive safety culture throughout the organisation predicated on risk prevention and management, proactivity and employee engagement.

In fulfilling their responsibilities, Adif and Adif AV identify the core elements underpinning traffic safety; **F.i., people, technology applied to installations, infrastructure, rolling stock, and technical and regulatory standards.**

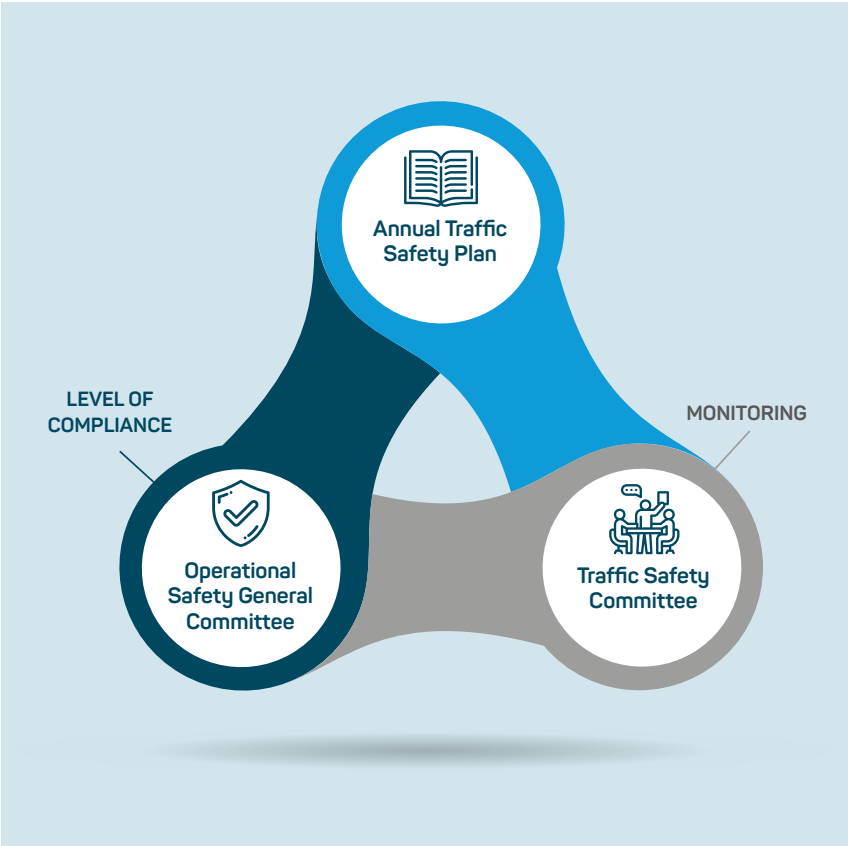
The safety policy includes a variety of tools, including the application of a proprietary traffic safety management system based on prevention, continuous improvement and the implementation of corrective measures. Supports include management based on employee responsibilities and competences, continuous training, participation, information and awareness, as core elements for guaranteeing the oversight of railway safety.



In this vein, the **Annual Traffic Safety Plan** was drawn up and approved by the Operational Safety General Committee to foster compliance with Adif and Adif AV's safety policy and objectives.

This plan is a safety approach that aims to continuously improve the levels of safety at Adif and Adif AV, combining programmes and initiatives that facilitate the achievement of the objectives and indicators included therein.

It also brings together and outlines the safety and oversight action programmes and targets, and all the actions carried out by Adif's corporate departments and specialist business areas.



Security surveillance is performed through two groups of activities entrusted to Adif:

- **Level 1 surveillance:** proximity control and early detection actions on applying employee and process safety standards.
- **Level 2 surveillance:** inspections aimed at verifying, through observation and analysis, compliance with the regulations and safety requirements applicable to operations, elements and conditions related to train traffic safety and shunting.

Noteworthy initiatives in traffic safety arena

/ SAFETY OVERSIGHT INITIATIVES AT ADIF AV

Adif carries out oversight initiatives to verify the application of, and compliance with, the regulations applicable to its activities and operations, and ensure safety in traffic on the General Interest Rail Network (RFIG) managed by Adif and Adif AV.

In 2020, 205 inspections of the RFIG managed by Adif AV were carried out, including those provided by Adif.

/ RAIL TRANSPORT CONTROL INITIATIVES

Systematic actions are in place for rail traffic control to detect risky situations in the transit of freight and passenger trains and verify compliance with the rules established regarding train composition (towed material), loads and documentation.

In 2020, a total of 27,262 carriages were weighed for the RFIG managed by Adif and Adif AV.

Under the scope of the Traffic Safety Plan, 5,386 visual inspections were scheduled for trains running on the RFIG managed by Adif and Adif AV, with 6,876 ultimately carried out.

/ OPERATION CONTROL INITIATIVES

These are Adif/Adif AV scheduled level 1 operational control actions aimed at verifying compliance with existing technical operating standards and performance condition and maintenance checks of the fixed installations and rolling stock whose maintenance and conservation is allocated or entrusted for shunting.

Voice recordings at command posts and remote traffic and energy control cabinets enable Adif AV to check compliance with traffic safety rules, detect any non-compliance with operating rules and adopt corrective and preventive measures as required. In 2020, at total of 527 voice recordings were made in Adif AV's RFIG.

"Safety visits are designed to reduce the incidence of risk as a result of failure to comply with traffic-related processes and tasks. In 2020, at total of 275 safety visits were made in Adif AV's RFIG."

/ FOSTERING A CULTURE OF SAFETY IN SERVICE OPERATION

One of the most important thrusts of safety efforts is the training provided, along with the efforts to award, expand, maintain and renew specific qualifications.

In 2020, the driving licenses of 717 Adif and Adif AV employees were maintained and 11,744 qualifications were awarded to staff involved in safety activities at Adif, Adif AV and external firms, in keeping with prevailing regulatory requirements. In addition, 869 candidates of external firms seeking qualifications were tested for their theoretical knowledge and 836 for their practical knowledge during the year.

Meanwhile, initiatives were rolled out entailing diagnosis, human and organisational factors, leadership and just culture framed in the "SIGMA" safety culture transformation project carried out in cooperation with the ERA (EU Agency for Railways).



There were no traffic accidents on the RFIG managed by Adif AV with victims in 2020. The following table sets out the key metrics:

	2018	2019	2020
No. of traffic accidents	0	3	0
Men killed	0	0	0
Men seriously injured	0	2	0
Women killed	0	0	0
Women seriously injured	0	1	0
Total no. of victims (killed and seriously injured)	0	3	0

Different management-employee **traffic safety management bodies in the traffic safety arena are set up as tools for overseeing and controlling the safety of operating activities** with the aim of ensuring that all staff in the organisation is on board, directly or through their representatives, and that traffic safety improves continuously.

These bodies are created based on their area of action and the scope of their functions: the Central Traffic Safety Technical Committee, the Traffic Safety Operational Committees of the Corporate Departments, and the Regional Traffic Safety Technical Committees. Those committees met **46 times** in 2020.

Adif AV also participates actively in a number of forums in Spain and abroad where it shares its experience in traffic safety matters.



Those committees met 46 times in 2020.

5.3.3. WORKPLACE HEALTH AND SAFETY

Employee health and safety is of vital importance to Adif AV and one of its strategic objectives. To that end it works daily to safeguard Adif AV's position as a benchmark in the sector for its low accident rates, framed by a tireless commitment to prevention.

Adif AV's workplace health and safety effort is described in further detail in section 5.6.4. Employees – Workplace health and safety.

5.3.4. CYBERSECURITY

The Sub-Department of Information Security falls under the Corporate Safety, Processes and Systems Department and is tasked with all matters related with cybersecurity at the Company as a whole.

The 2030 Strategic Plan included the cybersecurity strategic objectives under the Safety Pillar, namely “Protecting the IT and OT systems against intrusions and assaults and minimising the impact of any that do occur.

Cybersecurity is one of the most pressing concerns of public and private enterprises all around the world. The Spanish public sector systems are increasingly exposed to security incidents. Cyberattacks are easy to perpetrate and highly viral. Moreover, the fallout from a cyberattack is particularly relevant in the rail sector: rail infrastructure managers are defined as critical operators in prevailing legislation.

Against that backdrop, cybersecurity is a crucial aspect of safety at Adif AV and part of one of its strategic pillars, the ultimate goal being to protect its IT systems against intrusions and assaults and minimising the impact of any that do occur.

The rail sector has become hyperconnected in just a few short years, introducing a new and ever-shifting universe of risk factors. As a result, Adif AV's strategic objective is to guarantee the integrity, availability and confidentiality of the organisation's information and of the systems, communication infrastructure and technologies that support the various business processes. Teamwork in all areas is crucial to delivery of this target.

/ COMPREHENSIVE IT SYSTEM SECURITY PLAN

The so-called **Comprehensive IT System Security Plan** came about with the goal of defining an end-to-end corporate IT security management model, setting the foundations for a continuous improvement process capable of guaranteeing the safety of the organisation's information and of the systems, communication infrastructure and technologies that support its various services.

The Plan encompasses the IT and OT systems that support Adif AV's business and are highly heterogeneous in nature. Adif AV has set up a management committee, a technical committee and operational task force to oversee and control the project, each of which is responsible for identifying the assets and developing, supervising and approving the actions designed to deliver the Plan's targets. The Company's IT risks have also been analysed to identify vulnerabilities and the Company's level of maturity, establishing action plans to mitigate the related risks.



Implement Cybersecurity

In 2021, the business areas will execute the treatment plans derived from the risk assessments and must start allocating specific cybersecurity budget items that effectively implement the governance model and provide leverage to increase maturity, and effectively implement cybersecurity.

In 2020, the contract to protect Spain's railway infrastructure from cyberattacks was implemented, providing service and support to the two main areas: the GRC (Governance, Risk and Compliance) and the Operations and SOC (Security Operations Centre) areas.

In 2020, Isabel Pardo de Vera, the Chairwoman of Adif and Adif AV, signed the new **Security Guidelines** issued to address the legal obligations of the national and European information security regulatory frameworks and the provisions in internal rules on cybersecurity rooted in legislation for all of Adif. The objective was to strengthen and broaden the foundation for managing information security within the organisation.

On 22 July 2020, the high-speed railway infrastructure manager (Adif AV) fell victim to a computer attack by the REvil/Sodinokibi cyberorganisation. The attacker threatened to expose Company information and encrypted certain user files. The incident did not have any impact on the Company's operations or the rail infrastructure it manages. The systems supporting its economic and financial activities were also unaffected.

The outcome of the attack was merely the encryption of certain internal files, aside from the potential reputational damage and costs associated with the services and supplies required to bring the situation back to normal. According to a report sent by the Company's Internal Audit Department to the Spanish Data Protection Agency, the amount and relevance of the information were not important.

Adif AV, as operator of critical infrastructure and essential services, has been kept informed from the outset by the competent bodies (CCN-Cert and CNPIC), in line with the procedures in place. It also submitted the appropriate reports to the Spanish national police force's central cybercrime unit.

Cyberattacks on the public sector have risen sharply over the past year and the highly sophisticated technology used poses an increasing threat to companies. Adif AV has drawn up an action plan to mitigate these risks which includes implementing new security measures to reinforce existing ones and further strengthen the protection of the perimeter and IT environments with a view to achieving higher security levels and enhancing its response to new cyberattacks.

Major challenges lie ahead for 2021, such as: adapting to changes in national and international laws; effectively implementing and managing cybersecurity in business areas through allocations to specific budget items; planning National Security Scheme (NSS) compliance checks of critical systems; and expanding Adif's GRC and SOC capabilities to provide the right drivers and tools for the Company's comprehensive cybersecurity management with an appropriate level of risk and maturity. This will depend largely on an IT environment that is changing constantly and ever more quickly.

5.4. Service improvements

TECHNICAL RESOURCES

In order to carry out its duties to the highest standards of quality, Adif AV boasts a highly qualified team and the technical resources necessary to carry out its construction, maintenance and operation activities. Specifically, the Company works to:

- Ensure traffic safety in coordination with other entities with safety-related duties.
- Embed efficiency and sustainability criteria from an economic and environmental perspective into the planning, design, construction and maintenance of rail infrastructure with the ultimate aim of ensuring the highest levels of safety, reliability and availability possible.
- Ensure service quality and facility reliability, while optimising maintenance costs in parallel.
- Guarantee operators infrastructure availability on the best terms.
- Foster the development of new rail infrastructure management technology applicable to new builds and existing assets.
- Guarantee the reliability of the level-crossing protection facilities, planning and executing safety upgrades.

Adif AV was granted the **500+ Seal of Excellence** by EFQM (European Foundation for Quality Management) and is also certified under the ISO 9001 "Quality", ISO 14001 "Environment", ISO 166002 "R&D" and ISO 27001 "IT Security".

CERTIFICATIONS

Those certifications have the following scope:

Standard: ISO 9001

- Management of the construction, maintenance and operation of the general interest rail network (RFIG).
- Management of the construction, maintenance and operation of the high-speed rail network comprising the RFIG.

Centres of operation:

Adif AV's overall footprint is described in detail in chapter 3 of the Adif and Adif AV network statements and their annexes and maps.

Standard: ISO 14001

- Control and oversight of compliance with the environmental conditions set down in Adif AV's environmental impact statements, its environmental oversight plans and the requirements applicable to its rail infrastructure and facility construction activities.
- Management and coordination of research studies and projects related with rail infrastructure and facilities.

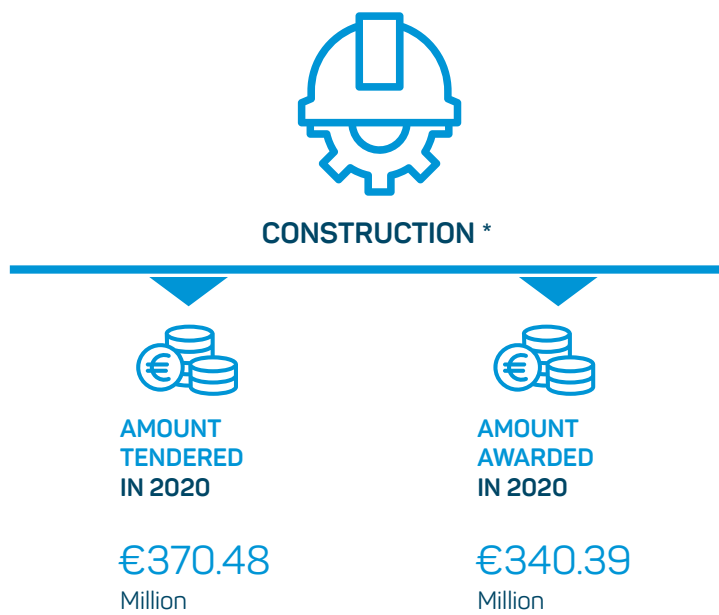
Standard: ISO 27001

- The information systems supporting the operating service of Adif's Information Systems and Technology Department in accordance with the applicable statement in force.

Standard: UNE 166002

- Research, development and innovation in railway technology.

5.4.1. CONSTRUCTION



* Amounts excluding VAT.

Spain has had high-speed rail for over 25 years now and boasts one of the world’s most modern and advanced high-speed railways. This infrastructure has led to development, improving the country’s structure and the quality of people’s lives.

Adif AV’s current strategy still targets territorial structuring and social cohesion, using the European funds granted for projects currently in progress and completing them.

Adif AV spent €1,272.57 million (including VAT) of its investment budget in 2020, of which €1,062.54 million was earmarked for the construction of new lines and the remaining €210.03 million for replacement and upgrade of assets in operation.

/ KEY CONSTRUCTION AND INFRASTRUCTURE UPGRADE ACTIVITIES

Current status of some of Adif AV’s largest construction projects.

- **Vitoria-Bilbao-San Sebastián high-speed line:** work is still under way on the platform for the Vitoria-Bilbao branch line, which comprises 19 sections (including the Bergara Junction), of which 11 are now complete. Platform work on the Bergara-Astigarraga branch line is nearly complete; of the line’s 17 sections, 16 are complete. Work is being carried out on drafting superstructure, energy and installation projects, along with the development of the informative studies for the integration of high-speed lines in cities (Bilbao and Vitoria).
- **Galicia high-speed line:** the Zamora-Pedralba de la Pradería section and the Level 2 ERTMS 2 system between Chamartín - Olmedo - Zamora and Pedralba have been put into service.
- All the platform work on the **Pedralba de la Pradería – Taboadela** section has been completed and work on track assembly, electrification, civil protection and telecommunications is being completed. Track assembly, electrification, signalling and telecommunications works on the Taboadela - Orense section are still under way. The Construction Department, in cooperation with the Sub-Department of Track Assembly and Supplies, has performed additional work on prefabricated slab tracks, driving R&D.
- **León-Asturias high-speed line (Pajares bypass):** work continued in 2020 on electrification, civil protection, energy, and safety and communications installations.
- **Madrid-Extremadura high-speed line:** Platform work has been completed and track assembly, electrification and signalling begun on the Plasencia-Cáceres-Badajoz. Platform work on Mérida bypass and architectural works at the Cáceres, Mérida, Plasencia and Badajoz stations have begun. The electronic interlocking systems of the Mérida-Badajoz and Cáceres sections was put into service in 2020, including sensors for falling objects in overpasses and signal closings in the event of alarms to prevent accidents due to crashes of vehicles.
- The interlocking systems of the **Madrid-Valencia-Albacete high-speed line** have added an alarm-based signal closing feature using sensors of falling objects to avoid accidents due to crashes of vehicles falling onto the track.

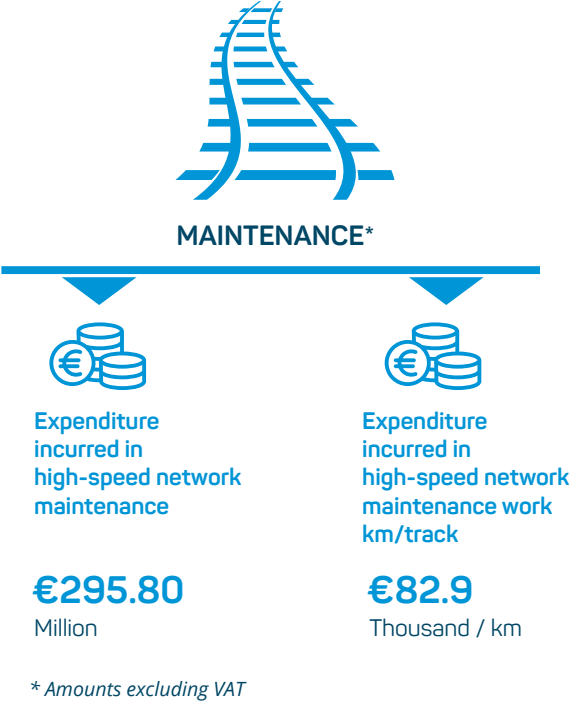
- **The Chamartín-Atocha-Torrejón de Velasco high-speed section** has been made available for testing and ERTMS and LZB system tests have begun. This section will connect northern high-speed lines with the rest of the high-speed network, resulting in significantly shorter travel times and permeability between all high-speed lines for railway operators.
- The **double high-speed track between Río Duero and Valladolid** was commissioned in 2020, eliminating the remaining single-track section between Madrid and Valladolid and improving consequent improvement in regularity and punctuality.
- **Almeria-Murcia high-speed line:** platform works were completed on four sections between Vera and Los Arejos and a boost was given to another 10 platform sections (via project drafting and works execution contracting).
- **Mediterranean corridor:** the Tarragona-Vandellós section was put into service in early 2020, with electrified double track and equipped with ERTMS Level 1, considerably reducing travel times between Valencia and Barcelona. Work on the connection between Valencia and La Encina to complete a new Iberian gauge connection between Mogente and La Encina is still ongoing. This will eventually provide a standard gauge connection for the Valencia-Alicante high-speed line. The Monforte del Cid-Beniel section, which will serve the new Elche AV and Orihuela stations, is in the final testing stage and will be put into service soon. This marks a further step towards bring the high-speed rail network to Murcia since the only section left to be completed is Beniel-Murcia.
- Work on the **Sagrera station** as Barcelona's main station in future and arrival point for many high-speed trains is proceeding. The Mataró corridor's passage through this station has been put into service.



5.4.2 MAINTENANCE

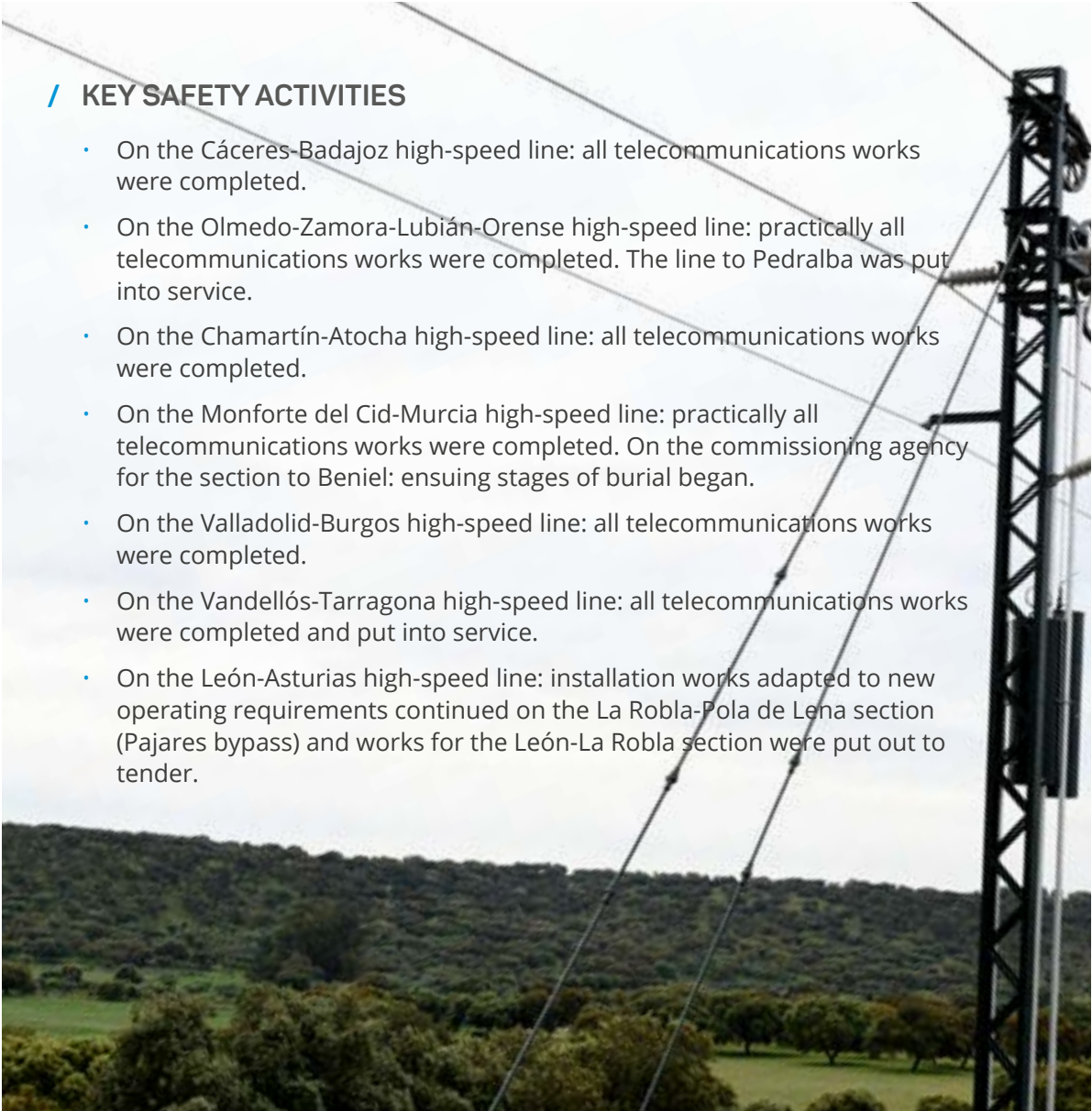
To maintain the infrastructures it owns, Adif AV gears its human and technical resources towards activities that add the greatest value, optimising preventive maintenance, managing inspection activities more efficiently and reducing incidents. This way, Adif AV can offer maximum availability of railway facilities to transport operators.

Total expenditure on high-speed network maintenance was €295.80 million in 2020 (excluding VAT).



/ KEY SAFETY ACTIVITIES

- On the Cáceres-Badajoz high-speed line: all telecommunications works were completed.
- On the Olmedo-Zamora-Lubián-Orense high-speed line: practically all telecommunications works were completed. The line to Pedralba was put into service.
- On the Chamartín-Atocha high-speed line: all telecommunications works were completed.
- On the Monforte del Cid-Murcia high-speed line: practically all telecommunications works were completed. On the commissioning agency for the section to Beniel: ensuing stages of burial began.
- On the Valladolid-Burgos high-speed line: all telecommunications works were completed.
- On the Vandellós-Tarragona high-speed line: all telecommunications works were completed and put into service.
- On the León-Asturias high-speed line: installation works adapted to new operating requirements continued on the La Robla-Pola de Lena section (Pajares bypass) and works for the León-La Robla section were put out to tender.



/ KEY ENERGY ACTIVITIES

Adif AV managed 3,431 electricity supply points in 2020, with incoming energy consumption of 2.234 TWh.

This represented 98.5% of consumption and corresponded to a total of 1,281 supply points equipped with telemetering systems, giving following average costs:

Energy cost:	€54.71/MWh
TPA cost:	€41.93/MWh
Total cost of MWh consumed:	€96.64/MWh

The remaining 2,150 supply points, which represented 1.5% of consumption, corresponded to low voltage supply points with extremely low consumption demands and not equipped with telemetering systems. The total cost (energy and TPA) for these was €164.97/MWh).

All electricity supply at both points equipped with a remote metering system and those without had renewable guarantees of origin (GoO) in 2020.

Further progress was made in 2020 on obtaining resolutions for the economic recognition of compensation for surplus train braking energy returned to the grid in the UIC network from the Ministry for the Ecological Transition and the Demographic Challenge. In October 2020, authorisation was issued for nine substations corresponding to the Madrid-Toledo-Seville lines, for which netting began on 1 December 2020 (1 January 2021 for the Getafe-El Hornillo line). With these nine authorised substations, there are now 45 UIC substations compensating for the energy discharged by the braking of railway compositions. Compensation for discharging energy to the UIC grid in 2020 resulted in €2.63 million of savings (excluding VAT) for the compensation for 38.4 GWh of discharged energy.

In 2020, invoicing with suppliers (retailers and distributors) for virtually all TPA contracts was processed using the exchange procedure between retailers and distributors established by the CNMC. Adif AV was the first consumer to implement this invoicing system, with three distributors at the end of 2018. By the end of 2020, it had achieved end-to-end management of all contracts with over 20 of its suppliers/distributors. Technical checks were performed on a total of 102,570 bills in 2020, representing estimated revenue of nearly €256.3 million (excluding VAT).

Under the current liberalisation framework, in 2020 the Sub-Department of Energy Management awarded the "Establishment of the Billing Methodology for the Complementary Service for Traction Current Supply in the Adif and Adif AV Network" contract to comply with criteria of transparency and non-discrimination. This will define the billing methodology for the complementary traction current supply service in an auditable, transparent and non-discriminatory manner. In the second half of 2020, the billing methodology for AC lines was developed, introducing the possibility of on-board measurement as the billing unit. Train braking energy was also added to the balance sheet. This development in operator billing, the inclusion of braking energy in the balance and the possibility of on-board measurement will be introduced in the 2021 Network Statement, once the billing method is finalised and mainstreamed.



The following milestones set out in Commission Implementing Regulation (EU) 2018/868 of 13 June 2018 as regards provisions on energy measuring system and data collecting have been achieved:

- On-board energy measurement. Communication protocol: Adif published Standard NAT 760 "Communication of on-board energy measurement" in January 2020. This standard defines the communications between an EMS (On-board Energy Measurement System) registered with Adif and the Adif's DCS (Ground Measurement Concentrator) according to the EN 50463-4:2017 standard (UNE-EN 50463-4:2018 Spanish version)
- Procedure for applying for the billing for complementary traction using on-board measurement. Over the course of 2020, work was done to develop the procedure required of operators wishing to apply for billing with on-board energy measurement, and the technical requirements and documentation to be submitted for the measurement equipment installed in traction units they wish to add to this method of billing.
- On-board energy measurement concentrator. In 2020, the technical specifications for the tender of an on-board energy measurement concentrator in accordance with the EN 50463-4:2017 and NAT 760 standards were prepared. The Technological Transformation Department will be launching this tender, presumably in January 2021.
- During 2020, testing began on the EREX energy consumption billing system based on the on-board energy measurement of traction units. EREX is owned by ERESS, an organisation of which Adif became a partner on 1 January 2020.

ERESS is a non-profit organisation that has developed a reliable, flexible, efficient and accurate energy settlement system for European railways.
- Work began on developing the technical specifications for a metering management tool for billing traction energy to operators in 2020 that could process both GTK (gross tonne kilometres), which is the current unit of measurement for energy billing, and the future on-board energy measurement collected by the meters installed in the traction units.

/ KEY TELECOMMUNICATIONS ACTIVITIES

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

It also oversees management of the electricity consumed by Adif and Adif AV and the energy for traction and other uses consumed by Renfe Operadora and any other operators that use electric traction material in freight transport. In addition, it advises on and oversees energy efficiency actions undertaken by Adif and Adif AV.

/ FIBRE NETWORK

In 2020, we continued to offer billing and commercial reporting support services, develop the 'Plan Renove' (renewal plan) and provide professional services.

Additional revenue for Adif AV arising from work on the Reintel project amounted to €331,805.93. Recurring revenue totalled €415,927.95.

For Plan Renove, €601,000 was certified for the following initiatives:

- Commissioning of the new fibre optic cable Sevilla-Escacena (underground).
- Reinforcement of the Cambrils-Port Aventura cable.
- Refurbishment and upgrade of telecommunications assets and technical premises in Ciudad Real, Gijón, Badajoz, Mérida, Benicarló, Castellón, Valencia Fuente de San Luis, Manresa, Alar del Rey, Burgos, Pancorbo and Quintana del Puente.

5.4.3 RAIL INFRASTRUCTURE OPERATION

For operation of the infrastructure owned by Adif AV, Adif is tasked with managing rail network traffic, adjudicating capacity to the rail operators and new candidates, directing and coordinating traffic and programming and verifying facilities.

Rail traffic planning and management

Adif AV currently has the following resources for planning and managing network rail traffic:

- One capacity adjudication department
- 22 command and control centres (18 in the conventional network and four in the high-speed network)
- One 24h network management centre
- Traffic offices
- Roaming traffic services

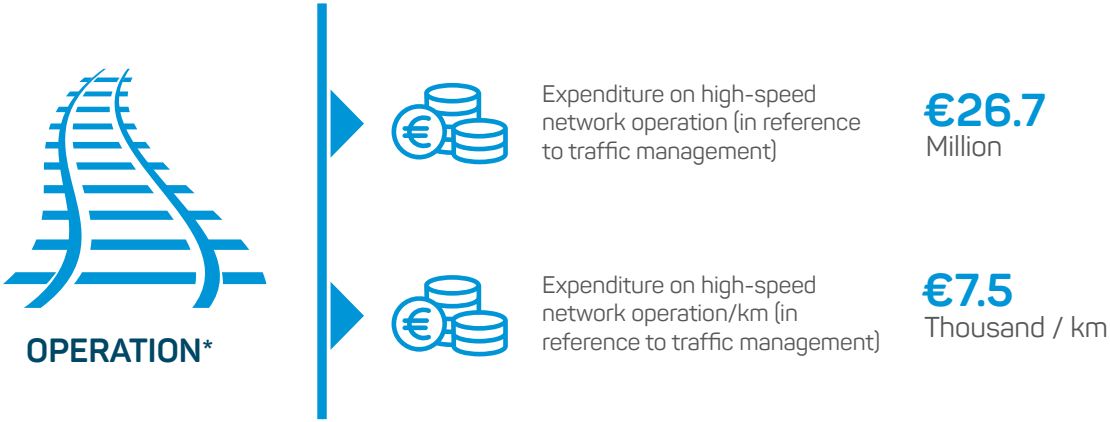
Adjudication of capacity to the rail operators and management of the running of their trains, 24 hours a day and 365 days a year, is oriented toward satisfying those providers' needs, framed by non-discriminatory treatment and a pledge to ensure safe train traffic underpinned by network utilisation optimisation criteria.

/ 24H NETWORK MANAGEMENT CENTRE

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

Working there are representatives from the Company's communication and other business areas to coordinate actions and share information in real time.

The centre shares IS tools with all Traffic areas and any others involved in rail traffic to perform its management and control functions.



* Amounts excluding VAT

Adif carries out the significant traffic management tasks and also adjudicates capacity for the network owned by Adif AV.

The length of the network whose management is entrusted to Adif AV is 3,622km*, broken down as follows:

FIGURES IN KM/LINE (at December 31)	2018	2019	2020
Total network under management	3,300	3,456	3,622
High-speed standard-gauge network (UIC)	2,514	2,619	2,782

* The network grew with respect to the previous year due to the recent entry into service of the Zamora - Pedralba de la Pradería section of the Galicia high-speed railway, and the Murcia - Beniel fork, which brings high-speed rail to the Region of Murcia: it is included in this report because it is expected to enter service by the beginning of 2021.

The key performance indicators for the volume of traffic managed by Adif AV are the following:

	2018	2019	2020
Average daily traffic (no. of trains)	845	952	691
Total traffic	308,390	347,480	252,998
Train-km (daily average)	162,333	169,503	104,897
Train-km (total)	59,251,500	61,868,768	38,392,375

Traffic on the general interest railway network (RFIG) managed by Adif and Adif AV decreased over the course of 2020 due to the restrictions on mobility caused by the COVID-19 pandemic.

Total traffic managed by Adif AV (including internal services) was 38,392,375 train-kilometres, down 38% from the year before due to the performance of passenger services, which fell 40% year-on-year to 35,311,079 train-kilometres. This was because barely over 50% of long-distance services on high speed, which are the largest contributor for Adif AV, were offered from June.

Station management

Station management is a fundamental aspect of rail transport development as it is via these facilities that Adif AV rounds out the quality of the service it provides passengers, rail operators and business operators. The design, construction, maintenance and operation of rail stations is framed by comprehensive sustainability criteria (innovation, safety, efficiency, intermodal exchange, accessibility etc.). Station management contemplates the entire life cycle of these facilities and the provision of high-quality services, factoring in:

- The correct working and sizing of the facilities (cleaning, maintenance, conservation, temperature control, etc.).
- The creation of safe environments.
- A commercial offering tailored to the needs of station users and the city itself.
- The right level of information in relation to the station and the services on offer, in Spanish and, as relevant, in the co-official languages of the various regions.



Liberalisation of passenger transport

Every effort possible to liberalise passenger transport was made in 2020 to deliver the commitments made by December this year. To provide entry by new transport operators to the passenger rail transport market, Adif AV offered commercial services at its passenger stations in accordance with the Services Catalogue included in its Network Statement after carefully assessing each operator’s specific needs and the stations’ real possibilities of meeting them efficiently, transparently and on an equal footing. Listed in the table below are the services offered. Their individual descriptions, terms, etc. are set out in the respective fact sheets.

SERVICES		NAME	PROVIDER
BASIC	SB-1	Commercial services or other operations at train stations with platforms and on tracks	Adif AV
	SB-5	Access to buildings and platforms at passenger transport stations for passenger use	Adif AV
	SB-6	Travel information	Adif AV
	SB-7	Ticket sales and information	Self-service
	SB-8	Ticket sales and information through self-service machines	Self-service
	SB-9	On-board personnel	Self-service
	SB-10	PRM assistance at stations	Adif AV

SERVICES		NAME	PROVIDER
ANCILLARY	SX-4	Ad-hoc information and service	Self-service
	SX-5	Mobile equipment storage on platforms	Self-service
	SX-6	Platform access control	Self-service
	SX-7	Last-minute attention	Self-service
	SX-8	Unmanned locker room for operational staff	Adif AV
	SX-9	Lost object management	Adif AV
	SX-10	VIP rooms	Self-service or Adif AV
	SX-11	On-board service loading and unloading logistics	Self-service or third party
	SX-12	PRM assistance for getting on or off trains	Adif AV

*To date, the SX-10 and SX-11 services were only self-service.



Railway undertakings may request SB-1 and SB-5 services according to the Network Statement, and the rest through the Requests for access to service facilities and rail transport-related services at Passenger Stations procedure.

Railway undertaking have already submitted requests under the framework agreement, which have been addressed, and requests related to the 2021 service timetable, which are currently being processed.

Digital transformation of stations

The **Master Plan for the Digital Transformation of Passenger Stations** was drafted in 2018 and roll-out of the Digital Transformation Office (DTO) began in 2019. In 2020, further efforts were made for continuous improvement in its management processes, with regular meetings held by the Strategic and Technical Committees. During the year, 23 initiatives were under way. These included initiatives related to the liberalisation of the railway sector; e.g. control of boarding area access or the projection of information related to the placement of train carriages along the platform, enabling passengers to board faster.

Other initiatives being drawn up or carried out included the **Neural Station Centre**, the development of a **CRM** system to facilitate customer relationship management; the **Adif Space** to connect users and Adif, the installation of new digital information formats, lost objects management; and the implementation of a smart station platform through a pilot project in Malaga.

Other initiatives coordinated under the plan include the evolution of the Elcano platform, a strategic IT pillar to which other plan initiatives (e.g. Adif Space content management, new digital formats, information needed for the carriage on platform project) are related. There is also a pilot initiative championed by RED.es for smart buildings, which will enable Adif AV to exchange information between some of its stations and local city councils.

Milestones in 2020

Other initiatives pursued in 2020:

VIALIA ESTACIÓN DE VIGO

Related to the VIALIA Estación de Vigo shopping centre:

- Construction of the VIALIA Estación de Vigo shopping centre by the tender winner, CEETRUS, was still in progress. The shopping centre inside the railway station boasts 35,000 square metres of profitable space and has become a hallmark of the city of Vigo.
- An addendum to the agreement on accesses and new urban roads in the area surrounding the Vigo intermodal station was passed in July and work on access from the AP9 motorway began in the last quarter of 2020.
- The three public authorities also greenlighted the projects for the station square and the development of interstitial spaces in addition to the access works also covered by the addendum. Urban development work began in the year's fourth quarter and the project for the square was awarded in December.
- Construction of the bus station by the Galicia regional government (Xunta) continued in 2020.

The various companies and authorities involved worked together during the year to achieve the objectives set and minimise the delays caused by the COVID-19 health crisis on execution of the project, which is expected to be completed in the second half of 2021.



COMMERCIAL ACTIONS

NEW COMMERCIAL OPERATING MODEL IN STATIONS

Pursuant to the tender held in the second half of 2019 for a consultancy contract to establish the commercial development model for Adif and Adif AV passenger stations, the winning bidder, Kearney, developed the new commercial operating model based on the following considerations:





- Liberalisation of rail passenger transport
- The digital transformation of stations already undertaken by Adif and Adif AV.

The proposals covered by the contract aim to: define parameters for stations’ commercial development to maximise resources; increase the efficiency of the procedure for marketing spaces; make the stations more sustainable; improve the Adif and Adif AV brand images; and enhance customer experience.

Based on Kearney's proposal, the new commercial development model at the stations pursues four strategic objectives, as illustrated in the chart below:



The following initiatives will be undertaken to deliver on the two objectives related to promoting the various existing business lines in stations:

 Optimisation of the commercial premises leasing business	 Advertising	 Car parks	 Vehicle lease
<p>Deploy new tendering strategy.</p> <p>Tender with negotiation and, where appropriate, preliminary pre-tendering consultations.</p> <p>Implement the Atocha Master Plan.</p> <p>Design the commercial mix at stations.</p>	<p>Employ an indirect management model, with exclusive licenses for conventional and a mixed model (advertising agency and Adif) for unconventional advertising.</p> <p>Optimise advertising spaces.</p>	<p>Implement an end-to-end services management model.</p> <p>Make improvements over the term of the SABA agreement and prepare the new tender.</p> <p>Implement an end-to-end services management model.</p>	<p>Put in place a new management model whereby Adif controls the periods bid and affords operators greater freedom.</p>



The new commercial operating model also entails taking up new business lines:

- Premiumisation; i.e. the addition of premium retail brands and restaurant/catering.
- Mobile retail and food formats at saturated stations.
- Culturisation; i.e. investee's that spread local culture.
- Last-mile delivery.

Other initiatives will be carried out to reinforce the commercial management model and develop control tools:

- Training plan.
- External communication plan.
- Workshops with operators and stakeholders.
- Development of a CRM system, as described previously.



'FERROLINERAS'

Another business line promoted by the Passenger Station Department in conjunction with the Business Strategy Department was the deployment of fast electric vehicle (EV) charging stations called 'Ferrolineras'. A call for tender was made providing the resources and spaces so potential developers can roll out these charging stations at some 400 stations owned by Adif and Adif AV.

This commercial development model to promote fast EV charging stations is one initiative of the Transformation Office to strengthen the Adif brand and enhance Adif's standing in other markets, in theory by driving and maximising use of the Company's resources. This will improve coordination among Adif and Adif AV's various areas in strategic projects, not to mention generate new revenue streams and make the business areas more profitable.

Through its Plan to Combat Climate Change, Adif is also committed to promoting e-mobility as a tool for delivering on its commitment to decarbonising the economy.

On this front, Adif has been studying ways to harness the electric energy of its network. Thanks to the various R&D projects carried out, a patent was filed for the system control and battery charging procedure using the railway electrification system. With this, Adif can take high voltage power from its own grid (via substations or catenary lines) and make it available to developers of EV charging stations so that they can offer recharging of EV batteries. Extracting this power would not affect rail traffic, which is protected by Adif's own patent.

After an assessment of existing conditions, Adif and Adif AV passenger stations in categories 2 to 5 could be made available to potential EV charge developers; i.e. the charging stations could be installed in slightly more than 400 train stations. A two-phase open and continuous model was devised to make this number of stations available.

To implement these phases, the terms of access to any station regarding the procedure and economic bids applicable to the tender were announced.

For the first phase of development, any interested party may submit an application for a technical feasibility assessment for a

specific station for Adif to determine the technical supply conditions for that particular supply point.

After the technical feasibility assessment, the second phase would begin with the tender for the passenger station for which this technical feasibility assessment was performed.

Adif/Adif AV's roles in this model is to provide the resources and spaces for the EV charging station developers can undertake the deployment are:

- Provider of the technical feasibility assessment.
- Provider of spaces at the passenger stations.
- Provider of the HV connection point (power substation or contact area line).
- Provider of the patent for use of the contact area line.





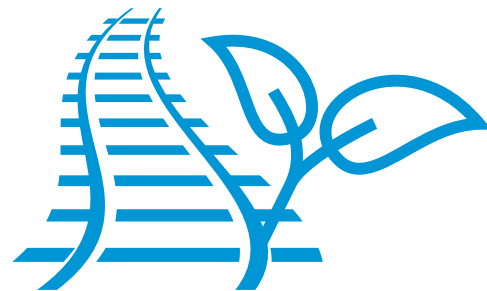
ECOMILLA PROJECT

Work continued in 2020 on developing Adif's Ecomilla brand. The project was showcased to the media and sectors of interest at the Fitur 2020 trade show and efforts were made to find the best way to commission and tender the project. The possible measures required were assessed and the stations where the project could and should be undertaken were identified. Specific project action, drafting and execution milestones were set until the project is put into practice.

Adif's object with this project is to promote sustainability by facilitating door-to-door travel (from start point to railway station and from there to destination) through an energy-efficient mode of transport with zero emissions.

The station must be a friendly space that improves the strategic objective of customer experience. Real-time information must be available to allow interactive communication among the various modes of transport so that the best alternative can be predicted immediately, and to help travellers to take decisions, thus reducing uncertainty and affording mobility on demand.

Once the measures have been set and the stations eligible for implementing the Ecomilla project are determined, specific project action, drafting and execution milestones are set until the project is put into practice. The timetable will also include user awareness-raising and information campaigns, and monitoring of the acceptance of the measures and achievement of objectives.



OTHER COMMERCIAL ACTIONS

New products were marketed in 2020 that improve customer perception and satisfaction. Meanwhile, the brand implementation process continued, with new premises added to network stations; a new premise was opened on 5 March 2020 in Leon.

This helped shore up the brand and its identification as a versatile business that unifies restaurant and shop activities into a single premise associated with industry experts.

Elsewhere, on 20 November 2020, the tender for the "Lease and operation of a batch of premises for pay toilets in public spaces distributed in five Adif AV stations" was published. These stations are: Alicante, Barcelona Sants, Madrid Chamartín, Madrid Puerta de Atocha and Zaragoza Delicias.



INVESTMENTS TO UPGRADE STATIONS

As for the upgrading of stations from the building perspective, considerable efforts were made in 2020 in a bid to minimise the impact of the COVID-19 health crisis on project tendering and execution, without losing sight of the objective to improve functionality and operability, boost facility performance and lengthen the assets' useful lives, with focus on enhancing accessibility and introducing new technologies, with the aim of moving the Company's stations towards the smart facility concept.

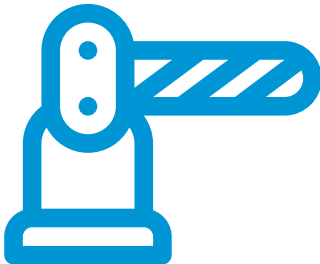
In 2020, a total of **€23.56 million (including VAT) was invested in order to draft construction drawings and carry out work at both Adif and Adif AV stations, of which €7.92 million (including VAT) related to accessibility improvements.**

Currently, 84.76% of passengers (Adif + Adif AV) pass through accessible station (94.63% accessibility at Adif AV stations).

- **Improvement in station functionality and operation**, drafting of projects and execution of works, lending continuity to the work required by the **transfer of the sales channel** by Adif to Renfe Operadora. The transfer requires the separation between sales premises leased to Renfe Viajeros and the other premises owned by Adif AV, above all with a view to addressing the new need arising from the liberalisation, mainly in stations like León, Málaga María Zambrano, Córdoba, etc. Other key actions included emergency repairs of the covering of Madrid Puerta de Atocha's hypostyle hall.
- **Optimisation of station maintenance and increased station control** through centralised and remote management. Highlights included progress on the execution of works for remote passenger station management and the start of works to start up the Neural Station Centre. Actions were carried out at 48 stations, mostly involving: deployment of a remote management system; installation of automation station access door devices; and supply of new intercom equipment and CCTV cameras for system operation.

Investments were also made to improve safety of platform level crossings in response to the **"Technical Recommendation 7/2018 from the State Rail Safety Agency" regarding Pedestrian Level Crossings"**, This extended the work carried out last year when the tender and framework agreement was awarded to adapt track crossings (mainly lighting, signalling, and tactile paving) setting prices applicable to building items, and tender and award of technical assistance for project drafting specifying the works to be carried out and the related project management.

The 26 projects in each lot were drawn up in 2020 and 21 of them were awarded under the Framework Agreement, leaving five unclaimed lots that were therefore rendered null and void in the Framework Agreement tender. Work also began on all 21 lots during the period, although progress was hampered by the COVID-19 health crisis.



- **Improved safety at crossings between platforms**. The guide on the implementation of immediate protection measures at track level crossings at passenger stations was drawn up during the period, as part of the ongoing process of implementing 1P measures for passive protection of crossings between platforms. It outlines risk-mitigation actions and measures until definitive protection actions can be undertaken to implement new passenger information systems, class 2-A measures for visual and acoustic signalling related to train traffic, or the construction of crossings at different levels, which will require a longer period of time to complete.

The measures envisioned in the guide include drafting a plan to raise and close crossings between platforms. The plan was drawn up in the second half of 2020 and includes an assessment of the actions needed to raise crossings wherever possible. The general criterion here is to ensure a single crossing in cases where there is currently more than one crossing with access to the same tracks and to remove all forms of unauthorised track crossings and short cuts. Service use crossings may be closed wherever it is not possible to plan how to raise them.

The plan covers the entire network of Adif and Adif AV, including suburban and commuter stations and the metric gauge network, with work carried out in tandem to update the information on the inventory of crossings between platforms. As a result, the opportunity was identified

to raise and close a significant number of crossings —more than 30% of the total— and work to achieve this objective got under way in 2020.

Other notable actions carried out in 2020 included the development, alongside the Corporate Business and Commercial Operations Department's Risks area, of the specific procedure for safe operation at passenger stations and the specific procedure for assessing the risk arising from the transit of users at crossings between platforms.

- **Fixed and WiFi telecommunications networks at stations**: After drawing up a model for the multi-purpose fibre network at passenger stations the year before, in 2020 the process for awarding the "Drafting of construction drawings, execution of work and maintenance of fixed and WiFi telecommunications networks at Adif and Adif AV passenger stations" project can began, for implementation over the 2021-2022 period. Under this contract, a fibre optic network will be installed at 15 stations, with WiFi available at eight of them.



Impact of the COVID-19 health crisis

ACTIONS RELATED TO STATION OPERATION

In the wake of the COVID-19 health crisis, we had to implement measures to control the risk of contagion at passenger stations under the action protocol and management model for the new normal at Adif and Adif AV stations. This plan has been updated weekly, with continuous monitoring of the effectiveness of the protocol considering existing levels of risk, the measures put in place and the likely development of the ongoing Coronavirus pandemic.

The plan applies to category 1 and 2 stations of Adif and Adif AV and to the most critical areas where there is prolonged and close contact between people carrying the greatest risk of infection (boarding lounges, pre-boarding areas, access control areas, lobbies, etc.), with an average net floor area of approximately 850 m² and comprising a total of 37 areas (two different areas are being analysed at four stations).

Measures deployed include:

- Disinfection of large areas (lobbies, platforms and outdoor areas): This measure was carried out at the Barcelona Sants, Madrid Chamartín Clara Campoamor and Madrid Puerta de Atocha stations.
- Implementation of an automatic capacity control system at the boarding lounges of two stations (Barcelona Sants and Madrid Puerta de Atocha). Work also began to install this system at the following four stations, even though it is not strictly necessary given the current level of risk: Alicante, Madrid Chamartín, Málaga y Valencia Joaquín Sorolla.
- Installation of an infrared passenger thermometer and control system for boarding lounge access at the Barcelona Sants and Madrid Puerta de Atocha stations.

In tandem, a specific procedure was deployed in July 2020 jointly with the Self-Protection and Safety area to measure skin surface temperature and ensure the use of masks for people accessing boarding lounges at the stations of Adif AV.

Further measures put in place at passenger stations to control the risk were:

- Installation and refilling of sanitiser gel stations in toilets for users.
- Installation of contactless, high-capacity gel dispensing machines at entrances and communal areas with the highest traffic at 14 stations, selected according to capacity calculations.
- Installation of protective screens in Adif customer service areas and points.
- Distance marking on the ground and removal of benches to facilitate social distancing measures.
- Separate entry and exit flows at stations, through the installation of signalling tape, retractable barriers, vinyl indicators, adhesives on pavements, stickers and signage.
- Station announcements and public address messages to enforce the use of face masks.
- Natural ventilation and maintenance measures in accordance with international technical protocols.

ACTIONS TO ADDRESS THE IMPACT AT COMMERCIAL ESTABLISHMENTS

In view of the impact that COVID-19 has had on commercial establishments, Adif and Adif AV have worked to offer station clients a raft of support measures, primarily reduced rent payments in accordance with Royal Decree Law 23/2020. This aid consists of a discount equal to half the percentage year-on-year decrease in sales at the establishment, provided that the reduction exceeds 40%. Rent payments may now be spread over the following 24 months without interest, if the contract remains in force over that period, or otherwise until the end date of the contract.

A total of 324 clients applied for the support offered for the March-June period within the deadline, i.e. within one month following the publication of Royal Decree Law 23/2020. There are 499 contracts in effect with these customers.

We contacted the 324 customers (100% of the total) and received the following responses in terms of contracts:

Affirmative response	431
Negative response	9
Termination requested	30
Does not apply	59
Addendum signed	431

For 85% of the total number of contracts, the conditions offered were accepted and 431 addenda were signed. Of these, only nine customers reiterated in writing their decision not to accept the support; in 59 cases the measures did not apply because the contracts were not eligible; while in 30 cases, despite having claimed the aid, the customer ultimately requested termination of their contract.

While this support initially covered the period of the state of alarm running from March to June and then up to and including October, on 17 November 2020 new measures were enacted to alleviate the impact of the COVID-19 crisis, effective 31 October 2020. To announce this second round of measures, a total of 251 communications relating to 413 contracts were delivered in December 2020 and early January 2021.

These measures will be become effective when the customers submit the relevant documentation and once the actual number of travellers for the November 2020 – January 2021 period is known so that the relevant calculations can be made.



Station maintenance services

In 2020, the technical documentation and administrative procedures were completed ahead of the publication of the tender for the **provision of maintenance services** for all 1,498 Adif and Adif AV stations with passenger traffic, including five stations located on high-speed lines that are expected to be commissioned in 2021.

This action should make the facilities more reliable, while improving safety conditions in the area outside platforms and the ability to respond to extraordinary incidents at all passenger stations, including those with lower passenger traffic located in rural or less densely populated areas.

Also in 2020, the technical documentation and administrative procedures were competed ahead of the publication of the tender for the **provision of on-site ancillary and complementary services** at a total of 68 passenger stations, with the aim of maximising operability and ensuring the continuing operation of the stations.

This contract will cover Adif's own needs at 60 stations with passenger traffic of more than 150 passengers/day, where there are currently no human resources available, and at a further eight stations considered significant, even though they experience lower levels of passenger traffic. It also envisions the provision of extraordinary services on an ad hoc basis, at the request of Adif, at any of its 1,498 stations with passenger traffic. The expected results are an improvement in the level of service provided and in the image perceived by passengers, as the contract will ensure a continuous presence of staff at stations during opening hours, and an improvement in the ability to respond immediately to incidents or unforeseen events.

Given the amount of the tender budget for the two contracts described above, they had to be authorised by the Spanish Cabinet. Approval was granted in December 2020, meaning the actual tender and award of the contracts will take place in 2021.

The maintenance service at passenger stations will entail one scheduled visit per month at each station or one scheduled visit every two months, depending on the maintenance arrangement agreed upon for each station, plus any further visits needed to carry out corrective maintenance or other additional maintenance services.

The following types of services will be provided:

- Standard comprehensive maintenance services at 529 stations on Adif's conventional network, including preventive, corrective and routine maintenance activities and asset condition and control checks.

- Standard routine maintenance services and asset condition and control checks at 860 specific stations providing suburban and commuter services and stations on the metric gauge network, as well as certain facilities and equipment managed by Adif.
- Standard routine maintenance services and asset condition and control checks assets for certain installations and equipment present at 62 stations on Adif's conventional network, located in provincial capitals, capitals of autonomous communities or in urban centres with large populations and heavy passenger traffic, and at 42 stations that accommodate high-speed rail traffic, plus the five new stations that are expected to be put into service in the short term.
- Extraordinary services, at Adif's request, within the scope of the 1,498 stations, involving corrective maintenance or other additional maintenance services to ensure the normal operation and running of the stations.

The provision of ancillary and complementary services at stations shall include the following regular work:

- Performance of tasks to ready the stations for normal service.
- Customer support and management of specific Adif station services.
- Support for traveller information equipment and management of the associated systems.
- Control of activities at the station and general services, including monitoring and control of the activities of third parties present at the station.
- Control and monitoring of assets and security at the station.
- Support in response to incidents or emergencies, including the use of defibrillators, if available, and the use of fire protection equipment or other resources present at the station.
- Maintenance work, troubleshooting of minor incidents and specific actions to ensure the availability of services at the stations and the sound functioning of the facilities during business as normal and in response to extraordinary situations and incidents or as a preventive measure.
- Risk prevention activities as and when required.

Neural station centre

In 2020, the technical documentation was drawn up for the project and work carried out to install equipment and operating systems at the station Nerve Centre and to enable remote management of the stations.

The aim of this project is to build and commission the Neural Station Centre (NSC), a technological and service-based platform that will provide the remote monitoring and management of passenger station installations and equipment, while also installing and handling the necessary technology and automation at the stations to allow for their remote management from the NSC.

The planned actions are one of the key initiatives of the Plan for the Digital Transformation of Stations, the aim of which is to enable Adif to communicate with passengers 24/7 and ensure the normal operation of stations and the provision of basic services during unmanned hours, while also providing a fast and efficient service in response to any significant incidents that may occur at any of the stations along the network.

To achieve this, IT equipment and centralised systems for the operation of passenger stations will be procured and installed, as will the necessary hardware and software equipment and systems for the NSC itself. Work will also be carried out to adapt or upgrade existing equipment or install new equipment at the stations with the aim of integrating them into the NSC and enabling their centralised monitoring and management.

The work to be carried out encompasses the supply, installation and commissioning of the necessary equipment and systems at the Valdebebas station, which Adif has chosen to house the NSC. It does not include civil engineering work to refurbish the existing premises at the station. For this, the drawings currently being drafted by Adif's Projects department.

The stations identified to be incorporated into the NSC are all passenger stations managed directly by Adif, totalling 640, although the NSC has been designed to provide service to all passenger stations, including, further down the line, suburban and commuter stations and stations on the metric gauge network.

Following the drafting of the technical specifications, the tender process and construction work are scheduled to begin in 2021.



5.5. Environmental management and climate change action

Adif AV has always embedded environmental criteria into the management of its business, as is evident in the existence of dedicated documents such as its Environmental Policy and its Code of Ethics and Conduct. As mentioned previously, the 2030 Strategic Plan places the environment as one of the priorities of the business strategy, as reflected in Strategic Goal 17 on Environment and Climate, as part of the wider Sustainability Pillar, of contributing to the development of an environmentally-friendly mode of transport that makes responsible use of scarce resources.

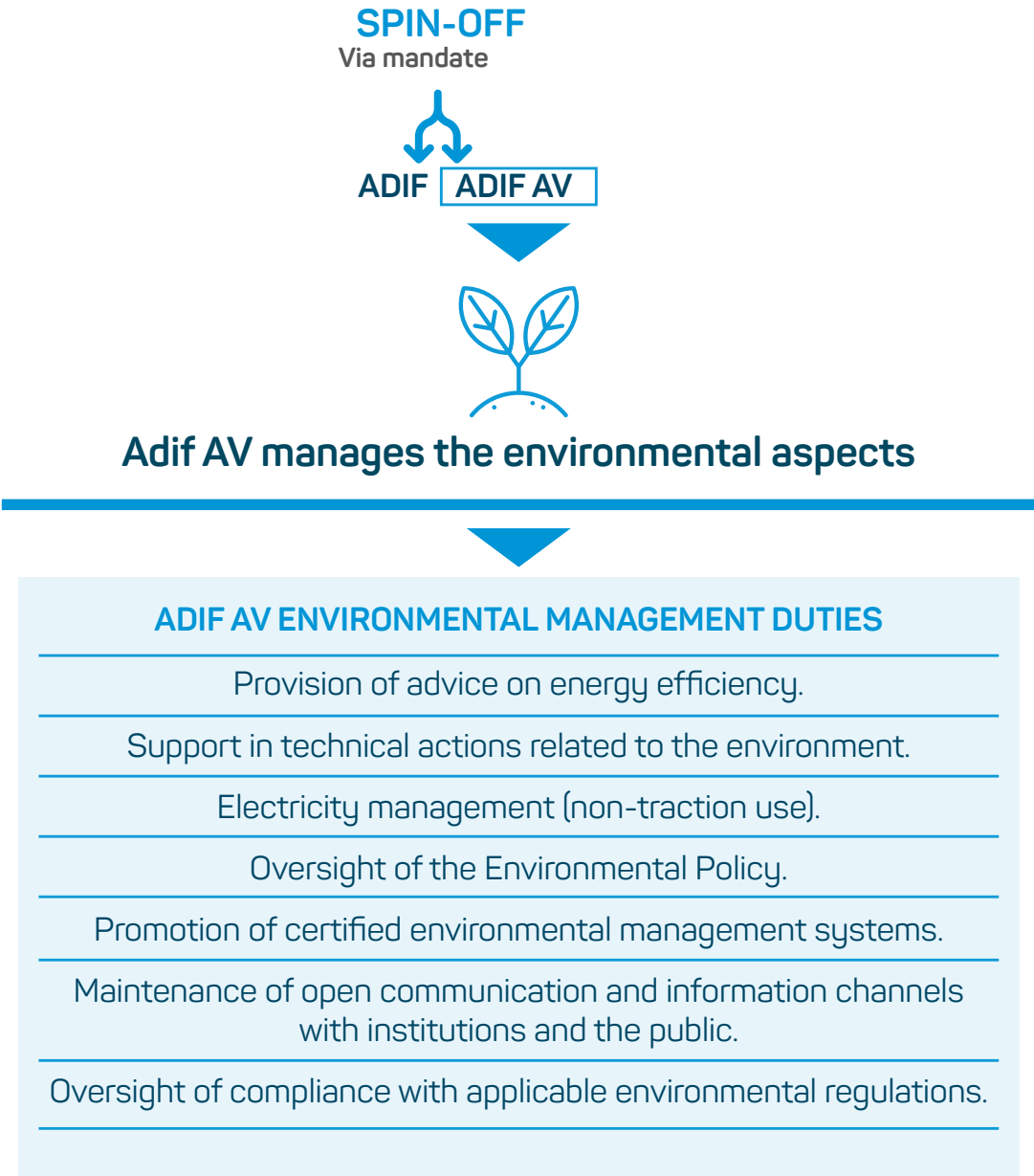
While rail transport implies an environmental advantage relative to other modes of transport thanks to its low impact on contamination and low greenhouse gas emissions, Adif AV is aware that its works have an adverse impact on the environment. Against that backdrop, the Company is keenly aware of the importance of environmental prevention and oversight efforts.

5.5.1. ENVIRONMENTAL MANAGEMENT

Matters related with business sustainability and energy efficiency are managed by Adif's Strategy Department, while the more operational aspects are handled by Adif AV's environmental management team.

Accordingly, Adif AV's environmental strategy and policy are jointly formulated by Department of Corporate Responsibility, Sustainability and Branding and the Adif AV environmental management team.

Since Adif and Adif AV were formally separated, Adif AV is the entity mandated with implementing and supervising this policy at both firms. Adif AV also provides other environmental management services to Adif.



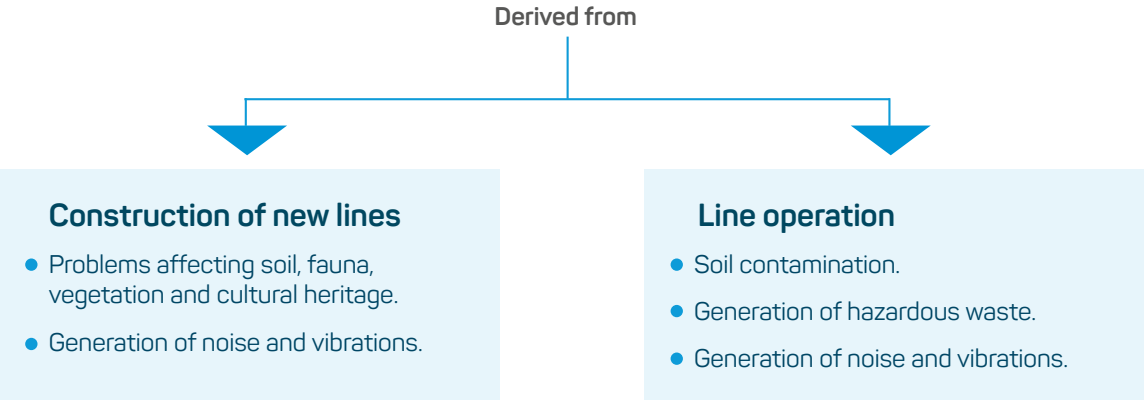
The General Procedure for the Management and Coordination of Environmental Activities at Adif AV sets down the guidelines governing the internal environmental management effort with the aim of reducing environmental risks, making optimal use of available resources and defining key lines of initiative.

The Company has designed an Environmental Management System in order to prevent, mitigate, correct or offset the environmental impacts of its activities. The ultimate goal is to ensure compliance with environmental regulations and to preserve and protect the environment and biodiversity.

This Environmental Management System starts by identifying the environmental impacts of Adif AV's activity, which are largely a result of the operation of new lines, including actual train traffic and the conservation and maintenance of related infrastructure, facilities and stations, though also the environmental impact of constructing new lines.



ADIF AV'S MAIN ENVIRONMENTAL IMPACTS



Adif AV's Environmental Management System is based on ISO 14001:2015 and is certified by AENOR. Via this certification, Adif AV is in a position to assure that it:

- Guarantees compliance with applicable environmental legislation with respect to the certified activities and centres.
- Establishes and implements objectives for continuous improvement in the certified system so as to in turn enhance the environmental management of the covered activities.

The certificate covers the following aspects of Adif AV's activities:

- Control and oversight of compliance with the environmental conditions set down in Adif AV's environmental impact statements (EISs), its environmental oversight plans and the requirements applicable to its rail infrastructure and facility construction activities.
- Management and coordination of research studies and projects related with rail infrastructure and facilities.

The importance of sound environmental management when carrying on the business is supported just like any other strategic concern in the Enterprise Risk Management model, thus requiring regular monitoring and control in terms of risk management. Adif AV complements its Environmental Management System by allocating funds and human resources⁽²⁾ as needed to minimise any negative impact⁽³⁾.

⁽²⁾ Within the Insurance Programme, the Company has arranged general civil liability insurance covering operations at both Adif and Adif AV and also complementary civil liability, which includes additional and specific coverage for environmental civil liability. This supplementary guarantee covers environmental liability under Law 26/2007 (partially implemented by Royal Decree 2090/2008 of 22 December) covering primary, supplementary and compensatory repair costs.

⁽³⁾ The criteria for classifying a sanction as minor, serious or very serious are set out in the agreement to initiate the sanctioning proceedings, or in the decision ultimately delivered. Sanctions are graded on the basis of the rule that was breached.



2020: One year without environmental administrative sanctions

Thanks to the Company's strong environmental practices, Adif AV received no serious or very serious administrative sanctions or penalties in 2020 due to environmental breaches.

/ VOLUNTARY INITIATIVES

Framed by its firm commitment to carrying out its activities in a manner that protects the environment, Adif AV undertakes a series of initiatives and participates in a number of voluntary platforms with third parties in order to promote respect for our natural surroundings and minimize the environmental impacts of its activities. The main initiatives targeted at the protection of the natural resources located in the vicinity of the rail infrastructure built, maintained and operated by the Company are the following:

- Monitoring consumption of natural resources: Adif AV regularly prepares indicators tracking its consumption of water, energy and fuels.
- Ballast quarry certification: Adif AV has a list of quarries with the corresponding environmental impact studies and restoration plans.
- Use of solar energy: Adif continues to make progress on increasing its use of this renewable source of energy which contributes to sustainable development without affecting air and soil quality.

In the past, Adif AV has participated in many initiatives designed to raise awareness of the need to protect our natural surroundings, educating target audiences about what impacts its activities have on them. Adif AV takes part in the activities organised by the Environment, Energy and Sustainability Platform of the UIC – International Union of Railways.



5.5.2. SUSTAINABLE USE OF RESOURCES

Adif AV consumes a series of resources it needs to carry out its activities. In its pursuit of good environmental practices, with the support of its Environmental Management System, the Company strives to minimise, to the extent possible, its consumption of the resources it uses in the course of carrying out its activities and the impact of its activities on the environment.

The main resources consumed are energy, water and materials. Its main impacts are emissions, soil contamination and waste generation, among others.

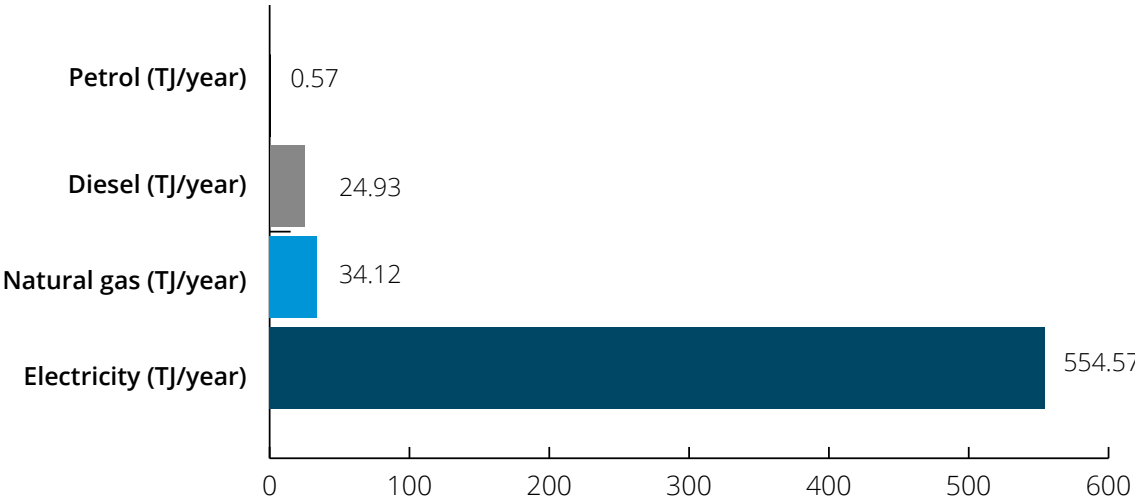
Energy consumption

Final energy consumption from Adif AV's own activities relates mainly to electricity (93.7%) and, to a much lesser extent, diesel (4.2%) and natural gas (2.0%), while petrol is the least consumed resource at 0.1%.

ENERGY TYPE/FUEL	2018	2019	2020
Electrical energy (TJ/year))	570.79	583.36	554.57
Traction use (TU)	254.39	267.10	261.55
Non-traction use (NTU)	316.40	316.27	293.02
Diesel fuel (TJ/year)	26.73	28.40*	24.93
Diesel A – Automotive	1.21	1.40*	0.70
Diesel B – Track maintenance	8.46	10.02	7.08
Diesel B – Workshop shunting	0.00	0.00	0.00
Diesel B – Ancillary terminal operations	0.00	0.00	0.00
Diesel B – Station shunting	16.77	17.17	17.16
Diesel C – Heating	0.28	0.00	0.00
Petrol (TJ/year)	0.18	0.37*	0.57
Natural gas (TJ/year)	35.85	38.40*	34.12
TOTAL	633.56	650.72*	614.19

*Updated values

ENERGY CONSUMPTION BY FUEL TYPE IN 2020



As can be seen in the diagram, energy consumption from Adif AV's own activities relates mainly to electricity (90%). The main components of other consumption are natural gas (5.6%) and diesel (4.1%).

Indirect consumption of primary energy also relates mainly to electricity. The following table shows indirect consumption deriving from final consumption of electricity, broken down by type of primary energy source:

SOURCES OF PRIMARY ENERGY (TJ/year)	2018	2019	2020
Coal	263.86	80.22	39.89
Natural gas and fuel	-	-	-
Combined cycle	200.23	386.18	318.22
Nuclear	402.34	421.63	462.56
Cogeneration and non-renewable waste	233.92	238.80	240.45
Turbine pumping	14.97	13.06	22.51
Fossil fuels	1,115.32	1,139.89	1,083.63
Hydro	81.32	133.14	64.55
Wind	116.68	35.30	113.27
Solar (photovoltaic and solar thermal)	28.29	11.15	41.01
Other renewables ⁽⁴⁾	10.02	241.51	10.75
Renewable resources	236.31	241.51	229.59
TOTAL	1,351.63	1,381.41	1,313.22

Note: Values calculated on the basis of data provided by Red Eléctrica de España on the structure of annual mainland electricity generation.

⁽⁴⁾ Other renewables includes biogas, biomass, marine hydro and geothermal.

Intensity of final and primary energy consumption

Energy intensity is defined as the consumption of final or primary energy (in MJ consumed) divided by the unit of production most representative of Adif AV's activities (traffic managed in train kilometres).

These two indicators allow Adif to quantify its energy efficiency and measure its energy consumption dependence in relation to the growth in its activities:

	2018	2019	2020
Train-km under management (train-km/year)	59,251,500	61,868,768	38,392,375
Final energy intensity (MJ/train-km)	10.69	10.52*	15.99
Primary energy intensity (MJ/train-km)	23.87	23.42*	35.76

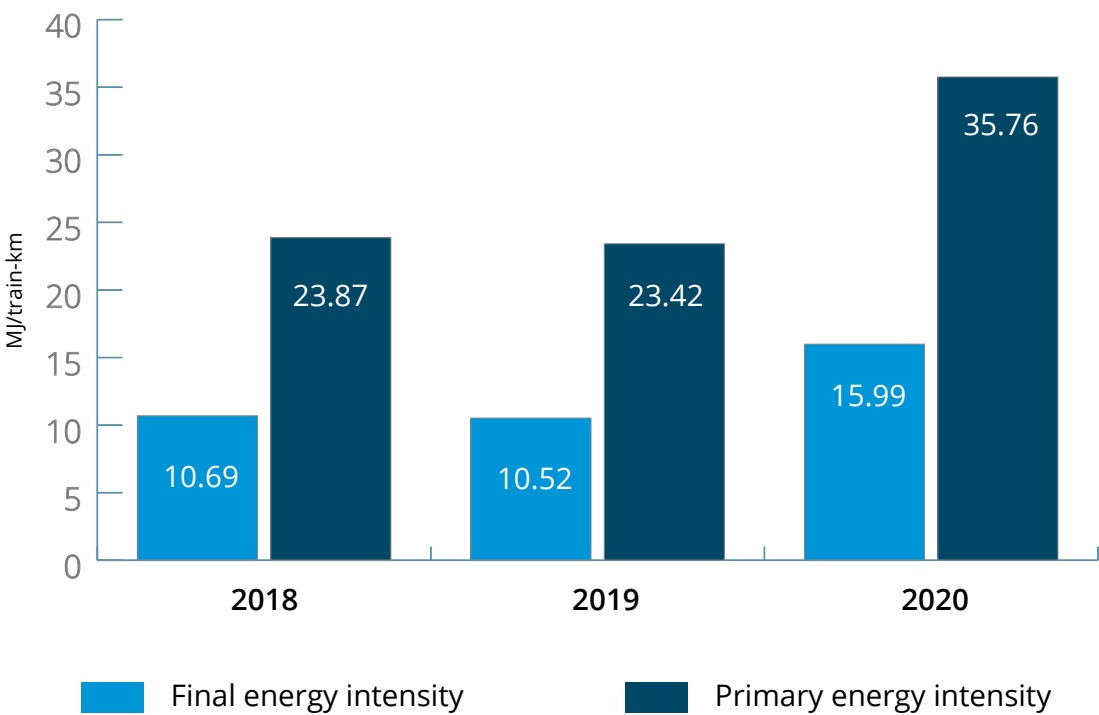
* Figures updated as per the methodology applied for 2019.

Energy intensity were up.

Final and primary energy intensity were up at Adif AV in 2020, due to a 38% reduction in managed traffic compared to the year before.

As can be seen in the table above, rail traffic managed by Adif AV in 2020 came to 62% of the figure reported in 2019, representing a reduction of 38%. This has pushed up both final and primary energy intensity by around 52% from the previous year. This, however, is not indicative of poor energy performance as it was due to the significant reduction in rail traffic in 2020.

ENERGY INTENSITY

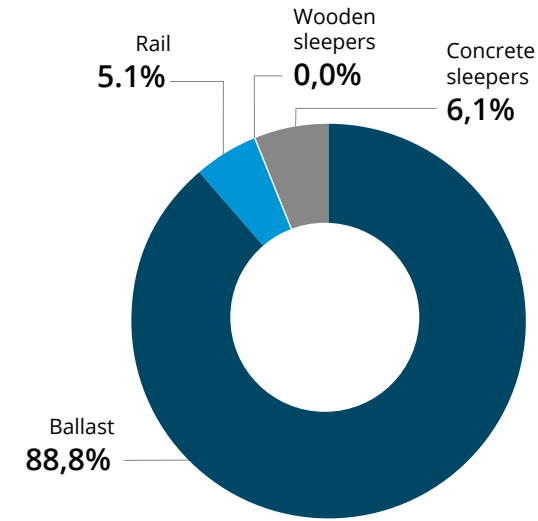


Material consumption in the course of construction operations

Material consumption at Adif AV is mainly concentrated in the rail materials used in construction of the rail network such as sleepers, rail and ballast.

TOTAL RAIL MATERIALS	2018	2019	2020
Rail (t)	21,638	45,824	26,049
Wooden sleepers (t)	0	0	0
Concrete sleepers (t)	64,638	139,147	30,808
Ballast (t)	638,051	728,806	453,026

MATERIAL CONSUMPTION



Material consumption fell by 38% in 2020. Ballast accounted for 88.8% of total material consumption, followed by rail (5.1%).

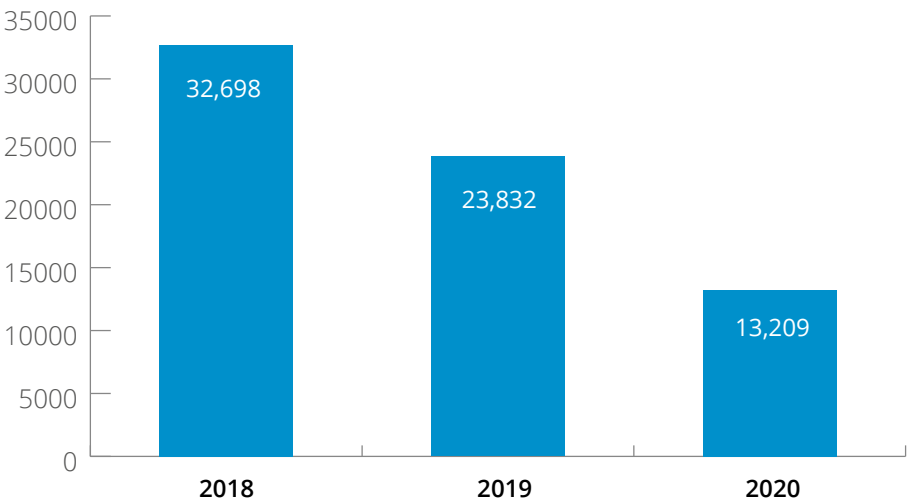
Herbicide consumption

Adif AV uses weed killer to impede the growth of herbaceous plants in the infrastructure and facilities it owns as their growth can generate issues for the running of tracks and increase the risk of fire along track verges. In 2020, the consumption of herbicides per unit of surface area treated declined by 39% with respect to 2017.

Water consumption

Adif AV mainly consumes water for sanitation purposes and to clean its facilities. Its main source of supply is the public supply network, although it also consumes a small amount taken from wells. Water consumption figures for recent years are as follows:

VOLUME OF WATER CONSUMED (m³)



5.5.3. COMBATING CLIMATE CHANGE

Strategic framework

The Company has amassed knowledge and learned lessons from the Energy Saving and Efficiency Master Plans launched in 2009 to draw up a **Climate Change Action Plan for 2018-2030** at both Adif and Adif AV. The plan was approved in the first quarter of 2019 to replace the existing Master Plans of both companies.

This Plan pursues one of the main pillars of the **2030 Strategic Plan** of Adif and Adif AV, namely **sustainability**, and pursues the strategic objective of making transport more environmentally friendly and responsible when it comes to the use of resources.

Thus, the Plan is a **further show of Adif and Adif AV's commitment to combating climate change**, focusing on the following courses of action:

LINES OF ACTION TO COMBAT CLIMATE CHANGE

✓

Energy management

✓

Energy efficiency

✓

Decarbonisation and renewable energies

✓

Resilience of rail infrastructure

✓

Culture and awareness-raising

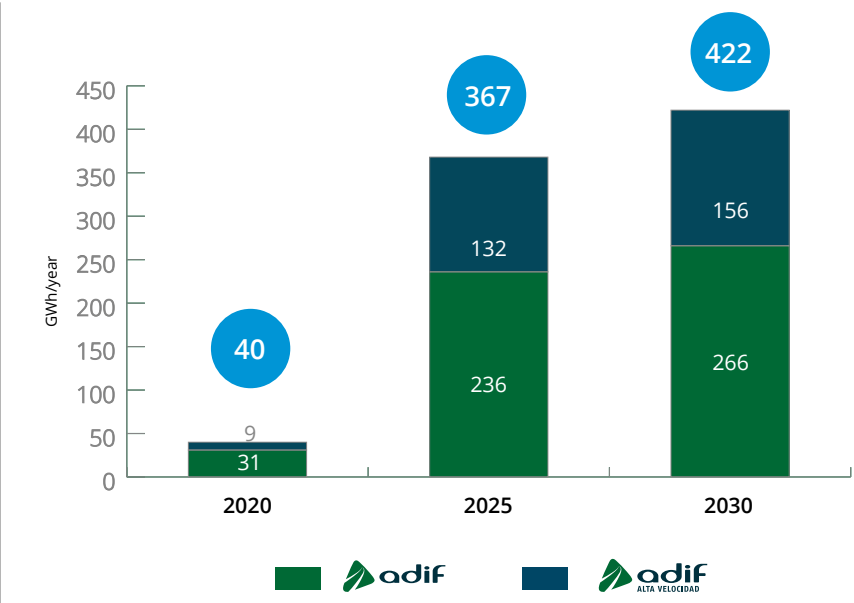


Plan to Combat Climate Change

The Plan to Combat Climate Change of Adif and Adif AV was approved in the first quarter of 2019. It envisions specific objectives for reducing energy consumption and greenhouse gas (GHG) emissions and sets specific targets for 2020, 2025 and 2030.

In terms of energy savings, the Climate Change Action Plan for 2018-2030 envisages the following targets for three different points in time:

ANNUAL ENERGY SAVINGS TARGETS FOR THE RAILWAY SYSTEM

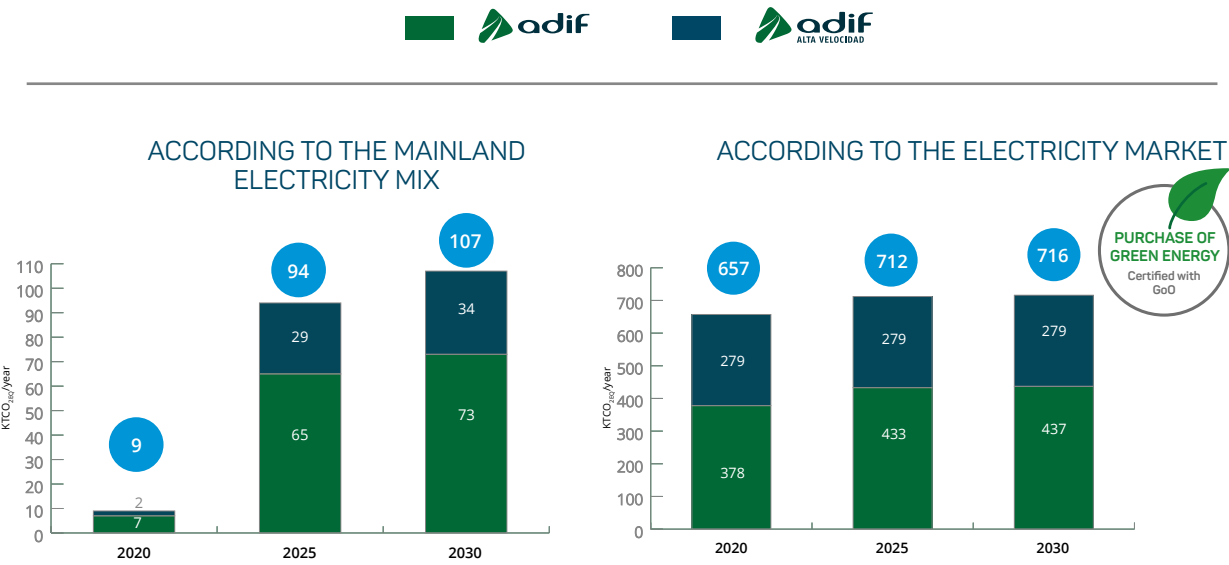


By implementing the projects included in this Plan, the estimated **cumulative reduction** in energy consumption for the 2018-2030 period will total **2,900 GWh_{eq} at both companies**.

Within the framework of this Plan, Adif and Adif AV have been **Sourcing Green Electricity** with guarantee of origin (GoO) since 2019, thus completely offsetting their GHG emissions associated with electricity consumption.

However, when defining GHG emission reduction targets under the Plan, a double calculation was made by applying pertinent recommendations of international standards. Therefore, annual GHG emission reduction targets have been established for Adif and Adif AV according to the mainland electricity mix and the electricity market based on the purchase of renewable energy with GoO:

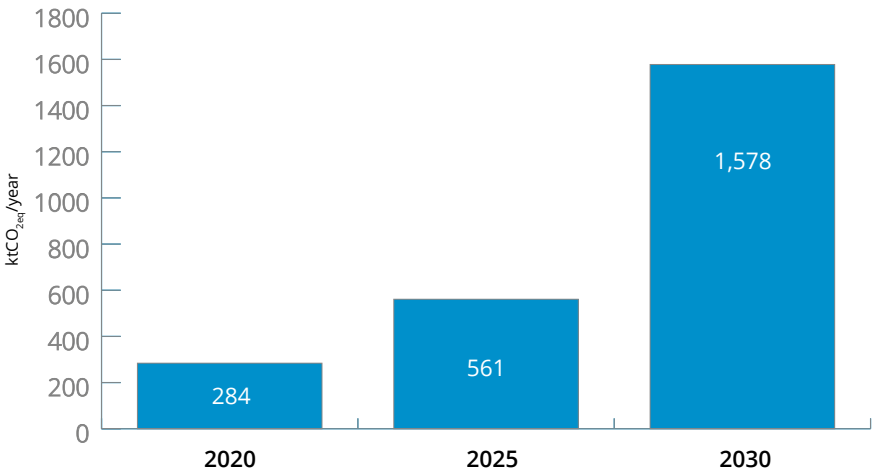
ANNUAL GHG EMISSION REDUCTION TARGETS FOR THE RAILWAY SYSTEM



The cumulative emissions reduction for the 2030 Plan horizon at Adif AV would be **777 ktCO_{2eq}** (according to the electricity mix) and **3,700 ktCO_{2eq}** (according to the electricity market through the purchase of green energy with GoO).

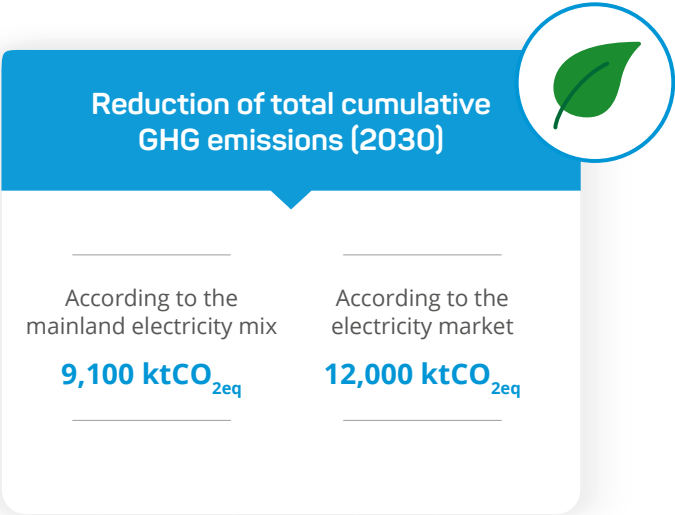
The Plan also takes into account the contribution and worth of promoting the modal shift to rail. Thus, assuming the modal share of rail increases by 2030 for both passenger and freight transport, in line with the objectives of the White Paper on Transport and the targets set by the European Union and the International Energy Agency, the GHG emissions avoided by this modal shift to rail can be estimated.

ANNUAL GHG EMISSION REDUCTION TARGETS



The modal shift is expected to generate a cumulative reduction in emissions of over **8,400 ktCO_{2eq}** by 2030.

Therefore, if we add the estimated emissions associated with the modal shift, the Climate Change Action Plan of Adif and Adif AV would generate a total cumulative GHG emission reduction for 2030 of **9,100 ktCO_{2eq}** in relation to the electricity mix and of **12,000 ktCO_{2eq}** in relation to the electricity market through the purchase of green energy with GoO.



Strategic indicators

To monitor the degree of progress made towards the Climate Change Action Plan, two main strategic indicators have been defined:

- **Improvement in energy efficiency:** GWh_{eq} saved per year through the implementation of energy efficiency actions.
- **Reduction in GHG emissions:** tCO_{2eq} avoided per year through the actions to combat climate change put in place.

Both indicators refer to energy savings and emission reductions generated across the entire railway system and take into account the measures deployed since 2009 under the previous Energy Saving and Efficiency Master Plans.

In the case of Adif AV, both indicators are as follows for the 2018-2020 period:

IMPROVEMENT IN ENERGY EFFICIENCY (GWHeq / year)

	2018	2019	2020
TU (traction use)	56.36	77.86	77.86
NTU (non-traction use)	25.11	25.70	26.32
TOTAL	81.47	103.56	104.18

104.18 GWh_{eq} / year
electricity consumption saved since 2009.

REDUCTION IN GHG EMISSIONS (TCO_{2EQ} / YEAR)

	2018	2019	2020
TU (traction use)	12,375	17,083	9,773
NTU (non-traction use)	5,499	5,629	3,255
TOTAL	17,874	22,712	13,028



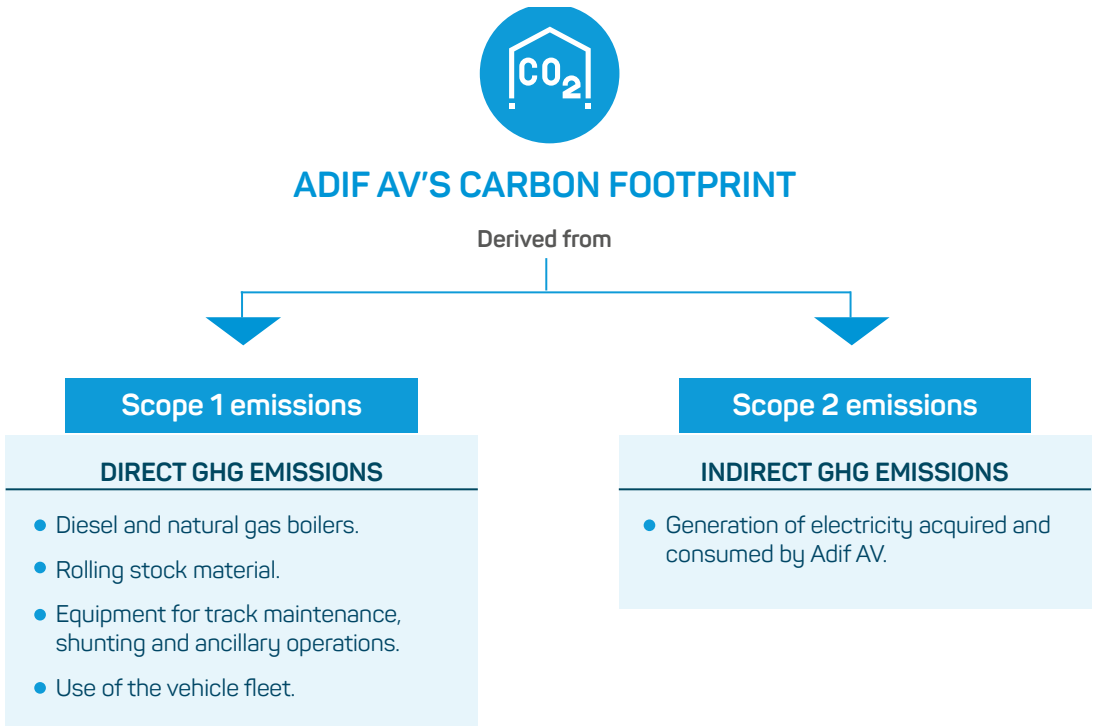
13,028 tCO_{2eq} / year

avoided through energy efficiency and decarbonisation actions undertaken since 2009.

Gradual progress in improving energy efficiency was made during the period, with a slight improvement in the reduction of energy consumption of the railway system in 2020. Meanwhile, the absolute value of GHG emissions avoided was lower than in previous years because the CO2 emission factor of the peninsular electricity system in 2020 was considerably lower than in earlier years.

Emissions deriving from Adif AV activities

Adif AV complies with prevailing legislation with respect to its emissions obligations. In the course of its activities, Adif AV generates indirect emissions (via generation of the electricity it consumes) and direct emissions (as a result of diesel- and natural gas-fired boiler consumption, the fuel consumed in traction motors, related machinery and the vehicle fleet). It monitors those emissions by calculating its carbon footprint, which enables organizations to track the GHG emissions associated with their business activities. Those emissions are categorised into two different scopes:



The following table shows Adif AV's CO₂ equivalent emissions (tCO_{2eq}/year) for 2018-2020.

		2018	2019	2020
Scope 1	Fuel facilities	2,046.72	2,167.51*	1,925.76
	Track maintenance, shunting and ancillary operations	1,795.76	1,934.58	1,724.34
	Vehicles	99.01	125.48*	89.11
	Total scope 1	3,941.49	4,227.58*	3,739.22
Scope 2	Electricity consumption	34,684.49	27,583.74	19,040.24
TOTAL (tCO _{2eq})		38,625.98	31,811.32*	22,779.47

* Updated values

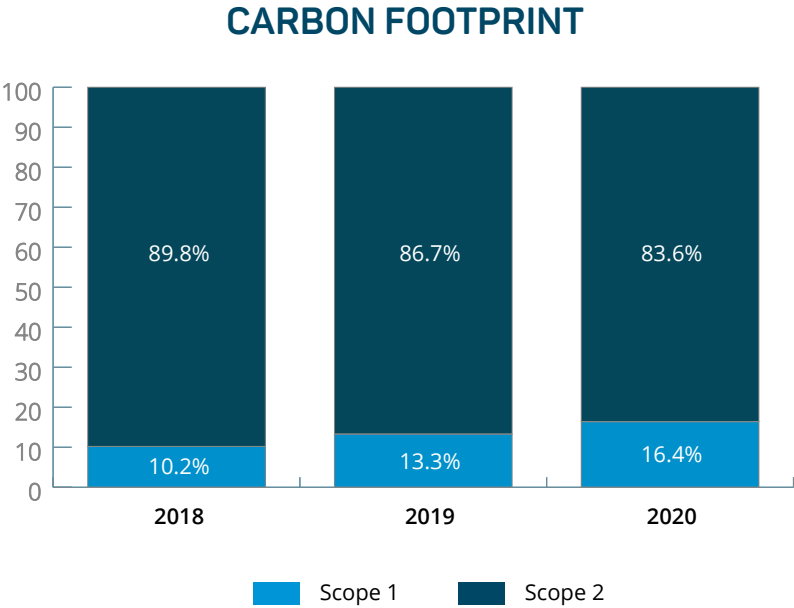
-41.1%

Adif AV's carbon footprint for the 2018-2020 period fell by 41.1% and by 28.4% in 2020 versus 2019.

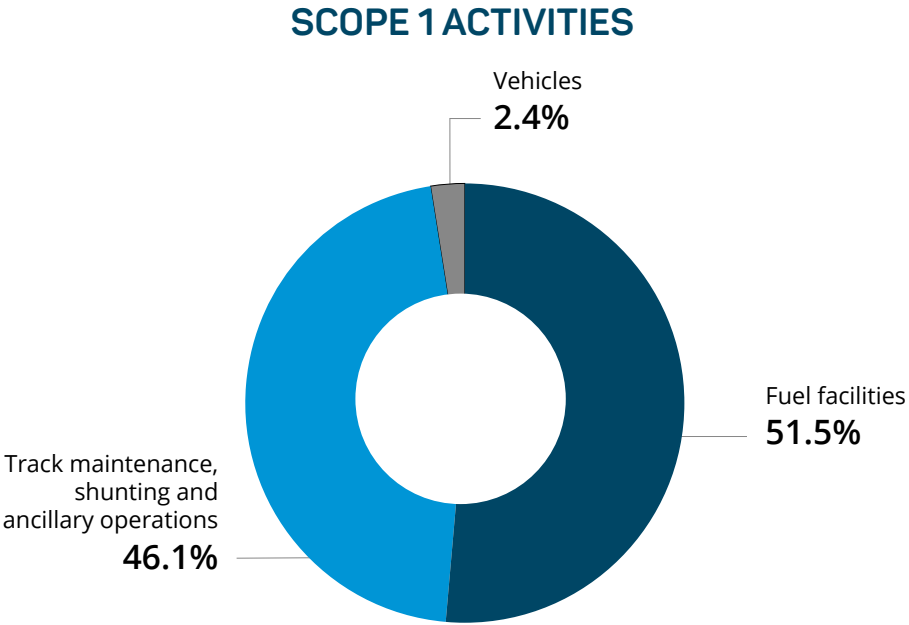
We can therefore observe a further reduction in the carbon footprint in 2020 for both scope 1 and scope 2 emissions, which has been following a downward trend since 2018. Note, however, that these figures are not particularly representative due to the unprecedented events that took place during that year. Looking closer, the greatest reduction can be seen in scope 2 emissions, which fell by 45.1% versus 2018 and 31% versus 2019.

Meanwhile, all the energy consumed by Adif AV in 2020 came with **guarantees of origin** (GoO). Taking this circumstance into account, the carbon footprint can be calculated on the assumption that Scope 2 emissions are equivalent to zero. Thus, in 2020, the footprint was 3,739.22 tCO_{2eq}, all corresponding to scope 1 emissions. This would mean that the reduction in respect of 2018 would be 90% and 88% in respect of 2019, revealing the weight of electricity in the energy consumption balance of Adif AV.

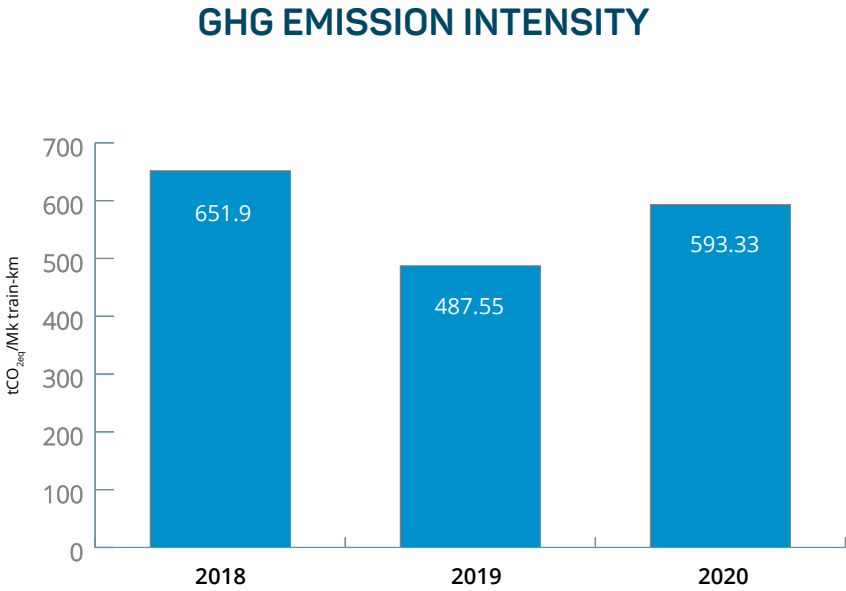
The contribution of the two scopes to the total carbon footprint is shown in the following diagram:



Scope 2 emissions account for the majority at nearly 84%. Scope 1 includes the activities of fuel facilities, which account for the largest amount of direct GHG emissions (51.5%), closely followed by emissions caused by track maintenance, shunting and ancillary operations (46.1%).

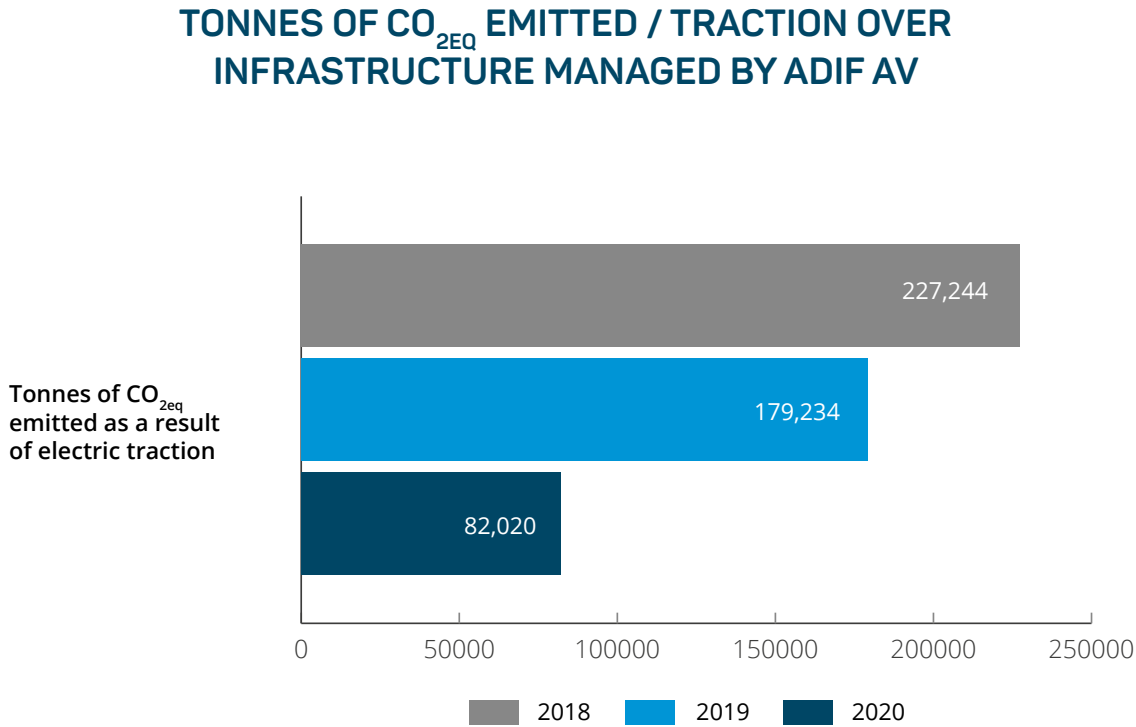


Analysing the emissions and taking into account the representative production unit (train-km managed), we see that **GHG emissions intensity** fell by **9.0%** over the 2018-2020 period and yet was up **21.7%** in the last year. This is due to the fact that total traffic managed by Adif AV in 2020 was down 38% on the previous year, so while GHG emissions generated were lower, the intensity with respect to the unit of production is in fact higher.



Emissions from the provision of traction on infrastructure managed by Adif AV

For the high-speed network, electricity alone is consumed by the railway operators, meaning GHG emissions are indirect and refer to the generation of the electricity those operators consume. The trend in these emissions between 2018 and 2020 is as follows:



Over the 2018-2020 period, emissions generated by electric traction were down 64% due to the reduction in traffic in 2020, as already discussed.

Further, these indirect emissions refer to energy generated at power plants and are therefore dependent on the mainland electricity generation system, the structure of which changes from year to year, thus causing CO₂ emission factors to also vary from year to year and influence these differences.

Applying international carbon footprint calculation standards, and if the electricity market is used instead of the mainland mix, then since 2019 all electricity purchased by Adif AV and consumed by railway operators is GoO certified. Therefore, it is fair to say that CO₂ emissions associated with electric traction are equivalent to zero over the last two years.

Adapting to climate change

The Climate Change Action Plan not only envisions actions to mitigate climate change by achieving a reduction in GHG emissions, but also a specific course of action that involves adapting railway infrastructure and making it more resilient.

In January 2020 the Standards Committee approved internal standard NAG 4-0-0.0 Methodology for risk analysis and adaptation to the effects of climate change in order to make railway infrastructure vulnerability assessments part of the adverse effects of climate change at the earliest stages of infrastructure construction.

The goal is that during the initial stages of defining rail infrastructure construction projects, their impact on climate change should be one of the variables contemplated when designing the infrastructure.

Application of the standard began in 2020 when drafting new railway infrastructure projects, mainly those that are co-financed by European bodies.

5.5.4. POLLUTION

Noise pollution

Noise pollution is another of the adverse impacts of Adif AV's business activities. The emission of noise and vibrations stems primarily from the running of passenger and freight trains. However, there are other sources of noise and vibration, namely:

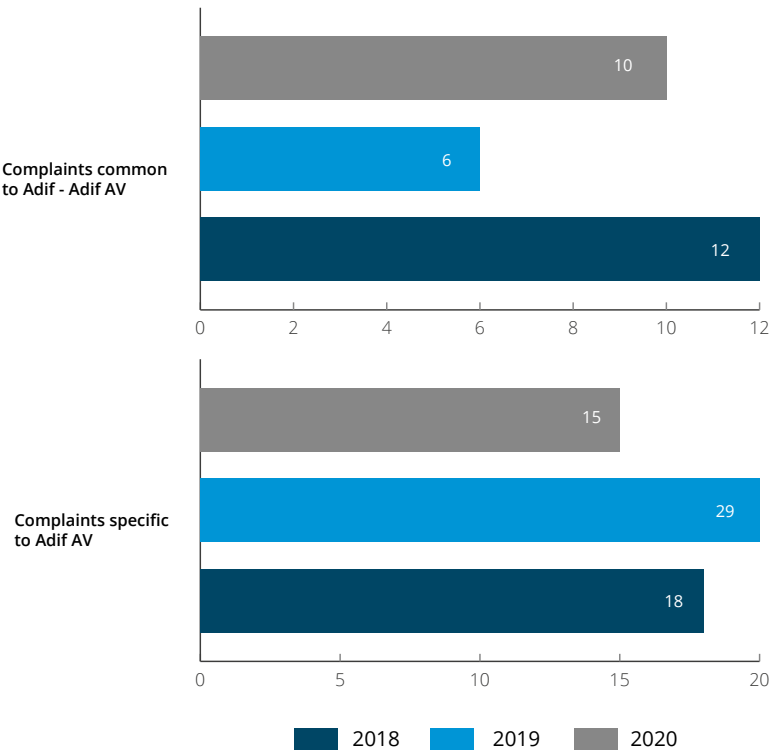
- The activities conducted at Adif AV's passenger stations, such as the public announcement systems, train shunting operations and building temperature control systems.
- Infrastructure maintenance operations, mainly arising from the use of track machining equipment.
- Construction work on the new high-speed lines.

Adif AV has a procedure for collecting, documenting and processing complaints related with noise levels, underpinned by its Management System.



As mandated by the Ministry of Transport, Mobility and Urban Agenda, Adif AV has been drawing up so-called strategic noise maps and action plans for the major high-speed rail routes (those carrying over 30,000 trains per year).

NOISE-RELATED COMPLAINTS



Noise-related complaints

Some 90% of the complaints received relate to noise and the remaining 10% to vibrations (Adif + Adif AV).

Soil contamination

As is customary when undertaking high-speed line projects, Adif AV acts as necessary to prevent soil contamination in the areas where the lines are built. However, the soil may sometimes be affected for various reasons while carrying out the work. In 2020, no such incidents were reported at Adif AV construction sites.

5.5.5. WASTE MANAGEMENT AND CIRCULAR ECONOMY

Passenger stations and the building and maintenance of high-speed railway infrastructure account for most of the waste generated by Adif AV.

As there are many activities that generate different types of waste, the Company reports figures on the generation of both urban or domestic waste and waste classified as hazardous according to current law and regulations.

Hazardous waste

The hazardous waste generated by infrastructure construction and maintenance work is the property of the contractor, or of the person who produces the waste in the eyes of the law, who is therefore obligated to comply with applicable law and regulations governing producers of hazardous waste. Station management and operations account for most of the hazardous waste generated by Adif AV.

The hazardous waste generated by Adif is stored at Waste Storage Centres (WSC), with a total of 59 centres on the peninsula as at 31 December 2020. The waste is then removed by authorised local waste management companies and typically recycled, recovered or otherwise valorised.

On 1 January 2011, the corporate hazardous waste management model came into effect to optimise the management of hazardous waste at Adif. This model centralises the management of hazardous waste at the Environment Sub-Department, which is tasked with arranging the services of authorised managers and transporters, coordinating waste collection activities and processing all documentation required by the autonomous regions of Spain in connection with the management of hazardous waste).

The Environment Sub-Department is Adif AV's advisory body on matters relating to the management of hazardous waste. In 2020, it resolved 104 queries from the business units related to waste characterisation, identification and classification, how it must be stored and the documents to be drawn up and kept in connection with the production and management of hazardous waste.



Adif AV has a **hazardous waste management system**, in place, with the following procedures and instructions:

- General Procedure ADIF-PG-109-001-022 "Waste management at Adif and Adif AV".
- Specific Procedure ADIF-PE-109-001-022 "Centralised waste management at Adif and Adif AV".
- Technical Instruction ADIF-IT-109-001-021 "Use and maintenance of the WSCs of Adif and Adif AV".

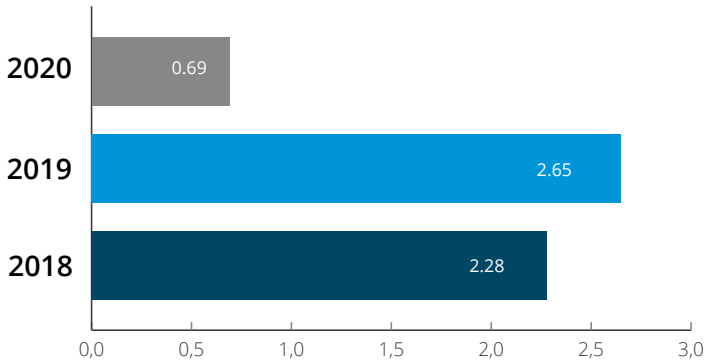
While most of the hazardous waste is managed through the corporate model, the business units also carry out waste management on a decentralised basis by arranging for final waste management companies to collect certain types of waste.

In 2020, Adif AV generated a total of 0.687 tonnes of hazardous waste, significantly down on the figure reported a year earlier (73.96%). Moreover, 100% of the hazardous waste was managed through the corporate management model.



HARZADOUS WASTE

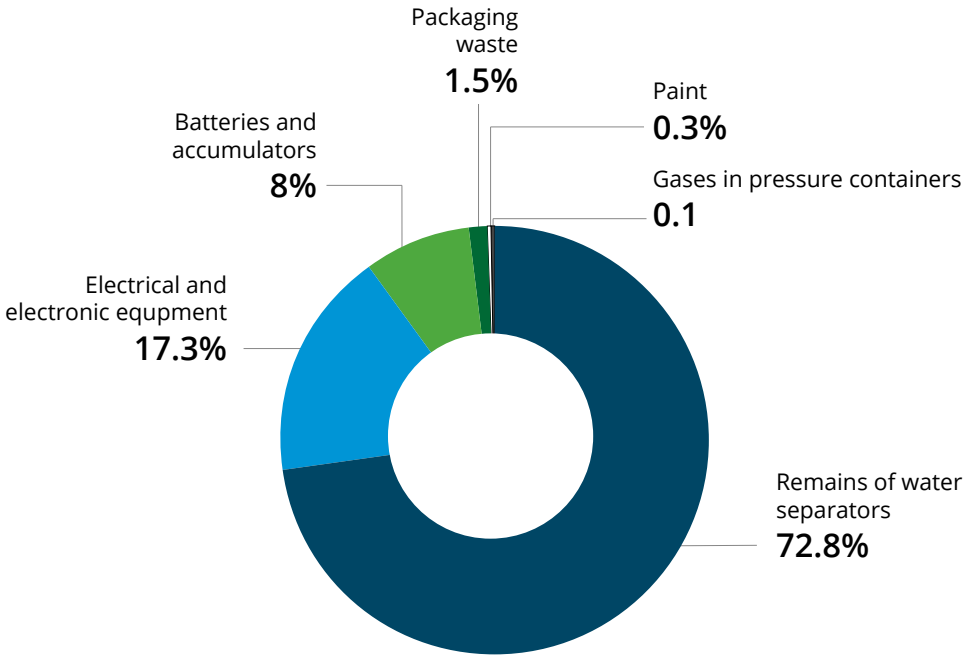
GENERATED DURING
INFRASTRUCTURE OPERATION
AND MAINTENANCE (T)



In 2020, waste was generated in six categories out of the 25 existing waste categories describing waste generation at Adif AV. The remains of hydrocarbon separators, electrical and electronic equipment and batteries and accumulators accounted for 98.11% of the total amount of hazardous waste generated in 2020, with the distribution by category shown below.

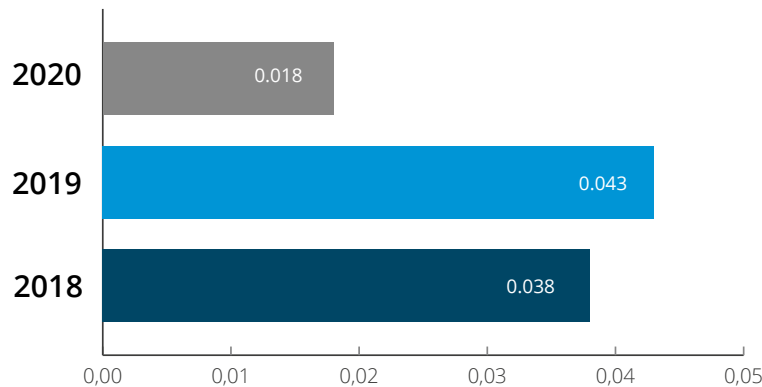


WASTE CATEGORIES



Due to the activities that Adif AV carries out, intensity of hazardous waste generation serves as an eco-efficiency indicator that measures the relationship between the growth of the business and the generation of hazardous waste. In 2020, the intensity of waste generation was 0.018 tonnes of waste/million train-km (PCB, asbestos and sanitary waste are not included in the calculation as they are not generated directly by Adif AV's own business activities).

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



As for the end destinations of hazardous waste, managers are selected to ensure the best available final treatment for each type of waste. As a second criterion, Adif AV insists that waste is collected by management companies located as close as possible to the storage centres, typically using collectors based in the same autonomous community as the generation centres. In 2020, the end destination of all the hazardous waste generated was recovery.

Commercial waste

Commercial and domestic waste is generated mainly at Adif AV stations as a result of passenger traffic and all the commercial and catering activities that take place at the establishments located there. This waste is usually collected by public cleaning or waste collection services.

Dumping and discharges

The most significant volume of wastewater is that deriving from the use of public bathrooms in train stations. At the busier stations, the sanitary wastewater is discharged to the public sewage network and sent to the corresponding treatment facilities. In the rest of the stations comprising the conventional network, work is underway to replace the existing cesspits with connections to the municipal sewage networks.

Circular Spain 2030. Spanish Circular Economy Strategy⁵

Adif and Adif AV lent their full support to the Ministry for Ecological Transition and the Demographic Challenge in drawing up the Spanish Circular Economy Strategy 2030, which was approved by the Spanish Cabinet in June 2020.

They also took part in defining the **I Circular Economy Action Plan for 2021-2023** which falls within the scope of the Strategy, by contributing six initiatives in the following realms: Consumption, Waste Management, Secondary Raw Materials Market and Employment and Training.

The following **projects** were ultimately selected to form part of the Action Plan:

- Drawing up a **Catalogue of environmental and social criteria** for railway infrastructure to facilitate its incorporation into procurement processes so that Adif and Adif AV can champion the principles enshrined in the Circular Economy and Green Public Procurement in a horizontal and cross-cutting manner.
- **"Ecomilla" project**, which seeks to promote sustainable mobility in urban environments by facilitating door-to-door travel (from start point to railway station and from there to destination) through an efficient mode of transport with zero or very low emissions.
- **Efficient management of surplus land from railway infrastructure work** to allow for the environmental recovery of degraded environments or their reuse in other construction projects.

⁵ Information common to both Companies: Adif and Adif AV.

- **Measures to improve the reuse of topsoil on construction sites for landscape restoration and integration** following the impact of railway work.
- Promoting the **use of sustainable materials and management techniques** at railway stations.
- **Comprehensive programme for the social recovery of disused railway assets**, to generate value through entrepreneurship or public service projects.



5.5.6. BIODIVERSITY PROTECTION

As part of its environmental management effort, Adif AV prioritises biodiversity protection on account of the large expanses of land devoted to the network and facilities managed by AV Adif. The operational rail network spans 3,568 km in total and occupies an area of approximately 11,418 ha, implying an area of influence of an estimated 33,052 ha.

Based on 2005 data, the last year for which this information is available, 11.11% of the rail network (in length) managed by Adif and Adif AV affected nature protection areas or other areas with some form of environmental protection order.

In order to comply with prevailing legislation with respect to biodiversity, the Company ensures that all of its construction projects and activities meet the requirements stipulated in its environmental impact statements (EISs).

Environmental review reports

In 2020, Adif AV carried out **207 environmental review reports**, including **18 environmental adjustment reports**, in accordance with prevailing environmental legislation.

In relation to the environmental management of its construction projects, in 2020 Adif AV drew up a total of **190 environmental monitoring reports** on projects not subject to an EIS and **412 periodic regulatory reports on environmental monitoring** of construction projects subject to an EIS.

Plan for the prevention of fire on or in the vicinity of tracks

The measures designed to prevent forest fire hazards are set down in a nationwide **Plan for the prevention of fire in or in the vicinity of tracks**. That Plan, drawn up in keeping with fire prevention regulations, identifies risk factors, risk areas and preventive and corrective actions; it also makes recommendations for pruning and welding operations and working with hot axle detectors.

Since 2006 Adif AV has been entering into collaboration agreements with the regional governments covering the joint development of prevention plans and the extinction of forest fires, as necessary, in areas close to rail platforms, all of which framed by the above Plan.

Under those agreements, the Company undertakes to roll out so-called self-protection plans designed to safeguard and conserve the facilities it owns and prevent the foreseeable consequences of possible fires in forested areas or within town limits.

Irrespective of the measures adopted by Adif AV, the railways, drivers and traffic management all play effective roles not only in detecting but also extinguishing forest fires close to its infrastructure.

The railway routes themselves serve as firewalls while rail staff can often spot fires early on, raising the alarm through the command centres and Adif AV's 24H Network Management Centre to the various fire-fighters in the various jurisdictions.



/ KEY FIRE PREVENTION MEASURES AND ACTIONS

- Control over the train braking systems.
- Surveillance of track work involving ignition sources.
- Regular surveillance that the train axle temperature detectors are working properly, that their path through the trains is clear and protocol in the event of alarms.
- Chemical and mechanical clearing of vegetation and other rubbish from the sides of the tracks.
- Surveillance of trains when going through the stations to determine whether there are any anomalies..

In 2020, there were no fires along the sides of tracks in the high-speed network caused by facility faults or line maintenance work.

	2018	2019	2020
Resources earmarked for fire prevention (€)	1,027,737	2,230,719	2,897,854
Fires	0	0	0

Environmental management indicators for design and construction

/ ON INFRASTRUCTURE PROJECTS

The Ministry of Transport, Mobility and Urban Agenda has delegated the power to approve the projects mandated to Adif AV in the state-owned enterprise's Chairperson's Office. As set down in Adif AV's charter, the Company has to supervise the projects it approves and to certify compliance with the corresponding environmental impact statements or reports, as warranted.

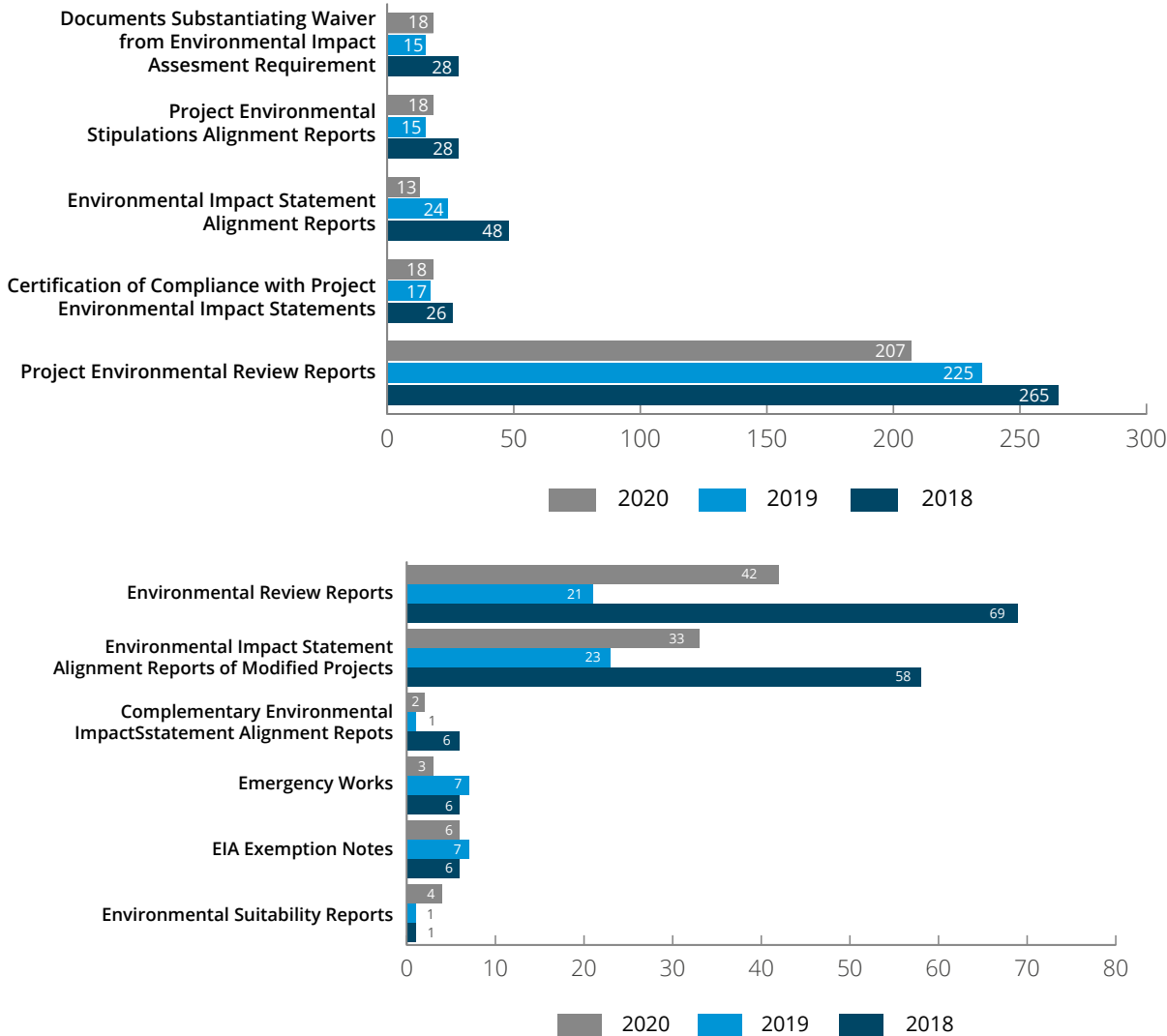
Adif AV, in its capacity as decision-making body for the purposes of environmental impact assessment legislation, plays a crucial role in ensuring that rail infrastructure is compliant at the planning and execution stages. As a result, all projects' environmental integration specifications are supervised to ensure compliance with the terms of prevailing environmental laws and regulations and Adif AV's own internal recommendations.

The following diagram shows the trend in project-related environmental management indicators over the last three years:

DESIGN PHASE

CONSTRUCTION PHASE

COMPLIANCE WITH ENVIRONMENTAL LEGISLATION

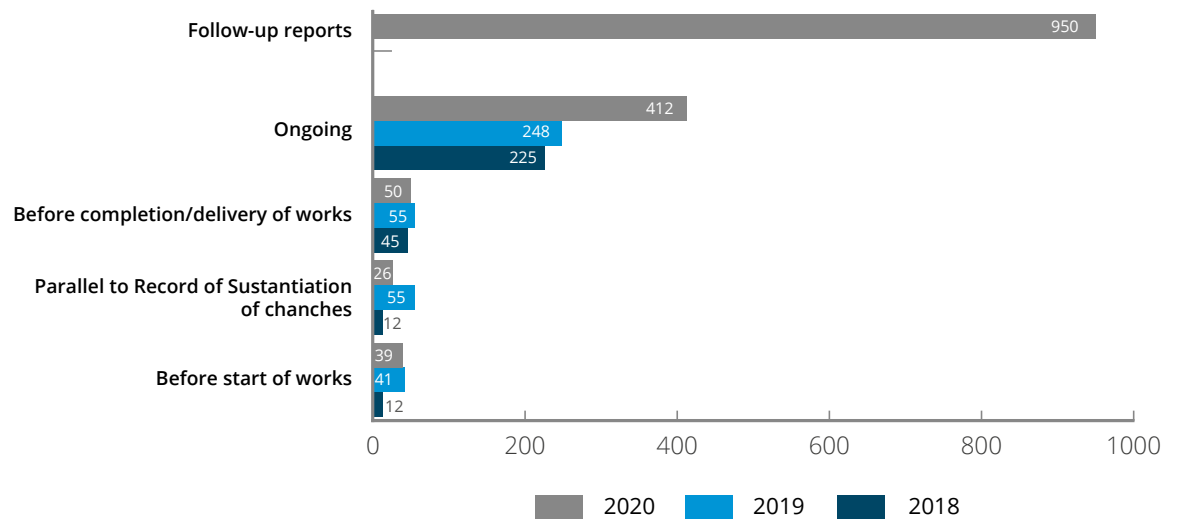


/ ENVIRONMENTAL MONITORING OF CONSTRUCTION WORK

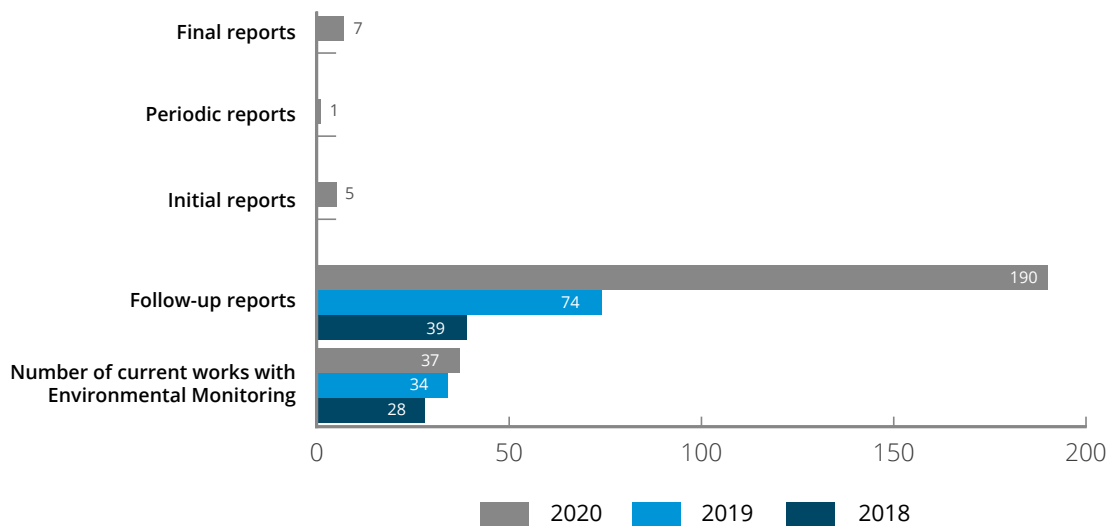
Since 2005, the Company has closely monitored all construction work subject to an EIS through its Environmental Site Managers. Since mid-2018 there has been increased environmental monitoring of maintenance work on the high-speed network not subject to an EIS through the Environmental Site Supervisors.

The following diagram shows the trend in construction-related environmental management indicators over the last three years:

REGULATORY REPORTS RELATED WITH ENVIRONMENTAL OVERSIGHT OF WORKS WITH ENVIRONMENTAL IMPACT STATEMENT



ENVIRONMENTAL MONITORING OF WORKS NOT REQUIRED TO ISSUE AN ENVIRONMENTAL IMPACT STATEMENT



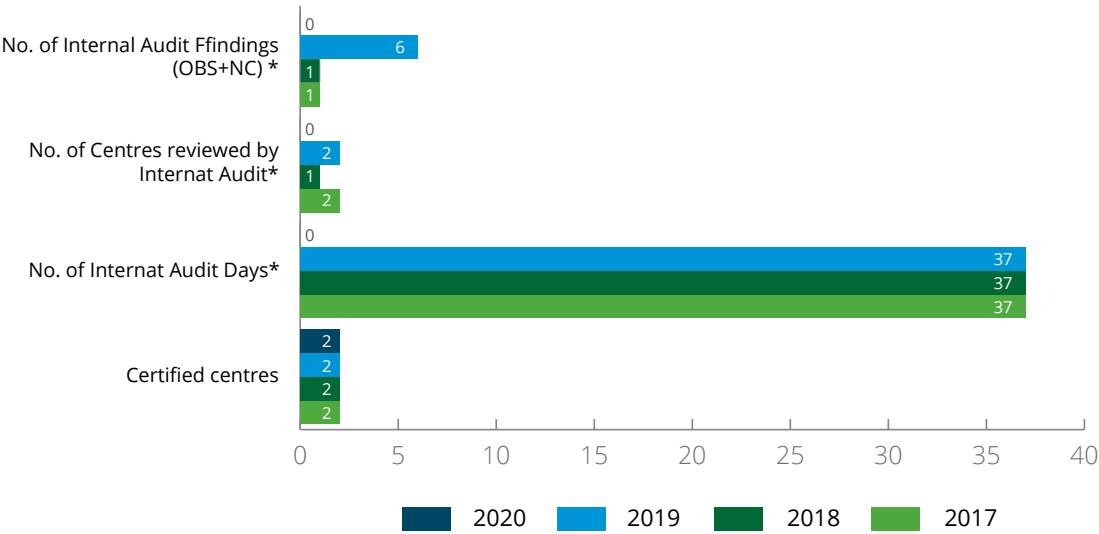
/ IN RAILWAY OPERATION

Delivering on commitments to continuous environmental improvement, based on the implementation, certification and regular auditing of management systems under ISO 14001 – Environmental Management, is a key point of Adif AV's Environmental Policy. This certification requires Adif AV to incorporate environmental concerns into its management model and the scope of the system covers the vast majority of operational activities carried out across the territory in relation to the maintenance and operation of railway infrastructure.

Adif AV's Management System undergoes continuous improvement and coordination in accordance with UNE-EN ISO 14001 by continuously reviewing the adequacy of documentation, analysing environmental concerns as they arise, regularly checking compliance with environmental legal requirements, periodically verifying the degree of implementation of the management system through internal audits, and increasing the scope of the certification process. Changes in the scope of certification at Adif AV in recent years are as follows:



CHANGES IN SCOPE OF CERTIFICATION



* The internal audit for 2020 has been transferred to 2021.

	2018	2019	2020
Percentage of passengers at stations certified under environmental management standard ISO 14001 in respect of total passengers at Adif AV stations	46%*	59.3%*	58.6*

(*) At stations managed by the Corporate Business and Commercial Operations Department.



5.6. The Team



For Adif AV, its employees are people first and employees second. With that premise in mind, it works to provide its team with an attractive environment in which to develop their careers, including the ability to achieve work-life balance. The basic management principles are the provision of equal opportunities, transparency and workplace health and safety.

/ PUBLIC EMPLOYMENT TENDER

The Call for Jobs in the Public Sector was announced in 2020. A total of 327 applications were received and are currently being processed as at the date of this report. The aim is to cover three openings with this call.

A further five positions were announced as part of an inter-government calls for applications, attracting a total of 24 applications.

/ INTERNAL MOBILITY

In 2020, the final decisions were cast in relation to the call for applications under the 2019 global internal mobility process.

Adif AV workers took part in this process alongside Adif workers as both groups were eligible for all the positions. More precisely, a total of 20 vacancies were awarded at Adif AV. Of these awards, three were for operational staff in three different categories, 11 for technical staff in seven different posts and six for technicians.

Adif AV is presently carrying out the 2020 global internal mobility process. Adif and Adif AV workers alike are taking part in the process as both groups are eligible for all the positions.

A total of 71 Adif AV workers have submitted 86 applications between them.

/ PARTIAL RETIREMENT

In 2020, four workers took partial retirement, involving a 75% reduction in their working hours.

5.6.1. EMPLOYEES

As set down explicitly in its strategic objectives, people management is a core aspect of the Company's activity. Adif AV believes that its employees' satisfaction, productivity, talent and engagement is key to delivery of the Mission, Vision and Values defined in its 2020 Transformation Plan. At 31 December 2020, Adif AV had 218 employees, broken down as follows:

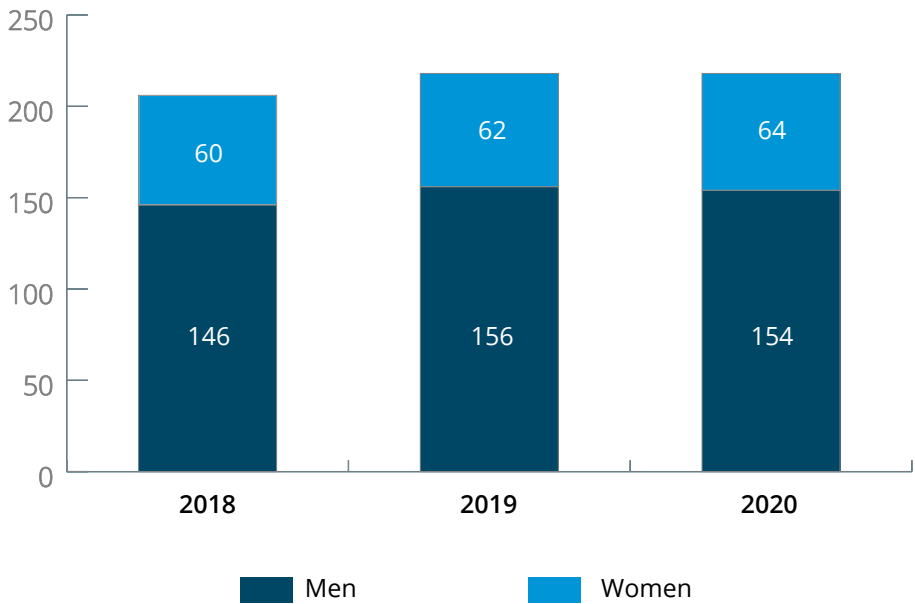
MANAGEMENT AREA	Men	Women	Total
HS Construction	116	52	168
Telecommunications	27	9	36
Electricity	6	2	8
Rail Traffic Safety	4	1	5
Corporate Centre and General Services	1	-	1
TOTAL	154	64	218



In 2020, Adif AV's workforce was made up of **218 employees**, the same as in 2019.

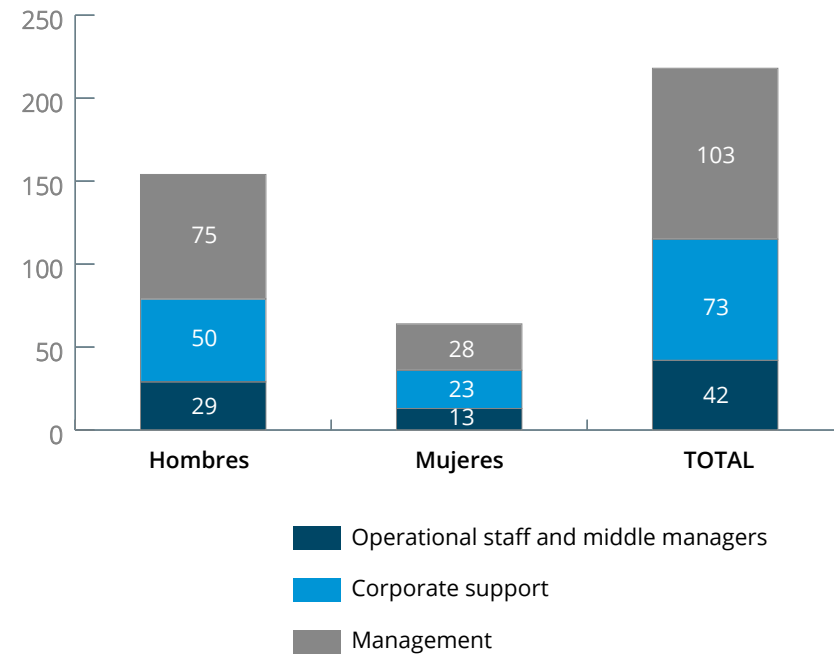
TREND IN HEADCOUNT BY GENDER

The trend in the headcount by gender during the last three years is as follows:



BREAKDOWN OF HEADCOUNT BY JOB CATEGORY 2020

The breakdown of the headcount by job category is provided below:



95.87% of employees have a **permanent contract** and **88.88%** work on a **full-time basis**.



Some 19.26% are operational staff and middle management, while 80.74% belong to the support and management structure.

Women account for 29.36% of the total workforce, slightly higher than in 2019.

By age and length of service, the headcount breaks down as follows:

AGE	Men	Women	Total
Up to 35	4.59%	0.46%	5.05%
Between 36 and 50	40.82%	18.81%	59.63%
Over 50	25.23%	10.09%	35.32%

LENGTH OF SERVICE (YEARS)	Men	Women	Totales
Between 0 and 11	23.39%	8.72%	32.11%
Between 12 and 19	29.82%	14.22%	44.04%
Between 20 and 27	4.59%	2.75%	7.34%
Between 28 and 35	2.75%	1.83%	4.58%
Over 35	10.09%	1.84%	11.93%

Adif AV's employees are **located** throughout mainland Spain:

AUTONOMOUS REGION	TOTAL	MEN	WOMEN
GRANADA	3	2	1
MÁLAGA	3	3	0
SEVILLE	9	7	2
ANDALUSIA	15	12	3

AUTONOMOUS REGION	TOTAL	MEN	WOMEN
CUENCA	1	1	0
CASTILE-LA MANCHA	1	1	0
LEÓN	7	6	1
VALLADOLID	3	2	1
CASTILE AND LEÓN	10	8	2
BARCELONA	8	6	2
CATALONIA	8	6	2
BADAJOS	1	1	0
CÁCERES	1	1	0
EXTREMADURA	2	2	0
MADRID	168	114	54
AUTONOMOUS REGION OF MADRID	168	114	54
MURCIA	7	6	1
MURCIA	7	6	1
BISCAY	3	1	2
BASQUE COUNTRY	3	1	2
ALICANTE	2	2	0
VALENCIA	2	2	0
VALENCIAN COMMUNITY	4	4	0
TOTAL	218	154	64

NON-FINANCIAL INFORMATION (LAW 11/2018 OF 28 DECEMBER)	DESCRIPTIVE TEXT	OUTCOME / IMPACT INDICATORS				
		Quantitative figures				
		Description of indicator	Unit	2018	2019	2020
SOCIAL AND EMPLOYEE-RELATED MATTERS	Distribution of employees by professional category.	Operating staff and middle management	No. of workers	30	43	42
		Support structure	No. of workers	69	63	73
		Management structure	No. of workers	107	112	103
	Measures the degree of retention and attraction of management personnel. Useful for achieving strategic management at the Company.	Manager retention rate	(Hires + Departures)*100/2) / Average number of employees without counting staff engaged in ticket sales activity, which was transferred to the RENFE Group in 2017.	0.25	1.87	0.54
	Measures the turnover rate of the workforce, regardless of the employee's role	Workforce retention rate	(Hires + Departures)*100/2) / Average number of employees without counting staff engaged in ticket sales activity, which was transferred to the RENFE Group in 2017.	3.64	7.11	17.24
	New hires	New employees (Public Sector Job Openings)	Workforce growth in the period (no. of additional workers)	0	8	5
	Collective bargaining	Collective bargaining	No. of collective agreements in effect	1	1	1
		Employees covered by collective agreement	% of employees covered by collective bargaining	48.06	50.96	52.75

Adif AV fosters and promotes stable and quality employment among its employees. As a result, almost all employees have permanent, full-time contracts. The breakdown of contracts among the workforce by gender, age and professional category is as follows:

EMPLOYMENT CONTRACTS BY TYPE	2020
Permanent	209
Temporary	9
Part-time	7
TOTAL	218

Gender	PERMANENT	TEMPORARY	PART TIME	TOTAL
Men	146	8	6	154
Women	63	1	1	64
TOTAL	209	9	7	218

AGE	PERMANENT	TEMPORARY	PART TIME	TOTAL
Up to 35	6	5	0	11
Between 36 and 50	127	3	1	130
Over 50	76	1	6	77
TOTAL	209	9	7	218

JOB CATEGORY	PERMANENT	TEMPORARY	PART TIME	TOTAL
Management	103	0	4	103
Corporate support	73	0	1	73
Middle management	26	1	2	27
Operational	7	8	0	15
TOTAL	209	9	7	218

The **average annual number of permanent, temporary and part-time contracts by gender, age and job category** is as follows:

2020		<51 YEARS OF AGE		>50 YEARS OF AGE		TOTAL 2020	
Job category	Contract Type	Men	Women	Men	Women	Men	Women
Operational	Permanent	0.08		2.00	5.00	2.08	5.00
Operational	Permanent, part-time						
Operational	Temporary	8.00	1.50	1.25		9.25	1.50
MM	Permanent	16.17	2.00	3.25	5.42	19.42	7.42
MM	Permanent, part-time			0.33		0.33	0.00
MM	Temporary, part-time	1.25			0.33	1.25	0.33
Support	Permanent	26.33	17.17	18.75	3.00	45.08	20.17
Support	Permanent, part-time			0.08		0.08	0.00
Management	Permanent	34.75	18.42	39.67	10.25	72.42	28.67
Management	Permanent, part-time			2.42	0.08	2.42	0.08
TOTAL		86.58	39.08	67.75	24.08	154.33	63.17

2019		<51 YEARS OF AGE		>51 YEARS OF AGE		TOTAL 2020	
Job category	Contract type	Men	Women	Men	Women	Men	Women
Operational	Permanent			2.00	5.00	2.00	5.00
Operational	Permanent, part-time			0.58		0.58	0.00
Operational	Temporary	0.50				0.50	0.00
MM	Permanent	12.50	1.00	5.00	5.58	17.50	6.58
MM	Permanent, part-time			1.00		1.00	0.00
MM	Temporary, part-time	2.92			1.00	2.92	1.00
Support	Permanent	25.42	17.58	20.75	3.00	46.17	20.58
Support	Permanent, part-time					0.00	0.00
Management	Permanent	33.75	17.42	45.08	10.00	78.83	27.42
Management	Permanent, part-time			2.92		2.92	0.00
TOTAL		75.08	36.00	77.33	24.58	152.42	60.58

In 2020, **average remuneration by job category and gender** was as follows:

AVERAGE REMUNERATION BY JOB CATEGORY		
MANAGEMENT	AVERAGE WAGE	GENDER PAY GAP*
WOMEN	59,160.04	7.81%
MEN	64,173.21	
CORPORATE SUPPORT	AVERAGE WAGE	GENDER PAY GAP*
WOMEN	51,906.51	-5.05%
MEN	49,409.29	
MIDDLE MANAGEMENT	AVERAGE WAGE	GENDER PAY GAP*
WOMEN	33,835.25	-5.18%
MEN	32,169.03	
OPERATIONAL	AVERAGE WAGE	GENDER PAY GAP*
WOMEN	31,152.35	-20.37%
MEN	25,879.55	

(*) Calculate as:
$$\frac{\text{Average remuneration of men} - \text{Average remuneration of women}}{\text{Average remuneration of men}} \times 100$$

AVERAGE REMUNERATION BY AGE	Men	Women
Up to 35	26,257.64	23,487.27
Between 36 and 50	47,763.69	48,474.45
Over 50	54,114.09	44,810.42

The labour legislation and pay tables applied by Adif AV rule out any manner of gender discrimination. The difference in the average remuneration between men and women is attributable to the later incorporation of women into the workforce, a phenomenon that affects Adif and Adif AV in particular. As a result, the gender pay gap will foreseeably narrow in the coming years, with the average pay received by male and female employees converging.

Pursuant to Article 21 of Royal Decree 1044/2013 of 27 December 2013, which enacted the Company's charter, the members of the Board of Directors receive no remuneration in the form of attendance fees for attending board meetings or for any other concept or item.

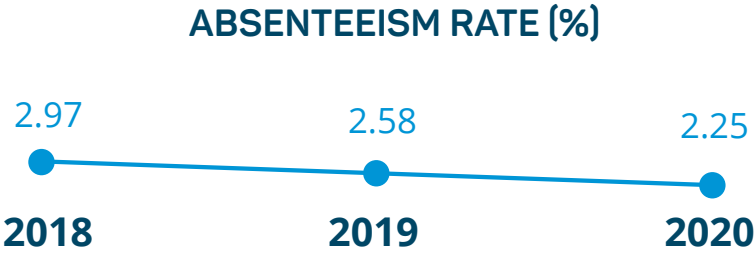
When it comes to integrating people with disabilities, 0.46% of Adif AV's workforce had some kind of disability in 2020 (one employee), the same as in 2019.

There were no employee redundancies at Adif AV in 2020, as in 2019.

5.6.2. ORGANISATION OF WORK

The collective bargaining agreement of Adif and Adif AV stipulates the number of hours to be worked during the year. There are different timetables and shifts depending on the position and work to be performed.

In 2020, absenteeism, measured as the percentage of absences over the theoretic number of working days, was 2.25% (9,789 hours), which was down 0.33% from 2019. The trend in absenteeism during the last three years is shown below:



/ INCENTIVES AND COMPANY BENEFITS

In addition to variable remuneration pegged to different targets to be met by the people working in the company (transversal personal, contribution to the team and skillset), Adif AV provides employees covered by the collective agreement with a wide range of benefits to help them balance their work and personal life, plus a variety of non-remunerative perks and benefits, such as:

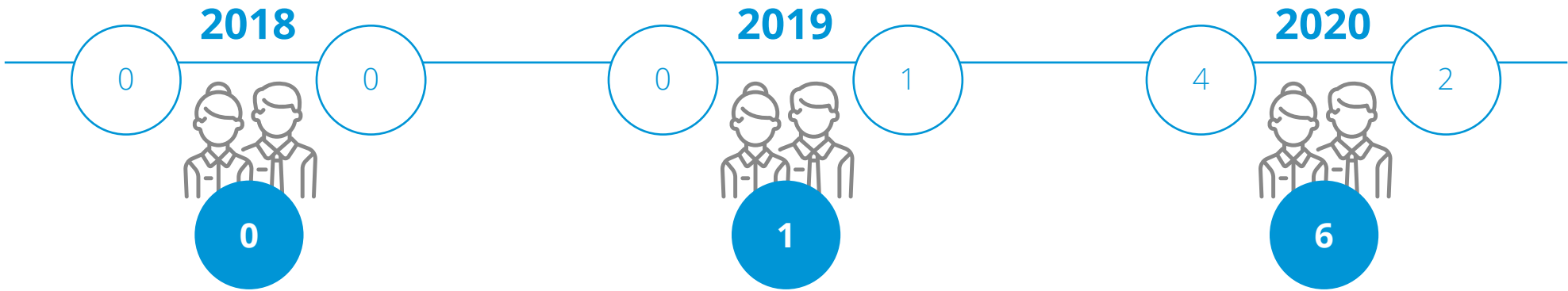
- **Health promotion:** medical check-ups, preventive medicine campaigns, financial aid towards extraordinary medical expenses, vaccination campaigns, further remuneration for temporary incapacity from work to complement minimum Social Security payments, support for drug and alcohol addiction, etc.
- **Life insurance.**
- **Transport cards** for free travel on commuter and regional trains and reduced rates for major and high-speed lines.
- **Aid for children with disabilities.**
- **Ex-gratia aid and assistance for temporary disability.**
- **Death benefits.**
- **Advance payments:** up to 3 months' pay.
- **Legal protection:** in the event of rail accidents in which criminal liability could be determined.
- **Family placement and guardianship for legally incompetent adults.**
- **Common-law partners:** entitled to same benefits as married couples, regardless of their sexual orientation.
- **Movement to new jobs** upon loss of function.
- **Job mobility** so as to reunite with spouse or life partner.
- **Service benefits and/or discounts:** banking, leisure, travel, housing, etc.
- **Job announcement board.**



Employees who have taken maternity leave



Employees who have taken paternity leave



The new indicators of the I Adif AV Equality Plan include figures on leave taken following the birth of a child.





5.6.3. LABOUR RELATIONS

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

- **Work Council and Staff Delegates:** Works Council in Madrid and staff delegates located in Seville, León and Barcelona. The council holds bimonthly meetings with management to discuss matters that fall within its territorial remit.
- **Health and Safety Committee:** management-employee body for all matters relating to workplace health and safety.
- **Traffic Safety Committee:** consultation body that deals with technical aspects related with traffic safety; they also approve plans and track specific indices.
- **Training Advisory Board:** tasked with drawing up and monitoring the Adif AV Training Plan.
- **Benefits Policy and Equality Committee:** this body manages and monitors Company benefits in depth, recommends lines of initiative and manages the tracking of the key performance indicators related with equal opportunities and discrimination. In 2019 it approved Adif AV's first ever Equality Plan, which was then ratified unanimously by all members of the Bargaining Committee and published in the BOE (Official State Gazette).
- **Labour Disputes Committee:** this Committee mediates in and resolves conflicts arising in the interpretation and application of the collective bargaining agreement and when strike action is called.



The II Collective Agreement of Adif and Adif AV was signed on 9 May 2019.

The II Collective Bargaining Agreement runs from 1 January 2019 through to 31 December 2023, though it may be extended until 31 December 2025 if the parties agree.

The agreement includes, among other measures, those relating to flexible working hours, other employee matters, and equality and work-life balance, which go beyond the measures provided for under labour law and regulations. It also establishes various committees (employment, regulations, professional organisation, working hours and work-life balance) to work towards strategic aspects of the transformation, including the development of the new professional organisation model structured into professional groups as the Company seeks to adapt functions and operational environments to successfully overcome the challenges ahead.

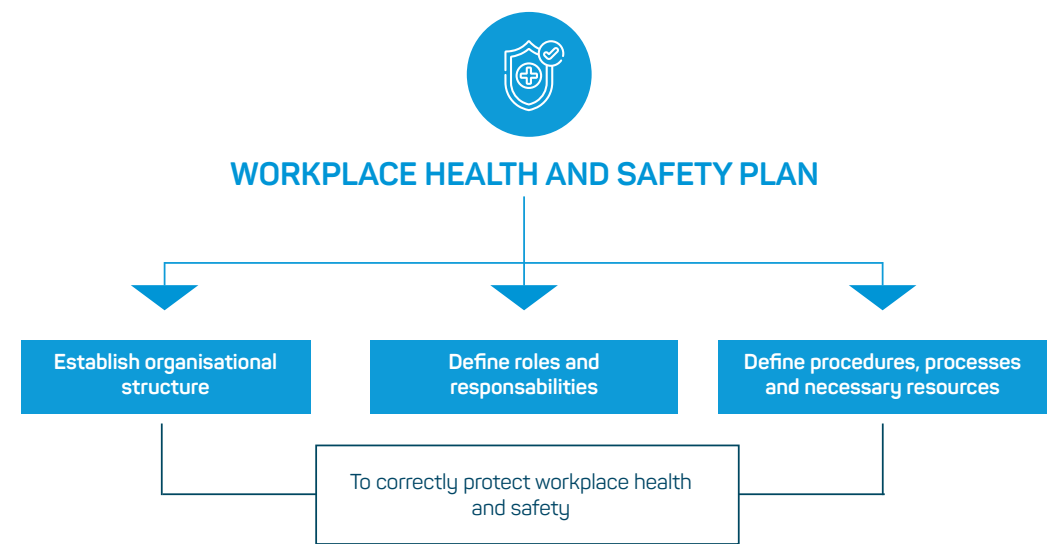


Employees are covered by
Collective Agreement

52.75%

5.6.4. WORKPLACE HEALTH AND SAFETY

As stipulated in article 16 of Spanish Law 31/1995, on occupational safety, Adif AV has a dedicated Workplace Health and Safety Plan.



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

OBJETIVES OF THE HEALTH AND SAFETY PLANNING EFFORT

-  Continuous improvement of work conditions
-  Integration of health and safety criteria across all activities and at all levels
-  Organisation-wide commitment to the safety management system
-  Encouraging employees to adopt preventive habits

The main lines of initiative pursued on the workplace health and safety front in 2020 were:

- Workplace safety training: 1,564 hours of training, compared to a planned 245 (post-COVID-19), implying a compliance ratio of 639.4%.
- A technical workshop on workplace health and safety.
- Internal audit programme: 2 scheduled audits were carried out.
- Health controls: Health check-ups and psychophysical tests. In 2020, Adif AV conducted 4 check-ups and 21 psychophysical tests. Seven medical campaigns and one vaccination campaign were also carried out.



There were no lost workdays due to commuting incidents, compared to one in 2019. Moreover, no fatalities were reported.

			ACCIDENTS	COMMUTING INCIDENTS	RELAPSES	OCCUPATIONAL DISEASES
2018	Men	Lost time	0	0	0	0
		No lost time	4	0	0	0
	Women	Lost time	0	0	0	0
		No lost time	0	1	0	0
	TOTAL	Lost time	0	0	0	0
		No lost time	4	1	0	0
2019	Men	Lost time	0	0	0	0
		No lost time	2	0	0	0
	Women	Lost time	0	1	0	0
		No lost time	2	0	0	0
	TOTAL	Lost time	0	1	0	0
		No lost time	4	0	0	0
2020	Men	Lost time	0	0	0	0
		No lost time	0	0	0	0
	Women	Lost time	0	0	0	0
		No lost time	0	0	0	0
	TOTAL	Lost time	0	0	0	0
		No lost time	0	0	0	0

		2018	2019	2020
Accident severity rate*	Men	0	0	0
	Women	0	0	0
	TOTAL	0	0	0
Accident frequency rate**	Men	0	0	0
	Women	0	0	0
	TOTAL	0	0	0
Work accident rate***	Men	0	0	0
	Women	0	0	0
	TOTAL	0	0	0

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

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

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

Accordingly, there were no lost workdays due to occupational accidents (no-commuting incidents) or occupational diseases.

		2018	2019	2020
Lost workdays due to occupational accidents or diseases*	Men	0	0	0
	Women	0	0	0
	TOTAL	0	0	0

In 2020, there were two meetings of Adif AV's Workplace Health and Safety Committee, the Company's highest management-employee body on matters relating to workplace health, safety and hygiene, which issues guidelines and instructions on related matters.

DESCRIPTION OF INDICATORS		UNIT	2018	2019	2020
Social and employee-related matters	Preventive medicine rate	% of employees participating in preventive medicine	21.62	20.42	3.22
	Social aid supplement	Amount (EUR) of social aid (for medical costs) by employee	2,472	793	0



5.6.5. TRAINING

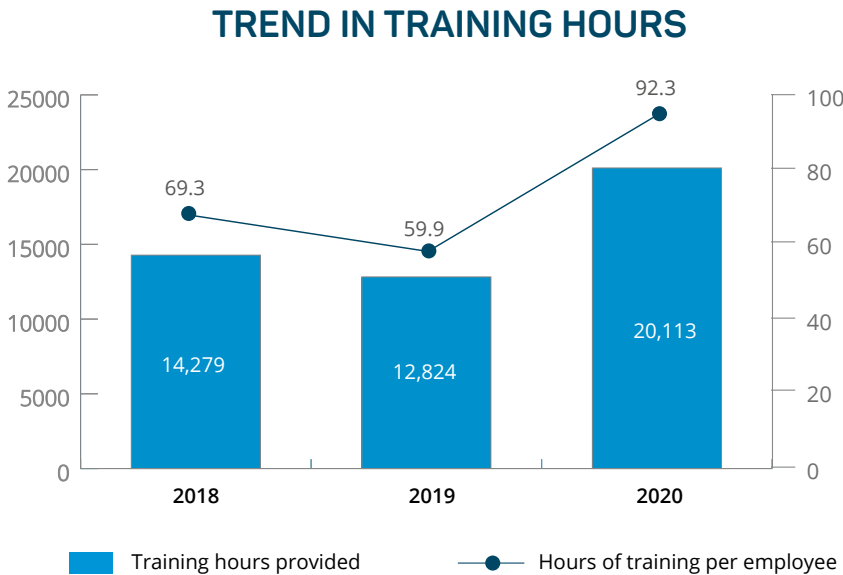
Adif AV views training as an activity that helps the various areas deliver their objectives. The Company's overriding goal when it comes to its training effort is to enhance its employees' professional and personal development so that they in turn contribute to its operational excellence. That training effort, in addition to focusing on processes and results delivery, attaches importance to engaging employees with the Company's key values, such as innovation, continuous improvement, excellence, social responsibility and sustainability, among others.

Training needs are identified jointly by all the areas of activity and the employees' legal representatives. Once those needs have been identified, an Annual Training Plan is drawn up to plan, detail and give shape to the training initiatives to be undertaken during the year ahead.

Under the annual Training Plan of Adif AV drawn up in 2020, each worker received an average of 92.3 training hours, giving a total of 20,113 training hours. The training programmes were articulated around the specific skills requirements in each business, framed at all times by the Company's Mission, Vision and Values.

In 2020, a total of **€3,082,230** was invested in training at Adif and Adif AV.

In 2020, each employee received 32.4 hours more training on average than in 2019, equivalent to **7,289 hours of additional training.**



Job category	Training hours 2018	Training hours 2019	Training hours 2020
Operational personnel	288	71	6,855
Middle management	675	2,727	3,724
Corporate support	7,057	4,750	4,583
Management	6,259	5,277	4,951
TOTAL	14,279	12,824	20,113

To manage the Training Plan efficiently, Adif AV uses a number of IT systems and applications connected up to the network which introduce continuous improvement. It also uses new methodologies and tools to render the training process more effective and efficient, such as simulators, videoconferencing and teletraining. Around 69% of the training provided uses distance methods over various platforms such as the Virtual Training Center, the Virtual Classroom, the Videoconference System and the TV Training Portal, among others. Use of these methods has been stepped up due to the impact of the COVID-19 pandemic, enabling the Company to continue its training activity.

5.6.6. TALENT MANAGEMENT AND CAREER DEVELOPMENT

Adif AV's staff selection processes are regulated in labor legislation for the employees covered by the collective bargaining agreement. In 2020, five people joined Adif AV under the recruitment process for jobs in the public sector. In addition, one person joined the Company through an inter-ministry call for applications.



The **employee turnover rate** increased in 2020 to 17.24 but was down at 0.54 for executive positions.

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

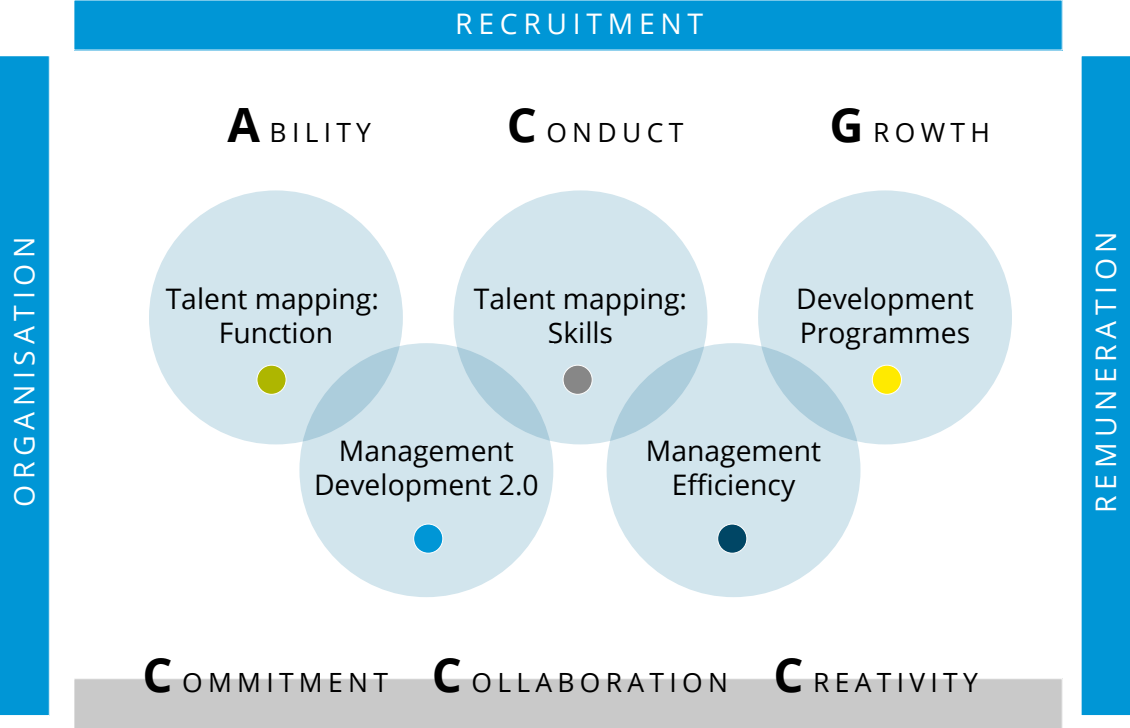
That model manages - systematically - the skills, conduct and growth of the organization's leaders, in a context presided by three Cs: Commitment (acting as ambassadors in respect of delivery of Adif AV's Mission, Vision and Values), Collaboration (as the priority force for improvement) and Creativity (to question and rethink existing paradigms).

Since its creation in 2013, a myriad of projects and activities have been undertaken under the umbrella of the programme. In order to reinforce the spirit underpinning the model and make it more powerful, an effort has been made to update its image, with a nod to the Olympic motto Citius altius fortius (faster, higher, stronger); the idea is to transmit the importance of improving continuously in order to overcome the unforeseeable developments that will inevitably cross our paths, recalling that there is always room to go further in pursuing the Mission, Vision and Values.



The **Leadership Model: 3C Directive Management** seeks to drive the performance of the organisation's leaders.

LEADERSHIP MODEL / 3C DIRECTIVE MANAGEMENT



In 2020, we continued to deploy the Skills Management Model - Digital Transformation, launched by the Human Resources Department in 2016 to align the skills in its catalogue with those demanded in the new era of digital transformation.



/ COMPETENCY CATALOGUE – DIGITAL TRANSFORMATION

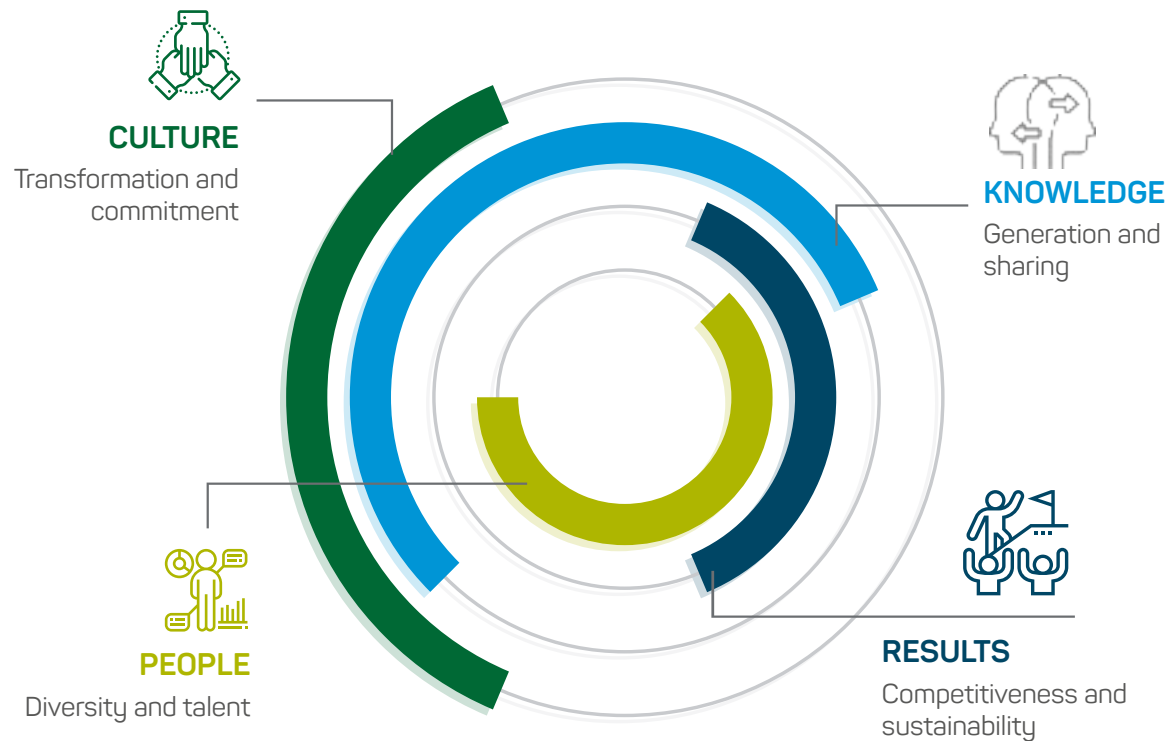
In 2016, Adif AV revised its skills catalogue, which had been in place since 2006, adding skills associated with digital transformation: agility, flexibility, collaboration and cooperation, efficiency, transparency, participation, speediness, etc.

The new catalogue, in effect in 2020, is articulated around four dimensions:

- **Knowledge:** it is not sufficient to acquire and maintain it; it is necessary to generate and share it, leveraging the opportunities afforded by today's information and communication technologies (ICTs).
- **Results:** competitiveness and sustainability underpin this dimension.

- **People:** the ability to manage diversity, which is increasingly broad, and talent, increasingly complex.
- **Culture:** commitment to embrace and transmit permanent and increasingly accelerated transformation that we are currently experiencing.

- As in the previous year, the Competency Catalogue – Transformation implemented the 360-Degree Feedback system of 2018 by offering different visions (one's own, one's boss's and that of colleagues and partners) on the performance of those being evaluated, thus allowing them to take stock of their strengths and opportunities, while uncovering aspects which with their own insight alone they might not have been able to pinpoint, facilitating continuous improvement and a culture of talent development.



Average Global Performance






In 2020, Average Global Performance at Adif AV came to 87.37%, as measured through 426 assessments (self-assessment and assessment by supervisor, peers and collaborators) conducted among 93 employees, accounting for over 43% of the workforce (reference workforce: 214).

The Company also continued to apply the Integrated Management by Objectives Model (MBO) in 2020. This model is based on three pillars (transparency, coherence and ease) to enable the development and deployment of company-wide and area-specific objectives to all staff subject to the Objectives System, thus improving levels of engagement among employees with the Company's key objectives. The senior management team is directly involved in formulating the Company's objectives, which are handled with full transparency for both evaluator and evaluatee.

As a result of this performance-based assessment and the Integrated Management by Objectives Model, the Company has continued to entrench its Management Development Community within the Conecta 3.0 platform, which generates its own content related to the development of competencies and fosters the exchange of knowledge and collective intelligence across the organisation.

TV TRAINING PORTAL

In keeping with the results of the performance evaluation exercise, work continued in 2020 to enhance Adif's video on demand TV training portal, which encourages learning, participation and recognition. Below is a description of each of the channels and the results obtained so far. The main takeaway was that the Hits Billboard, which shows the premières airing on each of the channels, reached 124,000 views in 2020.

	EXPERIENCIAS DE ÉXITO	EN PRIMERA PERSONA	EL CLUB DE LA GESTIÓN DIRECTIVA	MI DÍA EN ADIF	CARTELERA DE ÉXITOS	GOMINOLAS DE FORMACIÓN
	8 SEASONS	7 SEASONS	6 SEASONS	5 SEASONS	6 SEASONS	1 SEASON
	Professional circumstances or events experienced by the protagonists that led to successful outcomes (2013)	Management processes told by their protagonists (2014)	Humour in monologue format as a persuasive tool (2015)	Put a face to the day. A channel for universalising protagonism (2016)	The showcase, hosted on the corporate website, announcing the premiers of the various TV Training Portal channels (2015)	Training initiative to acquire personal, family, social and professional skills and knowledge (2020)
 Videos	228	36	29	28	616	56
 Events	56,363	4,727	6,525	7,007	123,791	4,599
 Comments	4,861	128	809	241	10,670	44
 Likes	7,391	106	941	347	15,189	39
 Average Rating	4.49 / 5	4.49 / 5	4.59 / 5	4.54 / 5	4.51 / 5	4.71 / 5



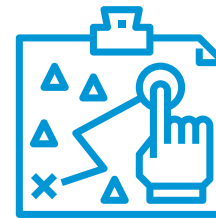
Lastly, in 2020, Adif AV pursued certain other noteworthy programmes, including:

/ COACHING IN PAIRS

Innovative talent honing practice aimed at unlocking the experience and management skills of people through professional support and accompaniment that is reinforced by self-knowledge and peer learning and ethical commitment, collaboration, trust and horizontality.

The programme was launched in 2015 and features three evolutionary training lines: L1

“Coaching in Pairs”, L2 “Coaching Community” and L3 “Internal Coaching”, the latter being the one that confers the professional qualification of “Internal Coach”. Adif’s Coaching programme is certified by the Spanish Association of Executive and Organisational Coaching (AECOP) and in 2019 Adif received the Honorary Award in the AECOP competition in recognition of its work in disseminating a Coaching Culture within the company. A total of 38 people took part in the 2020 programme, distributed across the three training lines. Between them, they carried out 16 development initiatives at different areas and departments of the company. They joined the six people who made up the Accredited Coaches Group and who delivered 15 individual coaching processes within the organisation.



/ HORIZON PROGRAMME

With the third and final stage of the PEOPLE WHO CHANGE THE COMPANY programme completed in 2020, a new training and development programme for Management Talent known as HORIZON was launched in 2020, as “a path leading to that point where the best professionals and the greatest achievements become one”. The aim is to further develop executive profiles over the 2020-2030 horizon.

Horizon is a programme that aims to assess leadership potential, improve conduct and unlock executive potential, thus enabling managers to develop and disseminate an effective management culture to successfully meet the challenges of the next decade.

The programme is divided into three levels: LEVEL I: Where am I? Helps one to take stock; LEVEL II: What am I like? Helps one get to know oneself better; and LEVEL III: What do I need to do? Pushes you in the right direction.

/ LEAVING A FOOTPRINT

In 2020, the third edition of the **Leaving a Footprint (Dejando Huella)** programme concluded, featuring 10 authors, and the fourth edition was launched, which will be completed in 2021. "Leaving a Mark" is a programme in which the organisation's veteran executives act as agents for the transmission of knowledge, experience, attitudes and corporate culture in three formats: something to read (a book recommendation), a story to tell (a Powerpoint presentation) and something to watch (a video).

AGENTS FOR THE TRANSMISSION OF KNOWLEDGE



MANUEL GÓMEZ I GRANADOS
Capacity technician



ÁNGEL LUIS RAMOS VILLAR
Head of Human Resources Management East



CARMEN GIMÉNEZ ROMOJARO
Head of Management Training.



TIMOTEO NOVILLO TORRES
Traffic Safety Manager. Centre.



JESÚS VEGA MARTÍNEZ
Traffic Safety Manager. North.



EDUARDO PERUCHA ESTÉBAN
Deputy Director for self-protection and emergencies.



FRANCISCO RECOVER LORENTE
Circulation Services Manager.



MIGUEL PUERTA MUÑOZ
Head of Administration.



JOSÉ MIGUEL GARCÍA SANZ
Head of the CSMS monitoring.



LUIS EUGENIO SUÁREZ ORDÓÑEZ
Deputy Director for Laboratory, Systems and Quality

/ EXTERNAL RECOGNITION

In 2020 Adif's name was put forward at the 13th edition of the Quality and Innovation in Public Management Awards organised by the Ministry of Territorial Policy and Civil Service.

The Company was competing in the Innovation in Management category, under the name of its franchise series, Experiencias de Éxito (Success Stories), in recognition of all the initiatives launched on the TV Training Portal since its inception seven years earlier. While it did not ultimately win the award, it did earn an evaluation report that recognised the value and worth of the initiative and provided useful guidance for further improvement.





5.6.7. EQUALITY

Adif AV has always demonstrated its interest in and commitment to participating in and undertaking initiatives in support of gender quality in the workplace, this being a stalwart principle of its people management effort.

The I Adif Collective Bargaining Agreement, which has been in effect at Adif AV since its inception, based on the job protection agreement on occasion of the split of Adif in accordance with Royal Decree 15/2013, marked a milestone in this respect by specifically addressing key issues such as work-life balance, hiring and training measures, the creation of a joint equal opportunities and non-discrimination committee, specific anti-domestic violence measures, diagnosis of the state of equality at the Company and negotiation and approval of the organisation's first Equality Plan.

The II Collective Bargaining Agreement of Adif and Adif AV has made further progress on these matters by setting up technical development committees on issues such as regulations, working hours and hours and work-life balance. The agreement also sets annual working hours at 1,642 hours on the basis of eight-hour days and increases death benefits, aid for disabled children and leave of absence to care for dependants. It also establishes a new system of leave

to care for relatives up to the second degree of consanguinity or affinity and provides unpaid leave of up to one month for the death of certain family members. Other measures include unpaid leave for assisted reproduction, teleworking arrangements, a new working hours regime and making the new equality plan part of the collective agreement once the terms have been agreed upon.

The I Adif AV Equality Plan was unanimously approved by the Company and all trade unions represented in the Social Policy and Equality Committee of Adif AV. It was then ratified unanimously by the Bargaining Committee of the II Collective Agreement and published in the Official State Gazette of 9 November 2019. The plan envisions multiple actions on the path to achieving various specific objectives: access to employment, equality, working conditions and professional career, training, information and awareness, working hours and work-life balance, remuneration and gender-based violence. The indicators for 2019 and the first half of 2020 are due to be presented and delivered to the trade union representatives sitting on the Social Policy and Equality Committee of Adif AV, although this process has been delayed somewhat due to the pandemic.



/ WORK-LIFE BALANCE MEASURES

Adif AV offers employees covered by the collective bargaining agreement work-life balance measures grouped into six categories:

General

- **Common-law partners:** common-law partners are afforded the same rights as married couples, regardless of their sexual orientation.
- **Flexible working hours:** new system of flexible working hours and decision to have all employees leave work by 18:00 at many of the company's facilities.
- **Reduction in working days:** agreement reached with the workers' representatives to reduce the number of working days by 10 in 2019 and 2020, in accordance with the provisions of Spain's 2018 state budget.
- **Part-time work.**
- **Paid leave:** for marriage (15 business days), death of family members (from two to six days), to fulfil an inexcusable duty of a public and personal nature, to move from the usual place of residence, unjustified personal matters (three days per working year). Following the signing of the II Collective Bargaining Agreement, the definition of family members has been widened to include the second degree of consanguinity or affinity.
- **Unpaid leave:** between six and ninety days in each calendar year.
- **Holiday leave:** thirty-five calendar days plus public holidays.
- **Voluntary leave:** between four months and five years.
- **Geographical mobility:** to reunite with a spouse or common-law partner and temporary mobility for medical reasons or social or family needs.



Specific

- **Maternity protection:** paid leave; change of job when job performance adversely affects the health of the mother and/or child; temporary suspension of employment contracts for at-risk pregnancies; redundancy protection.
- **Birth of a child/adoption/fostering:** shorter working hours; leave during hospitalization and ongoing treatment; paid absence or shorter hours in even of premature birth; paid leave of 2-3 days for birth of a child; extended paternity leave; breast-feeding leave; voluntary leaves of absence; geographic mobility; redundancy protection.

Care for family members

- **Leave for guardianship of legally incompetent adults.**
- **Shorter working hours** for legal guardianship or care of a family member.
- **Paid leave:** for serious illness or outpatient surgery. And extended unpaid leave upon the death of certain family members.
- **Leave to take care of a family member -** kinship up to the second degree of consanguinity or affinity.

Protection against gender-based violence

- Shorter working hours; leaves of absence; geographic mobility; substantiated absenteeism.

Training facilitation

- **Priority shift selection.**
- **Paid leave** to take exams leading to professional qualification.
- **Professional training** delivered by Adif AV.



As for work-life balance, the Equality Plan establishes the related initiatives created for and offered to Adif AV employees. All of the work-life balance measures on offer at Adif AV are set down in its rules of employment. Their content can be consulted by all employees via the employee Portal, Inicia.

/ PROMOTION OF GENDER EQUALITY


In 2020, Adif AV participated in a number of initiatives in favour of women at work and gender equality:

- Adif AV adheres to the Women's Empowerment Principles of the United Nations, thus demonstrating the Company's commitment to gender equality as an essential principle within its policies and corporate culture.
- Recently, the Company's Management Committee approved a programme of initiatives to be implemented next year in order to foster equality.
- Adif AV adheres to the first edition of the **Target Gender Equality** programme of the United Nations Global Compact. This initiative helps participating companies set and achieve ambitious business goals when it comes to women's representation and leadership, at all levels, through performance analysis, capacity building workshops, peer learning and multi-stakeholder dialogue at national level.

In addition, the Chairwoman of Adif and Adif AV, Isabel Pardo de Vera, participated in a number of events in 2020 designed to contribute to fostering gender equality in society:

- Participation in the LIDERA Programme, a mentoring initiative developed together with the Royal Academy of Engineering. Isabel Pardo de Vera sits on the Strategic Council of the Women and Engineering project, which is part of the same programme and seeks to recognise, activate and unlock the value of female talent.
- Participation in the first National Congress of Women Executives and Businesswomen of the Atlantic (EDA) in Oviedo.
- Participation in the magazine Magas-IN dedicated to the promotion of women, by El Español.
- Interview published in El Mundo newspaper. Mujeres Inspiradoras, with Gloria Lomana.
- Ceremony and new sculpture to pay tribute to women railway workers unveiled at Valencia-Joaquín Sorolla station, as part of the Women's Day celebrations.
- Invited to take part in the programme Ellas Pueden, dedicated to gender equality, on Radio 5 aired by RNE.
- Signing of a collaboration agreement with APRAMP to help combat trafficking in women and girls.
- Closing ceremony of the first edition of the LIDERA Programme.
- Participation in the forum Mujeres en Movimiento. Liderazgo femenino en el transporte y la sostenibilidad (Women on the Move. Female leadership in transport and sustainability), organised by 50&50 Gender Leadership, an organisation chaired by journalist Gloria Lomana and with the participation of top-level representatives from Metro de Madrid, Aena and Iberdrola España, to coincide with the 87th anniversary of women's suffrage in Spain.
- Participation in CEOE forum Mujeres Referentes (Inspirational Women), with the participants of the VIII Edition of the Promociona Mujer project, a joint initiative of the CEOE and the Women's Institute to encourage more women to reach senior management positions in companies.

In addition to championing gender equality, Adif AV is against any form of discrimination that could arise in the course of its business activities. Its Code of Ethics and Conduct stipulates that no employee may treat or permit the treatment of another person in a demeaning manner. All forms of conduct that imply contempt and/or harassment for reasons of gender, religion, ethnicity, race, nationality, illness, disability or any other personal, family or social circumstances are forbidden.



Adif AV has a **protocol outlining what to do in the event of possible sexual or psychological harassment**, (bullying), which was drafted with the agreement of all of its unions. There is also another **protocol dealing with what to do in the vent of workplace harassment**. Both protocols are currently under review.



5.7. Customer orientation

Adif AV works daily towards satisfying its customers' service needs and maintaining a collaborative relationship with them. In addition to rail service users, its external customers include rail operators, business customers and merchants and foreign governments.

Adif AV is particularly involved in fostering accessibility and service for people with disabilities as this is an area in which it can have a major impact on society. To that end it works continuously to make its infrastructure as accessible as possible for all of its customers.

5.7.1. CUSTOMER SATISFACTION

Adif AV has a number of channels for staying in constant communication with its users and other external customers. Its corporate website is the mostly widely used channel. Adif AV provides all of its stakeholders with comprehensive updated information about its activities via the website. As for direct customer channels, it has Customer Service Offices, and dedicated email addresses and telephone lines.

Depending on the customer category, Adif AV gathers feedback using different methods and uses it to establish mechanisms for improving the service it provides:

/ PASSENGERS

According to the results of the latest **study on quality perceived** by passenger station users, the stations have a **score of 7.76 out of 10**.

Adif uses that feedback to continuously improve different aspects of its stations with the aim of offering passengers better service standards. Work is therefore in progress to improve the accessibility of stations and to refurbish and waterproof certain stations, although in 2020 it was ultimately decided not to carry out any User Perceived Quality studies due to COVID-19.

DESCRIPTION OF INDICATORS		UNIT	2018	2019	2020
DISCLOSURES ON OUR PERFORMANCE WITHIN SOCIETY AND ON PRODUCT LIABILITY	Perceived quality at stations*	points/10	7.62	7.76	N/A
	Perceived quality in freight transport	points/10	7.3	N/A	N/A

* Customer satisfaction surveys at passenger stations: In 2019, the results of the study on Quality Perceived by Passenger Station Users were presented. No studies were carried out in 2020 to the exceptional situation caused by COVID-19.

/ RAIL OPERATORS

- **Regular contact:** Adif AV strives to find out what these customers think and expect first hand and to identify opportunities for improvement that are good for its business development.
- **Six-monthly satisfaction surveys:** about services provided.

/ MERCHANTS

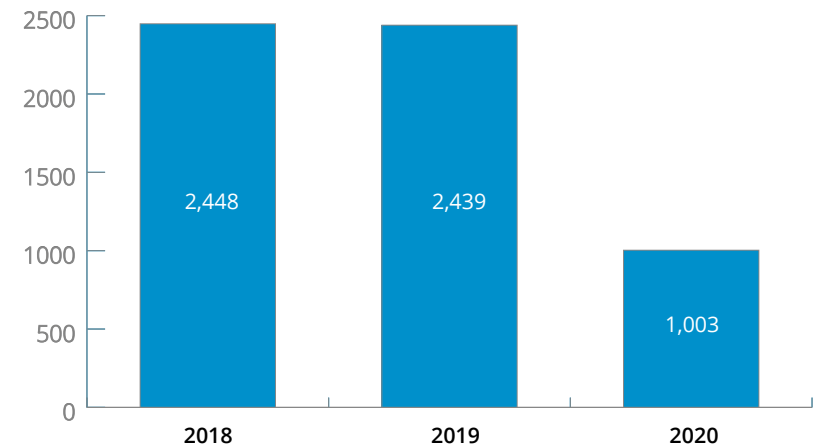
- **Satisfaction surveys:** no surveys were carried out in 2019 as they are biennial events. In 2018, a score of 7.07 was earned.
- **Management and galvanization of station store social media** handles (Facebook, Instagram, Twitter) where merchants collaborate by uploading promotional content and end users participate and engage with the sellers.
- **Annual prize for the best establishment** with a station or Vialia brand.

Adif and Adif AV run a grievances and suggestions service which facilitates communication with customers and helps them to understand their expectations and detect areas where management can be improved, while establishing a protocol for the correct handling of any incidents. It uses a dedicated IT tool to manage all cases (RECLAMA). Users receive responses either in writing at their mailing addresses or via email. In addition, the stations themselves have a book of complaints where users can put their complaints on record.

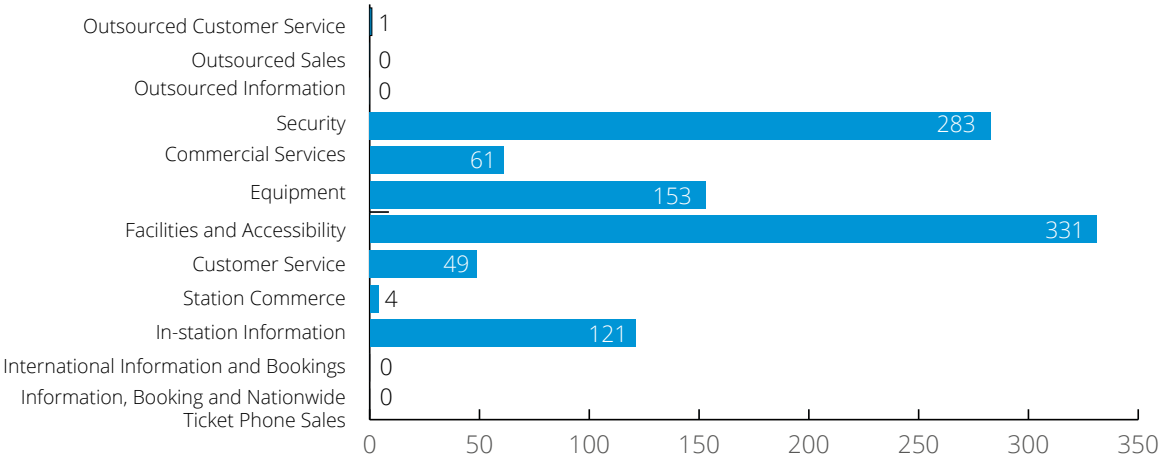
The complaints, claims and suggestions related with potential violations of legal or other requirements, incidents or deviations help Adif AV reach out to its customers, learn more about their expectations and detect ways in which it can manage its stations better. Complaints and claims can be lodged directly at the Passenger Service Offices and are sometimes received by email.

In 2020, a total of 1,003 complaints concerning Adif and Adif AV stations were resolved, while 87 suggestions and 20 compliments were received. This information enables Adif AV to identify possible areas for improvement in a bid to boost customer satisfaction.

COMPLAINTS RECEIVED IN PASSENGER STATION

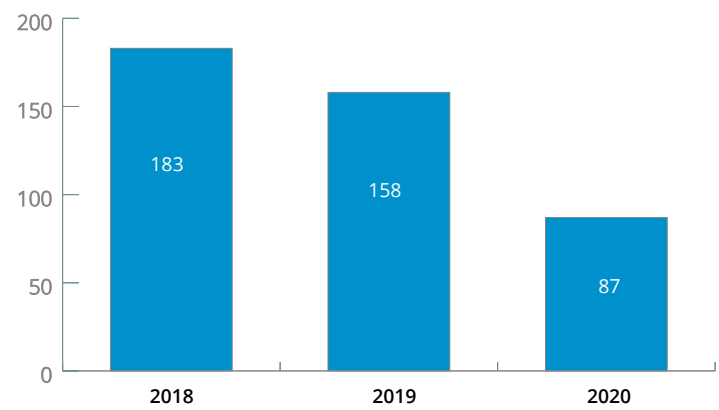


COMPLAINTS RECEIVED BY TOPIC

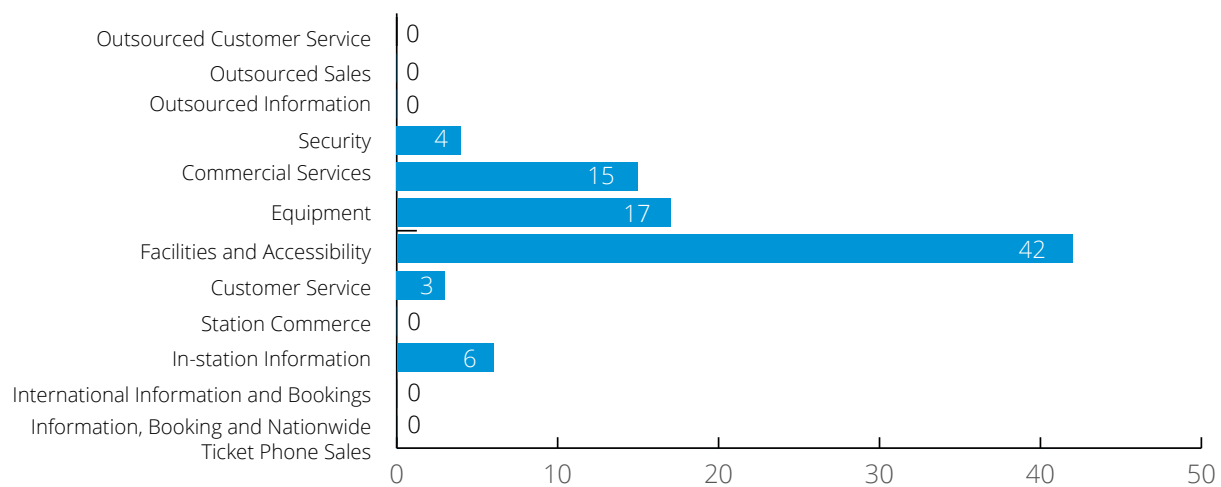


The number of **claim and complaints decreased by 58.88% year-on-year** in 2020. The complaints were most commonly related with the state of facilities and accessibility. This significant decline was due to the impact of COVID-19 on the number of passengers travelling through the stations.

SUGGESTION RECEIVED IN PASSENGER STATIONS



SUGGESTIONS RECEIVED BY TOPIC



5.7.2. ACCESSIBILITY

The strategic objective of social cohesion in the 2030 Strategic Plan encompasses all the improvements contemplated on the station accessibility front. Indeed, accessibility is a top priority social challenge at AV Adif. The goal is to gradually improve accessibility at the stations they manage, eliminating any barriers that could imply discrimination in the use of rail transport.

Along these lines, both Adif and Adif AV continue to deploy and work towards annual action plans with the ultimate aim of ensuring a transport system rooted in equality, dignity, maximum autonomy, comfort and safety, which is accessible and does not raise barriers for people with disabilities.

From 2018 to March 2020, Adif/Adif AV has co-led, together with Renfe, the design of the 2020-2028 Accessibility Master Plan for the Spanish Railway System, known as Plan Accede 360, which was drawn up in pursuit of Line of Action 6 – Universal Accessibility to Infrastructure and Transport, within Axis 1 – Mobility Strategy, which in turn falls within the Safe, Sustainable and Connected Mobility Strategy for Transport, promoted by the Ministry of Transport, Mobility and the Urban Agenda in line with the 2030 Sustainable Development Agenda.

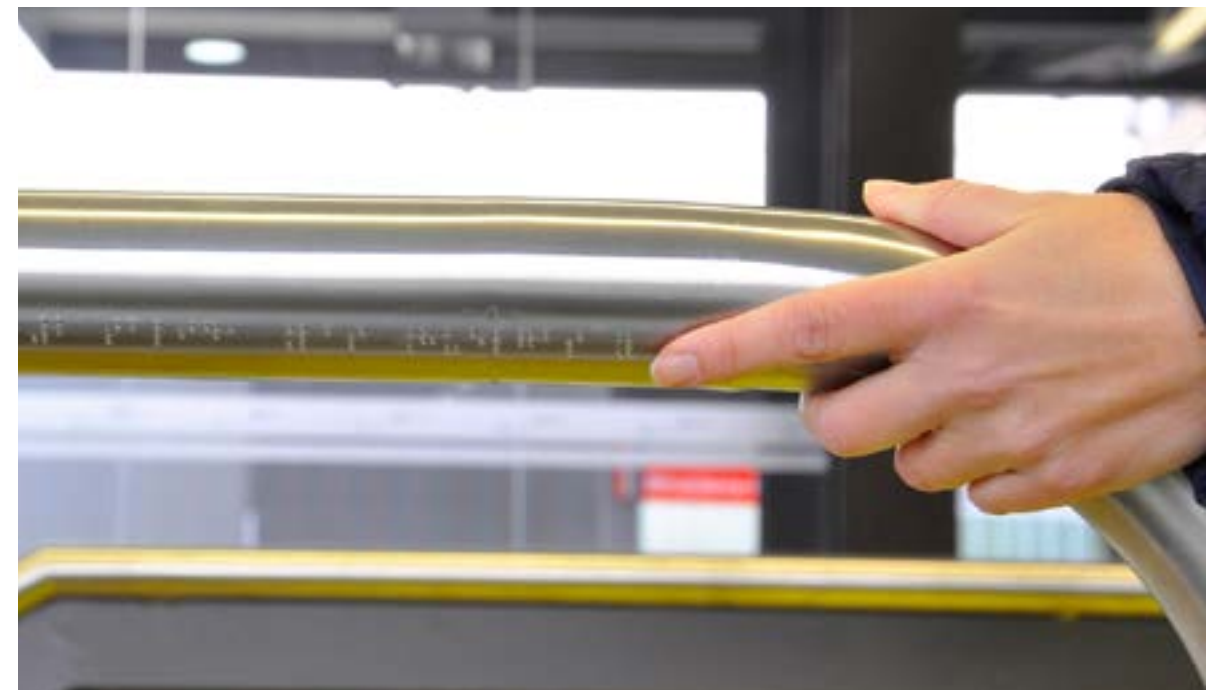
As this plan largely coincided with the liberalisation of passenger transport in late 2020, it was decided not to continue with it as it ran the risk of violating the criteria of transparency and equal opportunities between the different railway companies. However, Adif did make further progress in 2020 in improving facilities to make them more accessible, as shown by the data provided in due course. On 12 December 2020, it took over from Renfe Operadora in running the service to support people with disabilities and reduced mobility, within the framework of the liberalisation process Regulation (EC) 1371/2007 of 23 October, on rail passengers' rights and obligations.

As a result, Adif now offers this service at its stations, to further complement the services that Adif was already offering to railway operators and passengers at Adif and Adif AV stations. In the case of trains, it also provides rail operators with a service to help disabled and mobility-

impaired passengers board, find a suitable seat and disembark on request.

In any case, the purpose remains the same. Given the large number of passenger stations that exist throughout Spain, efforts are focused on those that see the largest numbers of passengers in accordance with applicable regulations, though without forgetting the rest. It should be noted that the measures put in place for stations with more than 750 passengers/day largely involve the construction of crossings at different levels. This process naturally affects the track, as the platforms need to be widened in order to build the entrances equipped with lifts to take passengers up to the crossing points. The work is therefore technically complex and calls for relatively large budgets.

During 2020, every effort was made to minimise the impact of the COVID-19 health crisis on the pace of tendering and contract award procedures and on the construction work that had been planned.



While Adif is fully aware that there is still much to be done when it comes to accessibility, 850 stations managed by Adif/Adif AV, out of the 1,493 passenger stations located across the network owned by the rail infrastructure manager, currently offer accessible travel routes. These same stations serve 448.13 million passengers/year (transit in stations with accessible travel routes) and allow around 84.76% of passengers (indicator for Adif + Adif AV) to travel independently anywhere along the network.

The remaining 643 stations are not yet fully accessible, though Adif/Adif AV is carrying out work at 97 of them and Renfe Operadora is planning other actions and initiatives to improve station accessibility. Once complete, a total of 964 stations will have been adapted and some 94% of passengers travelling through the 1,493 stations will be able to do so independently.

In 2020, a total of **€23.56 million (including VAT)** was invested to draft construction drawings and carry out work at the stations of Adif and Adif AV, of which **€7.92 million (including VAT) related to accessibility improvements.**

DESCRIPTION OF INDICATORS		UNIT	2018	2019	2020
DISCLOSURES ON OUR PERFORMANCE WITHIN SOCIETY AND ON PRODUCT LIABILITY	Station accessibility *	% of passengers accessing stations with accessible routes managed by Adif/Adif AV*	83.19	85.07	84.76



DIALOGA SERVICE

Adif AV has a service for people with hearing impairment called "DIALOGA", which is designed to facilitate communication and provide them with station service updates. DIALOGA is a video interpreting service in sign language available in Customer Service Offices, whereby all information conveyed via the public address system in the station is represented in text form on display monitors. The system is used to transmit significant incidents, emergency situations and other general messages in sign language. A telephone information and text communication service is also available for mobile devices.

* (Indicator for Adif + Adif AV). Universal accessibility for people with disabilities

The Adif AV corporate website provides information on Adif stations at which the services and facilities have been adapted to the needs of deaf and hearing-impaired people.

 More information

In 2020, the DIALOGA service was provided at 20 stations

- Alicante (HS)
- A Coruña (Multi-operator)
- Albacete Los Llanos (HS)
- Barcelona Sants (HS)
- Ciudad Real (HS)
- Córdoba (HS)
- Cuenca Fernando Zóbel (HS)
- Gijón (Multi-operator)
- Girona (HS)
- León (HS)
- Madrid Chamartín (HS)
- Madrid Puerta de Atocha (HS)
- Málaga María Zambrano (HS)
- Ourense (HS)
- Oviedo (Multi-operator)
- Santiago de Compostela (HS)
- Sevilla Santa Justa (HS)
- Valencia Joaquín Sorolla (HS)
- Valladolid Campo Grande (HS)
- Vigo Guixar (Multi-operator)

From 12 December 2020, this service is included within the Persons with Reduced Mobility (PRM) Service to be provided by Adif at its stations, as described below:



ADIF PRM SERVICE

On 1 December 2020, Renfe Viajeros Sociedad Mercantil S.A., RENFE-Operadora and Adif reached an agreement to transfer the provision of support services for passengers with disabilities or reduced mobility. Under this agreement, Adif began to provide this service as of 12 December, thereby assuming ownership of the assets, rights and obligations assigned and inherent to the service.

The service currently extends to 140 stations and is provided as a permanent service at 68 and as an ad-hoc service at the other 72. The service description included in the 2020 Network Statement reads as follows:

SB-10v	PRM SERVICE AT STATIONS, EFFECTIVE FROM 12/12/2020
DESCRIPTION	Providing rail companies with a service that facilitates accessibility of disabled people and/or people with reduced mobility to and assisting them in their transit through, stations using mechanical means or accompanying them personally in stations with permanent and ad-hoc services. In stations with ad-hoc services, this includes helping them board or get off trains and, where necessary, showing them to their seat, and restraining and releasing wheelchairs in the specified location.
PROVIDER	ADIF

SB-10v	PRM SERVICE AT STATIONS, EFFECTIVE FROM 12/12/2020
TERMS OF SERVICE	<p>A meeting point for receiving and collecting customers will be specified at each station.</p> <p>The infrastructure manager shall decide which means to use for receiving information from rail companies so it knows at all times at which stations, for which trains, and which type of assistance it must provide.</p> <p>The following types of assistance are available for disabled people and/or people with reduced mobility:</p> <ul style="list-style-type: none"> • Permanent service: This service is provided at stations with an in-person mobility assistant available continuously throughout the station's business hours. Requested for assistance will be attended at the network's 14 main stations up to 30 minutes prior to departure. At the rest of the stations with permanent service, these requests will be attended up to three hours prior to departure. Appendix 2 lists the stations providing this service. • Ad-hoc service: This service is offered at stations without an in-person mobility assistant. There, the assistant goes to the station to provide service at the request of the rail companies at least 12 hours before departure of the train. This service includes helping passengers on and off trains and, where necessary, showing them to their seat, and restraining and releasing wheelchairs in the specified location. Appendix 2 lists the stations providing this service. <p>Ad-hoc services are available at both origin and destination stations.</p>
REQUESTS	Requests must be made as soon as possible and at least within the times established for the permanent and ad-hoc services.

SB-10v	PRM SERVICE AT STATIONS, EFFECTIVE FROM 12/12/2020
PRIORITY	All requests made within the established timeframes shall be accepted. To the extent possible, the service's core principle is that no requests by a passenger with a disability and/or reduced mobility may be left unattended.
ECONOMIC TERMS	<p>Billing unit:</p> <p>Permanent service: €/equivalent passenger</p> <p>Ad-hoc service: €/service</p>
LIKELY CHANGES TO THE SERVICE	<p>Infrastructure managers may be forced to take measures to optimise and rationalise the provision of services due to the pandemic caused by Covid-19. This could result in a reduction in costs passed on to the railway companies.</p> <p>Potential measures include:</p> <ul style="list-style-type: none"> • Adapting available resources to forecast demand. • Expanding the notice period required for providing the service at permanent stations, which was originally 30 minutes before departure at the 14 main stations. • Changing the type of service, from permanent to ad-hoc, depending on demand.

This service, which was known as Renfe Atendo when it was managed by RENFE-Operadora, is to undergo a change of name now that it is managed by Adif. A new Adif trademark has been filed at the OEPM (Spanish Patent and Trademark Office).

5.8. Community commitment

Adif AV is aware that its business activities have a sizeable impact on the communities in which it operates and on Spain as a whole. The quality, safety and availability of its rail infrastructure and the impact that infrastructure has on economic development and social cohesion among many other impacts, have ramifications for citizens' quality of living, as is reflected in Adif's stated target of "improving people's lives".

It is important to consider the various impacts on the public and the strategy for making sure those impacts are increasingly positive, going beyond purely operational or service-related aspects to encompass the Company's environmental, social and governance dimensions.

Within the framework of the 2030 Strategic Plan and more precisely within the strategic pillar of Sustainability, Adif AV has set itself the objective of **contributing towards social cohesion**.

This objective is formulated as follows:
"Enabling **accessible public service** and working to **improve local communities** and **vulnerable segments** of society".

5.8.1. OPEN STATION PROGRAMME

The Open Station Programme is a Company-wide programme. It is the catalyst for Adif AV's community work and the main instrument for formalising its engagement with the third sector. Adif AV offers the third sector an excellent platform (every year over 150 million people pass through Adif's and Adif AV's stations) for carrying out activities that help them achieve their objectives; in parallel, the stations become of greater value to citizens by providing them with cultural, social or environmental content.

Collaborations with non-profit organisations are governed by an internal work procedure ("General Procedure for Donating Station Space"). That procedure makes sure requests for the use of space receive standardised responses, framed by explicit and shared criteria, irrespective of the channel through which they are received. It also renders the process of servicing and responding to third sector organisations more agile and transparent.



The Open Station Program contributes, via its activities, to materialisation of Adif AV's community work goals and the UN's

**Sustainable
Development
Goals.**

SOCIAL COHESION

The initiatives undertaken under the umbrella of the Open Station Programme are strategically targeted at defined priority groups. The 2030 Strategic Plan includes in the “Social Cohesion” target two key performance indicators related with the Open Station Programme:

Education, culture and values

a total of 197 activities were carried out in 2020.

Entities

number of non-profit partners. In 2020, Adif collaborated with 71 organisations, down 33% on 2019, when 106 non-profit organisations took part in the programme.

The declaration of the state of alarm in March 2020 amid the COVID-19 pandemic certainly influenced the performance indicators for this project. The number of activities carried out was down by almost 60% on the previous year, with 197* activities carried out at 60* different stations. Moreover, 237 scheduled activities had to be cancelled (*cumulative data for Adif and Adif AV). The same downward trend can be observed in the number of entities that have carried out activities at the stations. In 2020, Adif collaborated with 71 organisations (associations, foundations, local councils, public agencies or ministries), in this case down 33% in comparison with the 106 entities with which it collaborated in 2019. Adif AV's indirect contribution to the Open Station Programme, expressed in terms of loss of profit, amounted to €267,269 in 2020, down 72% from 2019.

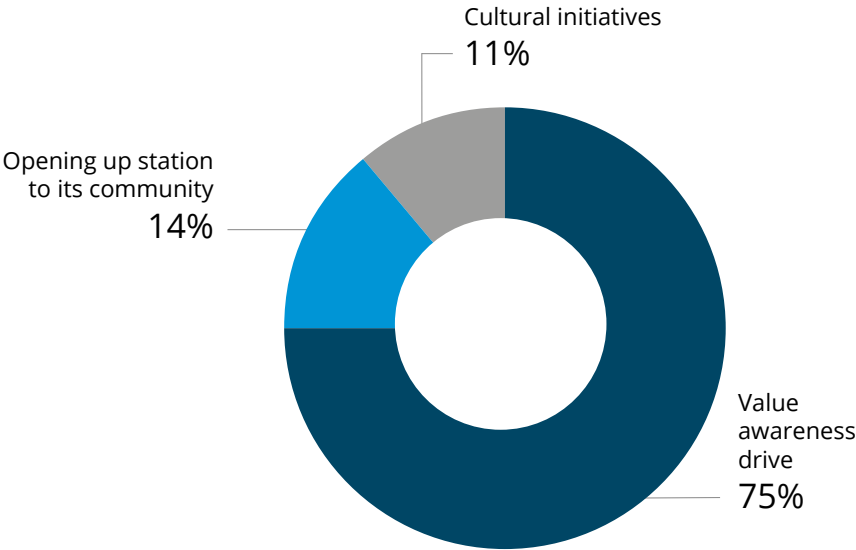


In 2020, a total of **237 activities** were cancelled due to the COVID-19 pandemic

Adif AV's Open Station Programme pursues three main courses of action and related activities, which can be carried out at different stations throughout the railway network:

- **Station outreach** , information initiatives and efforts to engage with citizens.
- **Value awareness drives**.
- **Culture**, artistic expression by up-and-coming artists, concerts, exhibitions, etc.

OPEN STATION PROGRAMME ACTIVITIES IN 2020



All of the entities to which Adif AV donates space under the scope of this program must fill out a feedback form, from which two indicators are gleaned: (i) an overall assessment of the outcome of the activity as a whole; and (ii) an average assessment of the assistance provided by the stations.

The 2020 assessments yielded very similar results to those of previous years despite the pandemic. The score given to the level of support provided by the stations remained high, at 9.25, while satisfaction with the result or outcome of the activity as a whole achieved a score of 7.74, despite the adverse climate in 2020. In 2020, Adif AV once again went to great lengths to get a high percentage of organisations to fill out this feedback form. As a result, 74% of the NGOs with which we collaborated during the period completed the form.

Some of the entities have voluntarily shared the direct return obtained on the activities conducted under the Open Station Programme. The economic return reported by the participating entities amounted to €4,870 (down €15,000 from 2019). There was also a marked decline in new members. In 2020, Adif's partner organisations achieved 761 new members (293 fewer than in 2019).

Adif's management committee approved the Sponsorship Policy of both Adif and Adif AV in 2019 and ratified the first version of the policy in 2020. This policy guides the process of managing all the different proposals that both companies receive from external partners and of undertaking initiatives, thus enabling them to flag projects suitable for sponsorship and providing rules and criteria on how to manage such actions.



DESCRIPTION OF INDICATORS		UNIT	2018	2019	2020
DISCLOSURES ON OUR PERFORMANCE WITHIN SOCIETY AND ON PRODUCT LIABILITY*	Sponsorship agreements signed with non-profit organisations	No.	2	2	0
	Membership of national associations (Corporate Responsibility)	No.	3	3	3

*Company commitments to sustainable development: the impact of the Company's activity on employment and local development; the impact of the Company's activity on local populations and the territory; relations maintained with local community stakeholders and how the Company liaises with them; membership of national and international associations; sponsorship actions; collective bargaining agreements.

In 2020, **NGO** satisfaction with the activities carried out under this programme was assessed, revealing a score of 7.74, and of the support received from Adif AV, which was given a 9.25.

5.8.2. ASSETS AND URBAN INTEGRATION

Adif and Adif AV manage the property assets they own with the ultimate aim of achieving a positive impact on the communities in which they are located and generating shared value that benefits society as a whole. Both companies therefore contribute to the sustainable development of the railway system and its urban-railway integration into towns and cities, in line with the policies set by the competent institutions. The Madrid Nuevo Norte project continued throughout 2020.



MADRID NUEVO NORTE

Pursuant to Clause 12 of the Amendment Agreement dated 28 December 2018, on 8 March 2019 the Monitoring Committee was set up and it was agreed that four Technical Committees would also be set up to meet on a monthly basis.

On 19 February 2020, the agreement between Adif, Adif AV and the company Distrito Castellana Norte S.A. (DCN) was signed, governing the drafting of construction plans for the foundation piles of the covering slab for the High-Speed Tunnel at the South Head of Chamartín Station (Madrid), as well as the agreement governing the award —within the framework of the competitive tender process presided by a panel of judges— of the "Service contract for the transformation of Madrid-Chamartín Station and its urban integration".

On 25 February 2020, Adif AV published in the Official State Gazette (BOE) the call for tenders for the tender process presided by a panel a judges for the award of the "Services contract for the transformation of Madrid-Chamartín Station and its urban integration. Drafting of preliminary projects, basic drawings and construction drawings".

On 25 March 2020, the Governing Council of the Community of Madrid green-lighted the Amendment of the General Zoning Plan (MPG), while stating that it would not take effect until certain modifications had been met. Madrid City Council, sitting in plenary, agreed to approve these modifications on 29 May 2020. The Governing Council of the Community of Madrid ultimately passed a resolution on 22 July 2020 confirming that the conditions set out above had been met.

On 31 July 2020, Madrid City Council published the MPG urban zoning regulations in the Official Gazette of the Community of Madrid (BOCM).

The bylaws of the Steering Committee of the APE 05.31 "Chamartín Business Centre" and the Delimitation Project of the APE 08.20 "Malmea – San Roque – Tres Olivos" are currently being drafted so that these aspects can take shape.

ASSET MANAGEMENT

The Company also continued to pursue its customary asset management activities during the period, notably:

/ AGREEMENTS WITH OTHER GOVERNMENT BODIES AND ORGANISATIONS

the Company has collaborated with other government departments in negotiating agreements for the cities of: A Coruña (future Intermodal Station), Lugo (future Intermodal Station), Vigo (accesses to Vialia and urban tunnels), Barcelona (new urban development of the area surrounding Barcelona-Sants station), including:

- Agreement signed on 13 July 2020 between the Company Murcia Alta Velocidad, S.A. and Murcia City Council to carry out new studies and zoning projects, urban management and site management work and/or to adapt existing studies and projects, and to coordinate health and safety in relation to the construction work needed to fulfil the purposes set out in the addendum amending the 2006 agreement.
- General Action Protocol between León City Council, Administrador de Infraestructuras Ferroviarias (Adif) and Adif AV to further integrate railway infrastructure in the city of León.
- Agreement between Valladolid Alta Velocidad 2003, S.A. and RENFE Fabricación y Mantenimiento for the handover of the old central repair facility in Valladolid and the new facilities at the New Railway Complex.

/ URBAN ZONING REPORTS

various urban zoning reports, suggestions and/or arguments have been issued for a number of different planning instruments, notably:

- Tui (modification to Regional Zoning Plan no. 3 – Equipment E209 – Customs-Border Police); Arteixo (PE Punta Langosteira); Cadeita (review of the General Municipal Plan); Arahal (PERI-3 SEMILLAS PACÍFICO), Berriolano (General Municipal Plan), among others.
- Written arguments and claims relating to the preliminary version of the Protection Catalogue (Catálogo de Protecciones) of Alicante.
- Report on the General Structural Plan, the Strategic Environmental and Territorial Report and the Detailed Urban Zoning Plan of Almussafes (Valencia).
- Urban zoning report on the amendment of the Special Plan for Duque de Pastrana, 5 (Madrid).
- Report on the construction drawings for the urban development of the intersection at calle General Vara del Rey (Logroño).
- Report on the amendment documents of the Integrated Action Plan and Integrated Reform Plan for the A.4-1 "Central Park" area (Valencia).
- Report on the amendment of the General Plan for the Intermodal Station, Intervention Area G-44/2 (Zaragoza).
- Written arguments and claims in relation to the urban zoning project for APE 05.08 José Vasconcelos (Madrid).
- Written arguments and claims relating to compulsory purchase arrangement ahead of the performance of construction work to adapt the North Junction of Calle 30 (Madrid)

/ ADMINISTRATIVE PROCESSES AND ACTIONS

the Property and Urban Planning Department initiates and processes administrative procedures after a citizen or other public entity has exercised one or other right, or otherwise assists the Ministry of Transport, Mobility and Urban Agenda in processing such cases, which include:

- Procedure to reduce public domain land and building right boundaries: in 2020 Adif continued to pursue another aspect of its work as a public entity by initiating, processing and resolving administrative proceedings in response to requests and applications relating to the limitations on ownership ushered in by Rail Sector Act 2003, which are still present in the current Rail Sector Act. The right granted by railway regulations to request and, as the case may be, secure a reduction of public domain land and the building right boundaries, has given rise to the following actions and proceedings:
 - * A total of 121 reduction applications processed: of which 13 related to public domain and 108 to building right boundaries.
 - * A total of 49 decisions: of which five related to the reduction of public domain land and 44 to the reduction of building right boundaries.

These land reduction applications are received not only from private citizens, but also from other public entities. Examples include the 14 reduction applications made by local councils and the application received from the city of Santander for the construction of the headquarters of the municipal workshops and local police infrastructure.

- **Collaboration on land reversion proceedings:** Adif and Adif AV also collaborate with the Ministry of Transport, Mobility and Urban Agenda in processing administrative claims where citizens or other public entities subject to compulsory purchase orders have exercised the right to reclaim part or all of their land. Adif and Adif AV issued multiple reports in relation to the 220 reversion applications that were processed over the course of 2020, notably the reports relating to key projects such as Madrid-Chamartín and Madrid-Fuencarral stations, or in municipalities such as Tres Cantos, Getafe, Santiago de Compostela and Valencia.

- **Proposals to the Management Committee and Board of Directors of Adif and Adif AV:** applications under this right of reversion and collaboration with other administrative bodies or institutions through inter-administrative agreements often entail other administrative actions, such as the need to lay motions and proposals before the Management Committee and the Board of Directors for approval. In 2020, this included the presentation for approval of two agreements relating to the Madrid Nuevo Norte development and the start of negotiations towards an agreement with Huelva City Council whereby municipal public facilities and infrastructure will be transferred to the City Council.

The interdepartmental agreements in effect sometimes require work in drafting declarations of building license exemption and release of land included in those agreements. Thus, in 2020, in the municipality of Logroño, 42,312.92 m² of land, 28,923.43 m² of urban development and 13,701 m² of building work were released as a result of the agreements signed in 2002 and 2004.

- **Reversion offers:** the administrative proceedings described above may sometimes generate the need to settle reversion rights. In such cases, the corresponding reversion right (right to reclaim expropriated land) must be offered to the expropriated parties or their assignees or successors, as happened in 2020, for example, upon the release of 64,342 m² in the municipalities of Burgos and Getafe, with the corresponding notifications sent to the parties concerned. In 2020, there were more than 500 such notifications offering the reversion of disencumbered land.
- **Cadastral amendment of land owned by Adif and Adif AV:** in 2020 Adif and Adif AV collaborated with other public bodies, including the General Directorate of the Cadastre, on the necessary process of putting public domain assets on record at the cadastre. In 2020, this collaborative work led to the filing of 772,602.52 m², of surface area, of which 659,123 m², related to Adif, including land pertaining to the stations of Madrid-Atocha, Méndez Álvaro, Delicias, Asamblea de Madrid-Entrevías, Pozo, Santa Eugenia and Coslada and the Madrid-Zaragoza lines and the Delicias branch line to Santa Catalina.

- **Filing and registration:** first registrations of land and other pertinent information were filed at the competent Land Registries during the period, using the different mechanisms provided for under the Mortgage Law, mainly Article 206. Registration of the Madrid-Chamartín station was a particular highlight in 2020.
- **Updating and maintenance of Adif's Inventory of Property Assets:** all administrative actions and processes require both prior and simultaneous work to update and maintain the Inventory, which in 2020 involved:
 - ★ Action on 340 Inventory units under the annual review programme.
 - ★ Support in drawing up the 42 property and urban planning reports to have been issued during the period, by providing documentary, cadastral and graphical information on the Inventory units concerned.
 - ★ Working alongside the Department of Economic and Financial Management in delimiting, valuing and recording, in the accounting inventory, all compulsory purchases undertaken by the former Ministry of Public Works in respect of land owned by Adif. This process enabled the parties to calculate the acquisition value of each of the 11,100 properties included in 240 projects, which had hitherto been recorded in aggregate terms on Adif's balance sheet at a value of €258 million.



CITIZEN'S RIGHTS: ADMINISTRATIVE PROCESSES AND ACTIONS

- Procedures to reduce public domain land and building rights.
- Land reversion proceedings.
- Laying motions before the Committee and the Board to approve proceedings or ratify agreements.
- Laying motions before the Committee and the Board in relation to declarations of license exemption and release of land, building work and urban developments.
- Processes to grant reversion rights.
- Cadastral amendment proceedings.
- First registrations of land and registry amendments.
- Updating and maintaining Adif's Inventory of Property Assets.

5.8.3. CORPORATE GROUP

Adif AV currently holds stakes in 21 entities of varying types (companies, consortiums, foundations, economic interest groups and associations), all of which make up the Adif AV Corporate Group. The ownership percentages are as follows:



Consulting and business companies	Adif AV (12.50%) - Emfesa, S.M.E, M.P., S.A.	
Consulting and business companies	Adif AV (20.68%) - Ineco, S.M.E, M.P., S.A.	
Public-private partnership enterprises	Track and installations	Adif AV (10%) - Albali Señalizaciones, S.A.
		Adif AV (10%) - Energía Olmedo – Ourense, S.A. Fase I
Other	International	Adif AV (4.35%) - Hit Rail, B.V.
Integration	Adif AV (30%) - Alta Velocidad Alicante Nodo del Transporte, S.A.	
	Adif AV (40%) - Almería Alta Velocidad, S.A.	
	Adif AV (30%) - Barcelona Sagrera Alta Velocitat, S.A.	
	Adif AV (40%) - Cartagena Alta Velocidad, S.A.	
	Adif AV (30%) - Gijón al Norte, S.A.	
	Adif AV (37,50%) - León Alta Velocidad, S.A. (undergoing liquidation)	
	Adif AV (30%) - Logroño Integración del Ferrocarril, S.A.	
	Adif AV (40%) - Murcia alta Velocidad, S.A.	
	Adif AV (40%) - Palencia Alta Velocidad, S.A.	
	Adif AV (30%) - Valencia Parque Central, S.A.	
	Adif AV (30%) - Valladolid Alta Velocidad, S.A.	
	Adif AV (40%) - Alta Velocidad Vitoria – Gasteizko Abiadura H., S.A.	
	Adif AV (30%) - Zaragoza Alta Velocidad, S.A.	
Foundations	Adif AV (25%) - Fundación de los Ferrocarriles Españoles	
Associations	Asociación ERESS (European Railway Energy Settlement System)	

The activities carried out to manage the Corporate Group were as follows during the period:

- Monitoring and control of the different entities, including their operational programmes and annual accounts and management reports.
- Monitoring the resolutions adopted by the governing bodies of these entities and ensuring that they are compatible with Adif's strategy.
- Overseeing the technical and economic viability of the different entities, including the courses of action they plan to pursue.

In 2018, Adif was mandated by Adif AV to launch the **“Corporate Group Positioning Plan”** with the aim of streamlining the Corporate Group and becoming more efficient. The plan explains the role played by Adif AV in managing these investees and analyses the competitive, economic, legal, operational, social, sustainability and environmental benefits and rewards of continuing to hold a stake in such companies.

This plan is in line with the following SDGs:



Various projects are undertaken within the framework of the plan:

- Analysis of the corporate business structure, which involved a diagnosis of the Adif Corporate Group and structuring the entities in which this public entity holds stakes into subgroups subject to differentiated treatment and business development. This analysis was completed in November 2018.
- Definition of the Adif AV Subsidiary Group Model, which will enable the public entity to become more effective and efficient in managing its subsidiaries. In relation to this project, several working meetings were held throughout 2019 at various areas and departments of Adif and Adif AV in a bid to flag possible areas for improvement at the public entity. The results obtained are currently being analysed, as is the possibility of drawing up a development roadmap.
- Companies fit for disinvestment/liquidation, based on the resolution passed by the Council of Ministers on 16 March 2012, approving the Plan for the Restructuring and Streamlining of the Public Enterprise and Foundations Sector. Work is currently being carried out on the following aspects, among others:
 - * Liquidation of LEON ALTA VELOCIDAD 2003 SA.
 - * Improved management of the railway JVs, for which the plan is to draw up and deploy an Action Plan.

The projects envisioned under this plan are all in progress, with varying degrees of maturity.

A number of special projects are also being carried out, notably:

- Analysis of the activity carried out by EMFESA, which led to the sale by Adif to Adif AV of 12.5% of its shareholding. Work is also ongoing out to regularise the Company's status as an own resource, to draw up and approve the rates for the services it offers and to modify its corporate purpose.

Over the coming years, the aim is to press on with projects and actions envisaged in the Positioning Planw.

5.8.4. URBAN INTEGRATION JVs

Adif AV carries out rail integration operations through the stakes it holds in 13 urban integration JVs in the following cities: Alicante, Almería, Barcelona, Cartagena, Gijón, León, Logroño, Murcia, Palencia, Valencia, Valladolid, Vitoria, and Zaragoza. These corporations are the result of various agreements to have been signed since 2002 between the Ministry of Public Works (currently MITMA) and its state-owned companies and regional and local government bodies.

These arrangements regulate all the necessary railway, integration and urban development actions, including costs and funding methods. They also set out the powers and obligations of the signatories and of the Company, whose mission is to oversee the urban development and carry out the infrastructure and urban development works on land released from railway use in different facets of city management.

Action undertaken in relation to the Integration JVs was a result of:

- The decisions that had to be made because of the imbalances present within the corporations due to the economic and financial difficulties that Spain had to endure from 2011 onwards.
- Management and coordination of the actions carried out in relation to these companies.
- The recommendations arising from the Court of Audit's 2017 Audit Report.
- The entry into force of Law 40/2015, on the legal regime of the public sector.
- Analysis of new models of rail integration in cities that guarantee sustainable integration in line with the SDGs and the 2030 Agenda, among others.

In relation to the Integration JVs, further work has been needed to deliver on the commitments assumed under the agreements in place, mainly in order to:

- Render the Integration JVs viable by reviewing the integration plans defined at source, promoting each of the milestones that make up the global project in order to rethink, modify or terminate the Agreements, proposing new integration solutions, or adapting the integration model to reflect the current situation.

- Ensure that the financing of these operations is compatible with the costs set out in the integration solutions.
- Pay off the bank borrowings of the Integration JVs in order to minimise the cost overruns associated with these contracts.
- Implement different financing solutions so that these operations are not caught by capital gains on urban planning projects.
- Grow the value of the released land in order to earn a return and repay the bank borrowings, participation loans and commercial debt of the Integration JVs.

An Action Plan has been drawn up to accomplish these goals as part of the Positioning Plan described above. The main aim of the Action Plan is to establish the mechanisms and analytical work needed to improve and optimise management of all integration operations carried out through the Integration JVs and, as the case may be, to propose alternative solutions for managing these operations. The ultimate aim is to enhance the urban integration of the railway system by generating more of an economic, social and environmental impact and improving mobility and sustainability within the city.

The following documents were signed in 2020 in relation to the activities carried out by the Integration JVs:

- **13/7/2020:** agreement between the Company Murcia Alta Velocidad, S.A. and Murcia City Council to carry out new studies and zoning projects, urban management and site management work and/or to adapt existing studies and projects, and to coordinate health and safety in relation to the construction work needed to fulfil the purposes set out in the addendum amending the 2006 agreement.
- **10/12/2020:** agreement between Adif AV, Barcelona City Council and Barcelona Sagrera Alta Velocitat, SA to draft the construction drawings for the architecture, installation and urban development of the Sagrera intermodal station.

In line with the actions envisioned in the Action Plan and to improve levels of communication and coordination in carrying out the work, meetings were held with the Technical Committees comprising representatives of all the partners on the project.

Meanwhile, to provide further information for decision-making in relation to the integration of the railway into cities and to make them more sustainable, an analysis was conducted of the current state of the railway system and of how it will ultimately be on the date all the work envisioned in the agreements is completed in the 10 cities in which the railway system will have the greatest penetration and impact.

This additional information will facilitate decision-making on possible solutions for the integration of rail in cities in line with the SDGs and the 2030 Agenda.

The most relevant actions carried out by Adif AV in 2020 within the context of the Integration JVs were as follows:

ALICANTE TRANSPORT NODE

- On **18 March 2020**, two participating loans were signed to cover the annual payment commitments of Adif and Adif AV under the amending addendum to the founding agreement signed in 2019. The loan funds were delivered in April.
- In **June 2020**, a working group was set up to coordinate construction of the tram station next to the Adif AV station. The drawings for the tram station are currently being drawn up by the regional government of Valencia.
- In **August**, work was completed to relocate the maintenance equipment at Alicante station (known as the “Via de la Vagoneta”). This action is needed for the planned urban development work to proceed, as it will release the current railway land where the future central park will be located and connect the north and south of the area on the west side.
- In **October**, the Company awarded the contract for the adaptation of the OI/2 Special Plan ahead of the final approval of this special plan, this being a prerequisite for the urban development of the area, which will feature a large central park, and to be able to sell the released land and related property developments.



ALMERÍA ALTA VELOCIDAD

- In **June 2020**, the **preliminary project for integration Phase 2** was finalised and in July 2020 it was presented to the Technical Committee. The preliminary project will entail extending the underground access section to Avda. Mediterráneo (1.5 km underground) and includes high-speed upgrades to the intermodal station, with tracks and platforms on the surface. This preliminary project, which includes several alternatives and associated costs, is needed in order for the Company to make decisions regarding the options on how best to bring high-speed railway to the city of Almería.
- The construction work in the **El Puche** zone, belonging to Phase 1 of the process of integrating the railway into the city of Almería, is nearing completion (91.54%) and is expected to be finished next year.
- In **September 2020**, the Regional Government of Andalusia announced an extension of the deadline for the Company to justify payment of the nominative subsidy received by Adif AV in respect of the contribution made by the Regional Government of Andalusia for the performance of the integration work in El Puche. The new deadline is **17 January 2022**.

BARCELONA SAGRERA ALTA VELOCITAT

- Throughout the year, work continued on the station structure, the station accesses and the parking bays in the **Sant Andreu sector**.
- A number of **track and electrification, installations and signalling and civil protection and safety projects** are currently being drafted for the **Sant Andreu sector**. Revised Design No. 2 for the Sagrera station structure is currently on the drawing board (provisional continuation of the works was authorised in June 2020).
- In **September 2020** the Company put out to tender the **drafting of the construction drawings for the station architecture and installations** for a contract worth **€5.21 M** (VAT not included) with a term of 24 months.
- Work also began on the **Sant Andreu Comtal** station in September 2020.
- In **November 2020** the Company put out to tender the sale of plot FR-01 in the Entorn

Sagrera sector through a contract worth **€11.09 million** (excluding urban development charges and VAT).

- In **December 2020**, the bank debt was fully repaid by means of the capital calls made to the shareholders, arranged through a participating loan that also matured in December but which, following the agreement of all the shareholders, has now been extended until December 2021. The parties are currently looking to amend the loan by adjusting its maturity date to when the Company manages to secure funding.

CARTAGENA ALTA VELOCIDAD

- On **14 July 2020** the novation of the **€2.7 million** participating loan agreement was signed to extend the original maturity date agreed upon under the July 2014 agreement through to 30 June 2030, while also allowing the partners to agree upon a further extension of three years.
- The amendment also states that the participating loan will be repaid progressively as funds are obtained by the Company through the gradual performance of the planned urban development work, while any remaining amount will be repaid on the final maturity date.
- In **October**, work was completed on **the Platform Construction Project for the Remodelling of the Arterial Railway Network of the City of Cartagena** - Section I, involving a 500-metre, double-track section. The work was completed ahead of the expiry of the current Environmental Impact Statement, although the work does not form part of the commitments under the current agreement.
- Further work completed outside the scope of the agreement included **the completion of the construction drawings for the comprehensive refurbishment of the Cartagena station**, a listed building of great architectural value. This project is compatible with any solution that may ultimately be adopted to bring high-speed rail travel to Cartagena
- A new **study is on the drawing board to appraise the merits of building a freight bypass**, as per the resolutions passed by the Company's governing bodies, to avoid the need for freight traffic to pass through urban areas.

GIJÓN AL NORTE

- On **4 July 2020** the initial approval of the study was published in the Official State Gazette, concluding that **Moreda** is a better location for the **future Intermodal Station** than building it in front of the Railway Museum. In this case, a new agreement would need to be signed if the competent administrative bodies decide to change the location of the station.
- Adif is currently drafting the civil works construction drawings for the **Bibio and Viesques stations** and for the **Viesques-Hospital de Cabueñes section**.
- On **22 December 2020**, the partners delivered the second annual payment by virtue of the financial commitments assumed under the new Integration Agreement signed in 2019, worth **€5.61 million**.

LEÓN ALTA VELOCIDAD

- Work is currently under way to wind up and **liquidate Sociedad León Alta Velocidad 2003**, and to reach an agreement with the City Council to settle the entire scope of the railway integration work that has involved Adif AV.

LOGROÑO INTEGRACIÓN DEL FERROCARRIL

- In **July 2020** Logroño City Council approved the resolution under the agreement to carry out the construction work at **Vara del Rey**. Also in July, the City Council drew up a new urban zoning drawings for the zone, envisioning the removal of the underpass and the creation of a roundabout with traffic lights, all with an initial tender budget of **€4.55 million** (VAT not included) and a deadline of 10 months.
- Work on the **bus station structure** was completed in **September 2020** and in **December 2020** the **urban zoning** work was finalised, with the fitting out work currently ongoing. This work has been financed by both the City Council and the Company.
- Work to **relocate the La Portalada traction substation** has now been completed and will be commissioned once the competent safety agency authorises the work.
- The working group set up to analyse the 2002 agreement and the feasibility of **phases 2 and 3** is currently drafting a new agreement.

- In **December 2020** the Company secured an extension until 29 July 2021 (when the bank debt also matures) for the **mandatory repayment** of the pledged account, which was essential in order to finance the work planned for the first half of 2021.

MURCIA ALTA VELOCIDAD

- In **July 2020**, the signing of a participating loan totalling **€71.01 million** was approved for year two (2020-2021), as stipulated in the Amending Addendum to the Founding Protocol signed in 2019. This participating loan contract was then signed in November.
- On **24 July 2020**, the novation of the first participating loan worth **€8.5 million** was signed, subject to a new maturity date of 30 June 2025 and allowing the partners to agree upon a further extension of three years.
- The amendment also provides for progressive **repayment** of the loan as funds are obtained by the Company through the ongoing performance of the planned urban development work, while any remaining amount will be repaid on the final maturity date.
- The agreement between the Company and the City Council was signed in **July 2020** to govern the drafting of all necessary urban planning documentation, as well as the tendering of the construction and other work arising from such documents.
- Work on **Phase 0** of the railway integration project (Santiago El Mayor-Senda de los Garres) is nearing completion and is expected to be finished next year.
- Meanwhile, work continues on **Phases 1 and 2 of the railway integrations** (Estación-Barriomar and Nonduermas). In January 2020 the Board of Directors of Adif AV authorised the drafting of a first amended project. The construction work has been partially suspended on one particular section for the time being as it has been found to affect numerous houses located very close to the tracks in the Barriomar zone.
- On **24 November 2020**, the IV meeting of the Monitoring Committee of the Amending Addendum took place. At this meeting, the amounts to be passed on to the City Council of Murcia and the Region of Murcia to settle the advance payments made by Adif AV for the Phase 0 work were agreed upon. The corresponding payment orders were then issued on 27 November 2020, as follows:
 - * Region of Murcia: **€4,745,689.80** (Order no.: 2003500053)
 - * Murcia City Council: **€1,366,299.32** (Order no.: 200350005)



PALENCIA ALTA VELOCIDAD

- The **Ministry of Transport, Mobility and Urban Agenda (MITMA)** is currently analysing a solution for integrating the railway into the city, whereby the station will remain above ground and there will be less underground space than initially envisaged.

VALENCIA PARQUE CENTRAL

- Adif IV is continuing to draft the basic project and construction drawings for the **New Railway Access Channel** (Phase III). At the meeting of the Company's Technical Committee held in May, Adif AV announced that **Joaquín Sorolla station would require more extensive remodelling** than previously planned due to the likely increase in passenger numbers over the coming years, meaning that Adif AV would need to draw up a complementary project to extend the station.
- **Plot development work has now been completed** to provide urban infrastructure for certain plots resulting from the reparcelling (Phase 1A) of the northern zone.
- In **May 2020, development work began** in the area around **calle Dr. Domagk**, a zone within the park that could not be developed due to illegal occupation of the area. The work is currently on hold following the detection of contaminated soil, and an amendment to the project is pending approval. Another amendment is to be approved to complete the restoration of part of a listed building following the decision reached by the competent authority. This work was originally envisioned under the contract.

VALLADOLID ALTA VELOCIDAD 2003

- **The transfer to the NBMI** (new integrated maintenance facility), which started in April 2019, is now being finalised.
- In relation to the **eastern bypass**, Adif has awarded contracts for the supply and transport of monoblock sleepers (worth **6,43M€** including VAT), **bi-block sleepers** (worth **€1.41 million**, including VAT), **switches and crossings** (worth **€5.93 million**, including VAT included), **ballast** (worth **€2.55 million**, including VAT) and **rail** (worth **€5.27 million**, including VAT). Meanwhile, the award of the contract for the booted underties is pending, with work on the bypass scheduled to resume in 2021.

- In **June 2020** the regional government of Castile and León **ratified the updated general urban zoning plan** (known as the PGOU) by having it published in the Official Gazette of Castile and León.
- The construction drawings for the **underpasses connecting Vía and Salud streets, thereby joining Unión and Pelicano, San Isidro, and connecting Estación and Guipúzcoa streets**, thereby joining Padre Claret with Andalucía, are currently being drafted and are expected to be completed in February 2021.
- In **November 2020**, Adif AV approved the construction drawings for the **underpass at Panaderos and Labradores streets**. On **28 December 2020**, the Company's Board of Directors tendered the contract to perform the construction work, worth **€19.60 million** (including VAT). In **November 2020**, TYPESA delivered the preliminary project for the remodelling of **Campo Grande station** and is currently drafting the basic design.
- In **December 2020**, the Company authorised the tender for the drafting of the construction drawings for the **pedestrian underpasses between Avenida de Irún and the streets Guadalajara and Camino de la Esperanza and the area running between calle Hípica and calle Adolfo Suarez**.
- In **December 2020**, the Company authorised the tender for the supply and assembly of a **complete train spray** booth facility for the NBMI. The contract is worth **€2.495 million** and comes with a 12-month term.
- At a **meeting of the Company's Board of Directors** held in December, it was agreed to analyse the **impact that the suspension of the 2020 and 2021** contributions may have and to resume such contributions as of 2022. The directors also resolved to formulate a proposal in January 2021 to agree upon the relevant payments to be made.

VITORIA-GASTEIZKO ABIADURA HANDIA

- On **14 February 2020**, the Ministry of Transport and the Basque Government agreed that the latter would handle the **work on the HST access** while the Ministry would assume responsibility for the **work on the station**.
- The new **study into the railway integration process in Vitoria** is currently undergoing the environmental approval phase. Final approval is expected in early 2021.

ZARAGOZA ALTA VELOCIDAD

- In **May**, the Board of Directors of the Company ratified the agreement signed on 25 November 2019 between the Company and ENDESA for the performance of the work needed to **supply electricity to plots 5 to 7** (Phase 2). Phase 1 work under this agreement will commence once it has been cleared by the City Council (Adif/Adif AV have already granted their consent to such work).
- In May, the contract that had been in effect for several years governing the drafting of the construction drawings to **transfer the facilities of the former El Portillo station to the Delicias station** was terminated. This contract allows work to commence on a new project tailored to current needs, subject to the signing of the corresponding financing agreement, which is currently being drawn up.
- The Company is calling for a new **amendment of the General Urban Zoning Plan for the city of Zaragoza** to further optimise the real estate developments yet to be carried out in the Barrio Oeste zone.
- In the **second half of 2020**, the Company initiated negotiations to obtain an alternative option with better terms than the existing **bank financing** arrangement. The negotiations are nearing completion and if successful would lead to a significant reduction in the interest rate payable.

At 31 December 2020, there were a total of **56 agreements, protocols, addenda and related documentation relating to the integration JVs** in which Adif AV has held and interest since their inception.

5.9. Supplier management

Suppliers are an essential part of Adif AV's business development and growth. The Company seeks to ensure that its relations with suppliers are based on transparent contracting processes and legal certainty.



Both Adif and Adif AV are state-owned enterprises and, as such, are bound by **prevailing public contracting law.**

Specifically, Adif's contracts, meaning the drafting, adjudication, effectiveness and termination thereof, are governed by the Public Sector Contracting Act, (Spanish Law 9/2017), as stipulated in section d) of article 3.3 of that same Law.

Elsewhere, Adif AV's contracts are subject to the following legal regime:

- The drafting, adjudication, effectiveness and termination of contracts the estimated value of which is equal to or exceeds the thresholds set out in Chapter I, Article 1 of Royal Decree Law 3 of 4 February 2020, on procurement procedures in the water, energy, transport and postal services sectors (LCSE 3/2020), are governed by that law.
- Pursuant to additional provision eight of Law 9/2017, the drafting, adjudication, effectiveness and termination of contracts the monetary value of which is less than the above thresholds are broadly governed by the rules regulating non-harmonized contracts set out in Law 9/2017 for non-government contracting authorities.

5.9.1. RESPONSIBLE PUBLIC PROCUREMENT

The challenge faced by Adif AV is to ensure that public procurement serves as an exemplary and legitimate tool in contributing to its strategic targets in relation to sustainability and social cohesion, while upholding, in parallel, the fundamental principles of public procurement: competition, freedom of access, transparency, non-discrimination and equal treatment.

To that end, each time it puts a tender out to call, Adif AV runs a supplier selection process in which the suppliers must certify their business and technical expertise and solvency, while also satisfying certain social and environmental criteria, which are determined individually for each supplier approval process. When contracting, the supplier approval and assessment processes at Adif and Adif AV are equivalent to the solvency and capacity conditions stipulated in Articles 65 to 97 of Law 9/2017 (for Adif contracts and, to the extent applicable, for Adif AV contracts not subject to harmonised rules) and in Articles 30 to 40 of LSCE 31/2020 (for Adif AV contracts that are subject to harmonized rules). In addition, the procurement documents specify the prerequisites which must be met and certified by bidders before the respective contracts are awarded.

The social, equality and environmental criteria used to select bidders are set as part of the above-mentioned solvency criteria or in the adjudication criteria. Both the solvency and adjudication criteria are set by the contracting entity in the corresponding procurement documents and are made known to the bidders before they present their bids. In the event of a tie, the terms of Articles 131.1 and 145 to 148 of Law 9/2017 apply (for Adif contracts, and in respect of aspects applicable to contracts below the threshold for harmonized contracts of Adif AV), as do the terms of Articles 58 to 73 of LCSE 3/2020 (for contracts the estimated amount of which is equal to or more than the thresholds stipulated in Article 1 thereof).

/ CATALOGUE OF SOCIAL AND ENVIRONMENTAL CLAUSES

As a result of the new Public Sector Procurement Law, specifically Article 1.3 thereof, establishing the compulsory requirement to embed social and environmental criteria into all public contracts, Adif AV is currently drawing up a **Catalogue of Social and Environmental Clauses** to be included along the various stages of the procurement process for each type of contract. Specifically, it is working on clauses at three different levels:

- Requirements to be met by bidders during the design, preparation and drafting of the contract and the related documentation.
- Clauses containing assessment criteria to be used during the contractor selection process.
- Special terms of performance to be considered during the contract execution phase.

In parallel, with the aim of enriching the work under way, Adif AV is being advised by Forética's Taskforce for Public Sector Entities so as to be able to add ideas emerging from similar initiatives to its own Catalogue.



Adif and Adif AV's procurement procedures are **supervised by numerous institutions**, including the General State Controller (IGAE for its acronym in Spanish) and the Court of Audit.

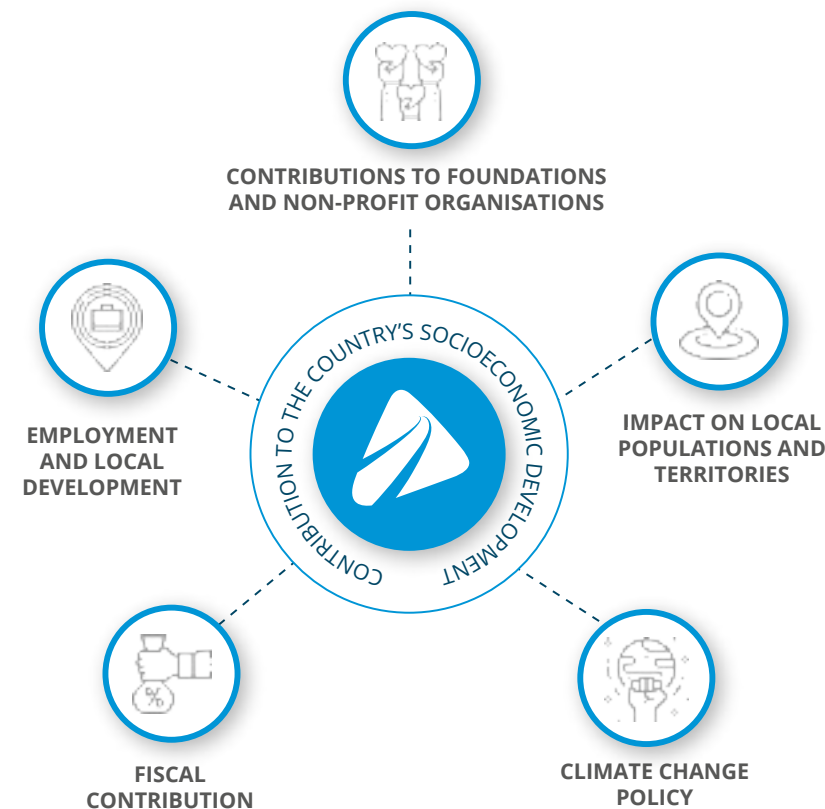
As a result of this work, Adif AV has defined the social and environmental criteria it will use to assess the suppliers that bid in its procurement processes. The social criteria will be more cross-cutting while the environmental criteria will be more closely related to the nature of what is being procured:

- **Social criteria:** equality, work-life balance, hiring of persons with disabilities, hiring of persons at risk of exclusion/particularly vulnerable segments, recruitment and job stability, workplace health and safety measures, good pay and terms of employment, collective bargaining agreements, training, corporate social responsibility, transparency, and good tax practices.
- **Environmental criteria:** waste and emissions, environmental management system, contracts for specific work and services, cleaning services, security services, consultancy and engineering services, maintenance services, vehicle fleet services, and the supply of energy and other materials.

DESCRIPTION OF INDICATORS		UNIT	2018	2019	2020
Disclosures on our performance within society and on product liability	Purchases framed by responsible criteria <i>* Indicator for Adif + Adif AV</i>	%	100	100	100

5.10. Adif AV's contribution to the country's socio-economic development

The activities carried out by Adif AV generate various qualitative and quantitative impacts within the communities in which it operates, as described below.



5.10.1. EMPLOYMENT AND LOCAL DEVELOPMENT

One of the most important of these is **direct employment**. As of the date of publication of this report, 218 jobs had been created at Adif AV. It is also worth noting that **rail transport** generates 145,000⁶ jobs in Spain (covering 0.75% of the active population⁷).

To promote local growth, Adif AV mainly deals with **local suppliers**, with 98.97% of its suppliers based in Spain.

These facts and figures, among others, show that the Company has generated **wealth within the local community** (social cash flow), distributed as follows:

- Payment of employee taxes (Social Security): €3,120 thousand
- Payment of employee taxes (personal income tax): €2,682 thousand
- Economic value distributed (contribution to stakeholders): €1,015.2 million
- Use of EU funds: 1.12%

⁶ Railway Observatory in Spain (2018 Report) – Last available report

⁷ INE (National Statistics Institute) – Labour Force Survey, Fourth Quarter 2020



5.10.2. CONTRIBUTIONS TO FOUNDATIONS AND NON-PROFIT ORGANISATIONS

To meet the growing demands of today's society and achieve the goals enshrined in the **2030 Agenda of the United Nations**, companies need to set up means of implementation and cooperation that will enable them to unlock synergies and multiplier effects for the common good, as stated in **SDG 17** of the Agenda.

To succeed, Adif AV collaborates with non-profit organisations through a variety of different formulas. It is also a signatory to the **UN Global Compact** and a member-participant of the **Spanish Network of the UN Global Compact**. Meanwhile, the Company is a member-promoter of **Forética**, and collaborates with the **Spanish Royal Academy of Engineering**.

In total, Adif AV's direct and indirect contributions to foundations and non-profit organisations in 2020 came to **€311,602**, including both membership of the organisations concerned and the Company's involvement in various social action initiatives. Adif AV collaborated with a total of 71 non-profit organisations in 2020.

5.10.3. IMPACT ON LOCAL POPULATIONS AND TERRITORIES

One of the biggest positive impacts generated by Adif AV is the contribution it makes towards the development of the rail transport sector —a strategic factor in terms of connectivity, accessibility, cohesion and territorial connection— and thus to local development, both economic and social. The railway is the most environmentally friendly modes of transport and should rightfully be the backbone of any **sustainable mobility policy**. To promote territorial structuring, several actions are being carried out across the Iberian Peninsula to optimise levels of cohesion and ensure the harmonious connection between of the railway and its surroundings:

- Investment in developing the high-speed network: **€1,062.54 million**.
- Resources for environmental protection (investment + operation): **€59.85 million⁸**.
- Station modernisation (millions of passengers to have benefited): **23.02**.
- Investment in accessibility improvement work (€ M): **€7.92 million**.
- Investment in the community (loss of profit – Open Station programme): **€267,269 thousand**.
- Urban integration (€M of cumulative investment): **€4,194.16**.
- Investment in R&D: **€3.32 million**.
- Investment in digital transformation: **€5.35 million**.

Rail transport has a promising future ahead of it, with continued growth forecast at a rate of 1% per year through investments in infrastructure, signalling and control, together with rolling stock and services.

⁸ Figures at year-end 2018 (latest available information).



5.10.4. CLIMATE CHANGE POLICY

Adif AV is acutely aware of the worldwide concern over the urgent need to halt one of the most pressing environmental problems, namely climate change. Its adverse effects are becoming increasingly evident, with a notable increase in frequency and severity in recent years.

With the aim of making a greater contribution to overcoming this environmental issue, Adif AV (together with Adif) has drawn up and implemented a **Climate Change Action Plan** for 2018-2030, which envisions action in the realm of both mitigation and adaptation. This strategic initiative is aligned with the main existing international commitments in the fight against climate change, such as SDG 13: Climate Action of the 2030 Agenda and the pledges made by the signatory countries to the Paris Agreement.

The Company also works towards European and domestic policies aimed at becoming **climate neutral by 2050**, as envisioned in the European Commission's Green Deal.

MAIN GOALS

The main goals pursued under this plan are as follows:

- **Reducing the energy consumption of the railway system** by 2,900 GWh cumulatively over the 2018-2030 horizon.
- **Cutting GHG emissions** by approximately 3,700 ktCO₂eq cumulatively over the 2018-2030 horizon, counting the purchase of green electricity (with Guarantee of Origin certificates).
- **Reducing the carbon footprint** of Adif and Adif AV by up to 86% if we count the purchase of green electricity (with Guarantee of Origin certificates).

Under this Plan, Adif AV accomplished the following goals in 2020:

- **Energy savings of 104.18 GWheq/year** (cumulative since 2009) achieved.
- **Greenhouse gas emissions down 13,028 tCO₂eq** (cumulative since 2009).
- **Procurement and consumption of 100% of the electrical energy** for the entire railway system with Guarantee of Origin certificates.

Appendix II: Indicators showing Adif AV's contribution to the socio-economic development of the country describes all KPIs used to measure the qualitative and quantitative impacts in relation to different aspects.

6

ABOUT THIS REPORT AND GRI STANDARDS



6. ABOUT THIS REPORT AND GRI STANDARDS

6.1. SCOPE

6.2. INTERNATIONAL STANDARDS



6.1. Scope

Adif has been preparing a Sustainability Report since 2006. In the 2020 report, Adif AV describes its financial and non-financial commitments and performance between 1 January and 31 December 2020.

The scope of the report extends to all Adif AV's activities in the countries in which it operates. The information contained in the report relates mostly to Adif AV, though sometimes to Adif as well. This is because the Company does not have separate information relating to specific aspects of Adif's management.

6.2. International standards

This report was drawn up with reference to the standards laid out in the Global Reporting Initiative's sustainability reporting guidelines (GRI Standards), in accordance with the Core option. Adif selected the material topics to be addressed based on the new materiality assessment conducted in 2020, which is outlined in section 2.5 of this report.

This report was also drawn up in keeping with the requirements stipulated in Spanish Law 11/2018 of 28 December, on non-financial and diversity reporting.

The table of contents and table of GRI performance indicators indicate the corresponding pages of the report, coverage of the requirements, management approaches and indicators. In the event that key performance indicators are not provided, the reason for their omission is explained.

This report also explains the relationship, or link, between the information contained in this report and the relevant Sustainable Development Goals (SDGs).

A person is shown from the side, wearing a brown jacket, sitting outdoors and using a silver laptop. The background is a blurred green landscape. A large white number '7' is overlaid on the left side of the image.

7

GRI INDICATORS

GENERAL DISCLOSURES

GRI INDICATOR		REFERENCE (Page)
102-1	Name of the organization	8
102-2	Activities, brands, products, and services	16-26
102-3	Location of headquarters	C/ Sor Ángela de la Cruz, 3 - 3º 28020 - Madrid
102-4	Location of operations	25
102-5	Ownership and legal form	210
102-6	Markets served	16-25
102-7	Scale of the organization	156; 158; 238
102-8	Information on employees and other workers	156
102-9	Supply chain	160
102-10	Significant changes to the organization and its supply chain	There were no significant changes in the organisation during the reporting period.
		Significant organisational changes are communicated within the relevant notice periods stipulated in the agreement.
102-11	Precautionary Principle or approach	83-89
102-12	External initiatives	16-17; 20-26

GRI INDICATOR		REFERENCE (Page)
102-13	Membership of associations	24; 98-101
102-14	Statement from senior decision-maker	Carta de la Presidenta
102-16	Values, principles, standards, and norms of behaviour	17
102-18	Governance structure	71-78
102-40	List of stakeholder groups	96-97
102-41	Collective bargaining agreements	166
102-42	Identifying and selecting stakeholders	28-29; 95-97
102-43	Approach to stakeholder engagement	95-97
102-44	Key topics and concerns raised	28-30
102-45	Entities included in the consolidated financial statements	210
102-46	Definition of report content and topic boundaries	210
102-47	List of material topics	28-29
102-48	Restatements of information	Where possible, data for the last three years (2018-2020 period) have been included.
102-49	Changes in reporting	210
102-50	Reporting period	210

INDICADOR GRI		REFERENCE (Page)
102-51	Date of most recent report	2019
102-52	Reporting cycle	Anual
102-53	Contact point for questions regarding the report	rsc@adif.es
102-54	Claims of reporting in accordance with the GRI Standards	210
102-56	External assurance	This report has been verified by a third party.

MANAGEMENT APPROACH

INDICATOR		REFERENCE (Page)
103-1	Explanation of the material topic and its boundary	The aspects reported on relate to the activities carried out by the Company and any direct impacts they may have.
103-2	The management approach and its components	41-57; 79; 85-89; 132-133; 177

ECONOMIC PERFORMANCE INDICATORS

INDICADOR GRI		REFERENCIA (Página)
201-1	Direct economic value generated and distributed	239
201-4	Financial assistance received from government	239

ANTI-COMPETITIVE BEHAVIOR

INDICATOR		REFERENCE (Page)
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	In 2020, there was no legal action regarding anti-competitive behavior, or anti-trust or monopoly practices.

MATERIALS

INDICATOR		REFERENCE (Page)
301-1	Materials used by weight or volume	135-136
301-2	Recycled materials used	135-136

ENERGY

INDICATOR		REFERENCE (Page)
302-1	Energy consumption within the organization	135-136
302-3	Energy intensity	137
302-4	Reduction of energy consumption	135-136

AGUA

INDICATOR		REFERENCE (Page)
303-1	Total water withdrawal by source	138

BIODIVERSITY

INDICATOR		REFERENCE (Page)
304-1	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	146-150

EMISSIONS

INDICATOR		REFERENCE (Page)
305-1	Total direct greenhouse gas (GHG) emissions (scope 1)	142-144
305-2	Total indirect greenhouse gas (GHG) emissions (scope 2) (generated off site during combustion of the energy source).	142-144
305-4	Greenhouse gas (GHG) emissions intensity.	144
305-5	Reduction of greenhouse gas (GHG) emissions.	142

EFFLUENTS AND WASTE

INDICATOR		REFERENCE (Page)
306-1	Total water discharge by quality and destination	149
306-2	Total weight of waste by type and disposal method	147-149

ENVIRONMENTAL COMPLIANCE

INDICATOR		REFERENCE (Page)
307-1	Non-compliance with environmental laws and regulations	152-153

EMPLOYMENT

INDICATOR		REFERENCE (Page)
401-1	New employee hires and employee turnover	171
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	164; 178
401-3	Parental leave	164; 178

OCCUPATIONAL HEALTH AND SAFETY

INDICATOR		REFERENCE (Page)
403-1	Workers representation in formal joint management-worker health and safety committees	166
403-2	Types of accident and accident frequency rates, work-related illnesses, days lost, absenteeism and number of deaths due to occupational accident or illness.	168

TRAINING AND EDUCATION

INDICATOR		REFERENCE (Page)
404-1	Average hours of training per year per employee	179
404-2	Programs for upgrading employee skills	170-176
404-3	Percentage of employees receiving regular performance and career development reviews	173

DIVERSITY AND EQUAL OPPORTUNITIES

INDICATOR		REFERENCE (Page)
405-1	Diversity of governance bodies and employees	71; 156
405-2	Ratio of basic salary and remuneration of women to men	163

NON-DISCRIMINATION

INDICATOR		REFERENCE (Page)
406-1	Incidents of discrimination and corrective actions taken	180

FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING

INDICATOR		REFERENCE (Page)
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk.	In 2020, no significant operations or suppliers were detected in which the right to freedom of association and collective bargaining may be breached or at risk.

LOCAL COMMUNITIES

INDICATOR		REFERENCE (Page)
413-1	Operations with local community engagement, impact assessments, and development programs	88-191

CUSTOMER HEALTH AND SAFETY

INDICATOR		REFERENCE (Page)
416-1	Assessment of the health and safety impacts of product and service categories	203-204



MARKETING AND LABELING

INDICATOR		REFERENCE (Page)
417-3	Incidents of non-compliance concerning marketing communications	In 2020, there were no incidents of non-compliance with regulations or voluntary codes concerning marketing communications.

CUSTOMER PRIVACY

INDICATOR		REFERENCE (Page)
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	181-183

SOCIOECONOMIC COMPLIANCE

INDICATOR		REFERENCE (Page)
419-1	Non-compliance with laws and regulations in the social and economic area	In 2020 Adif AV was not handed any significant sanctions or fines due to non-compliance with regulations in the social and economic area.

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APPENDIX I: CONTENTS

Table of contents required under Spanish Law 11/2018, of 28 December, amending the Spanish Code of Commerce, the consolidated text of the Corporate Enterprises Act passed by means of Royal-Legislative Decree 1/2010, of 2 July, and the Audit Act (Law 22/2015), of 20 July, in respect of non-financial and diversity information.

GENERAL AREAS

TOPICS		REPORTING FRAMEWORK	REFERENCE	COMMENTS / REASON FOR OMISSION
BUSINESS MODEL	Description of the business model	GRI 102-2 Activities, brands, products and services	10-67; 79	
	Business environment	GRI 102-3 Location of headquarters		
	Organisation and structure	GRI 102-4 Location of operations		
	Markets served	GRI 102-15 Key impacts, risks, and opportunities		
	Objectives and strategies	GRI 102-6 Markets served		
	Main trends and factors that could affect future development	GRI 102-7 Scale of the organization		
KEY RISKS AND IMPACTS IDENTIFIED	Risk management	102-15 Key impacts, risks and opportunities	85-89	
KEY RISKS AND IMPACTS IDENTIFIED	Assessment of risks and impacts related to key topics	102-15 Key impacts, risks and opportunities	87	

ENVIRONMENTAL MATTERS

TOPICS		REPORTING FRAMEWORK	REFERENCE	COMMENTS / REASON FOR OMISSION
ENVIRONMENTAL MANAGEMENT	Current and foreseeable effects of the company's operations	GRI 307-1 Non-compliance with environmental laws and regulations	132	
	Environmental assessment or certification procedures	Qualitative description of assessments and certificates	133	
	Resources dedicated to the prevention of environmental risks	Qualitative description of resources dedicated to the prevention of environmental risks	133	
	Application of the precautionary principle	GRI 102-11 Precautionary principle or approach	85-89	
	Amount of provisions and safeguards for environmental risks	Qualitative description of provisions for contingent liabilities	133	Adif AV keeps no such accounting record
POLLUTION	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	139-141;145	
CIRCULAR ECONOMY AND WASTE PREVENTION AND MANAGEMENT	Waste prevention, recycling and reuse measures and other forms of waste recovery and disposal	GRI 306-1 Water discharge by quality and destination	147-149	
		GRI 306-2 Waste by type and disposal method		
	Actions to combat food waste		n/a	This indicator is not considered material given the Company's activities

TOPICS		REPORTING FRAMEWORK	REFERENCE	COMMENTS / REASON FOR OMISSION
SUSTAINABLE USE OF RESOURCES	Responsible water consumption and supply based on local restrictions	GRI 303-1 Total water withdrawal by source	138	
	Consumption of raw materials	GRI 301-1 Materials used by weight or volume	138	
	Measures in place to ensure more efficient use of resources			
	Direct and indirect energy consumption	GRI 302-1 Energy consumption within the organization	135-136	
		GRI 302-3 Energy intensity	136-137	
	Measures in place to improve energy efficiency	GRI 302-4 Reduction of energy consumption	135-136;141-142	
	Use of renewable energies	GRI 302-1 Energy consumption within the organization		
CLIMATE CHANGE	Important aspects of greenhouse gas (GHG) emissions generated	GRI 305-1 Direct (Scope 1) GHG emissions	142-144	
		GRI 305-2 Energy indirect (Scope 2) GHG emissions		
		GRI 305-4 GHG emissions intensity		

TOPICS		REPORTING FRAMEWORK	REFERENCE	COMMENTS / REASON FOR OMISSION
CLIMATE CHANGE	Measures in place to adapt to the consequences of climate change	Qualitative description of measures taken to adapt to the consequences of climate change	39;144-145	
	GHG emission-cutting targets voluntarily adhered to	GRI 305-4 Reduction of GHG emissions	139-141	
PROTECTION OF BIODIVERSITY	Measures in place to preserve or restore biodiversity	GRI 304-3 Habitats protected or restored	150-153	
	Impacts caused by activities or operations in protected areas	GRI 304-1 Description of the most significant impacts on biodiversity in protected areas or in areas of high biodiversity value outside protected areas	146-149	
		GRI 306-5 Water bodies affected by water discharges and/or runoff		



CUESTIONES SOCIALES Y RELATIVAS AL PERSONAL

TOPICS		REPORTING FRAMEWORK	REFERENCE	COMMENTS / REASON FOR OMISSION
EMPLOYMENT	Total number and breakdown of employees by gender, age, country and job category	GRI 102-8 Information on employees and other workers	40; 156-159	
	Total number and distribution of types of employment contract	GRI 102-8 Information on employees and other workers	159-162	
	Average annual number of permanent, temporary and part-time contracts by gender, age and professional category,	GRI 102-8 Information on employees and other workers	161	
		GRI 401-1 New employees hires and employee turnover		
	Number of dismissals by gender, age and job category	GRI 102-8 Information on employees and other workers	163	
	Gender pay gap	GRI 405-2 Ratio of basic salary and remuneration of women to men	163	
	Average remuneration by gender, age and job category	Quantitative description of average employee remuneration by gender, age and professional category	163	
	Average remuneration of directors, by gender	Quantitative description of average remuneration of directors by gender	163	
	Average remuneration of executives, by gender	Quantitative description of average remuneration of executive officers by gender	163	
	Implementation of work disconnection policies		n/a	Adif AV has no work disconnection policies in place
	Employees with disabilities	GRI 405-1 Diversity of governance bodies and employees	163	

TOPICS		REPORTING FRAMEWORK	REFERENCE	COMMENTS / REASON FOR OMISSION
WORK ORGANISATION	Organisation of work time	Qualitative description of the organisation of working hours	164	
	Number of hours of absenteeism	GRI 403-2 Types of accident and frequency rate of accidents, occupational diseases, days lost, absenteeism and number of fatalities by occupational accident or occupational disease	164	
	Measures aimed at improving the work-life balance and ensuring a suitable balance between both parents	GRI 401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	164; 178	
		GRI 401-3 Parental leave		
HEALTH AND SAFETY	Health and safety conditions in the workplace	GRI 403-2 Types of accident and frequency rate of accidents, occupational diseases, days lost, absenteeism and number of fatalities by occupational accident or occupational disease	167-168	
	No. of work-related injuries and illnesses by gender, their frequency and seriousness		168-169	
LABOUR RELATIONS	Organisation of dialogue with employees	403-1 Workers representation in formal joint management-worker health and safety committees	166	
	Percentage of employees covered by collective bargaining agreements, by country	GRI 102-41 Collective bargaining agreements	166	
	Description of collective bargaining agreements, particularly in the field of occupational health and safety	Qualitative description of collective agreements and their application in the realm of health and safety	166	

TOPICS		REPORTING FRAMEWORK	REFERENCE	COMMENTS / REASON FOR OMISSION
TRAINING	Policies introduced in the field of training	GRI 404-2 Programs for upgrading employee skills and transition assistance programs	170-176	
	Total training hours by job category	404-1 Average hours of training per year per employee	170	
EQUALITY	Measures put in place to foster equal treatment and opportunities for women and men	GRI 405-2 Ratio of basic salary and remuneration of women to men	177-180	
	Equality plans and measures taken to promote employment, protocols to combat sexual and gender-based harassment	GRI 405-1 Diversity of governance bodies and employees	177-178	
	Integration and universal accessibility for persons with disabilities	GRI 405-1 Diversity of governance bodies and employees	184-187	
	Anti-discrimination policy and, where applicable, diversity management policy	GRI 406-1 Incidents of discrimination and corrective actions taken	180	

INFORMATION ON THE RESPECT FOR HUMAN RIGHTS

TOPICS	REPORTING FRAMEWORK	REFERENCE	COMMENTS / REASON FOR OMISSION
Application of human rights due diligence processes	GRI 102-16 Values, principles, standards, and norms of behavior	n/a	Due to its activity Adif AV has not found it necessary to apply any due diligence procedures in relation to human rights
Measures to prevent the risk of human rights abuses and, where appropriate, measures to mitigate, manage and redress any abuses committed	Qualitative description of measures to prevent risks of human rights violations	84	
Reports of human rights abuses	GRI 407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	84	
Promotion of and compliance with the provisions contained in the ILO's fundamental conventions on the freedom of association, the right to collective bargaining, the elimination of workplace discrimination and of all forms of forced or compulsory labor and the abolition of child labor	GRI 407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	84	

INFORMATION ON ANTI-CORRUPTION AND BRIBERY

TOPICS	REPORTING FRAMEWORK	REFERENCE	COMMENTS / REASON FOR OMISSION
Measures in place to prevent corruption and bribery	GRI 102-16 Values, principles, standards, and norms of behavior	83-84	
Measures to combat money laundering	Qualitative description of anti-money laundering measures	80-82	
Contributions to foundations and non-profit organisations	GRI 201-1 Direct economic value generated and distributed	205	



INFORMATION RELATED TO SOCIETY

TOPICS		REPORTING FRAMEWORK	REFERENCE	COMMENTS / REASON FOR OMISSION
COMMITMENTS OF THE COMPANY TO SUSTAINABLE DEVELOPMENT	Impact of the Company's activities on employment and local development	GRI 413-1 Operations with local community engagement, impact assessments, and development programs	205-206	
	Impact of the Company's activities on local populations and territories	GRI 102-12 External initiatives	205-206	
	Relations maintained with local community agents and forms of dialogue with those agents	GRI 102-43 Approach to stakeholder engagement	188-190	
	Association or sponsorship actions	GRI 102-13 Membership of associations	190	



TOPICS		REPORTING FRAMEWORK	REFERENCE	COMMENTS / REASON FOR OMISSION
OUTSOURCING AND SUPPLIERS	Making social, gender equality and environmental concerns part of the procurement policy	GRI 102-9 Supply chain	203-204	
		GRI 102-10 Significant changes to the organization and its supply chain		
	Consideration of social and environmental responsibility concerns in relations with suppliers and subcontractors	GRI 102-9 Supply chain	203-204	
		GRI 102-10 Significant changes to the organization and its supply chain		
	Supervision and audit systems and the results of those systems	GRI 102-9 Supply chain	203-204	
		GRI 102-10 Significant changes to the organization and its supply chain 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		

TOPICS		REPORTING FRAMEWORK	REFERENCE	COMMENTS / REASON FOR OMISSION
CONSUMERS	Measures to protect the health and safety of consumers	GRI 416-1 Assessment of the health and safety impacts of product and service categories	102-113	
	Grievance and claims systems	Qualitative description of complaints and claims systems	181-182	
	Complaints received and the solution or response given	GRI 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	182-183	
TAX INFORMATION	Country-by-country profits	GRI 201-1 Direct economic value generated and distributed	238	Adif AV pays taxes in Spain only
	Income tax paid	Quantitative description of profit before and after tax	238	Adif AV pays taxes in Spain only
	Public subsidies received	GRI 201-4 Financial assistance received from government	251	

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APPENDIX II: INDICATORS SHOWING ADIF AV'S CONTRIBUTION TO THE COUNTRY'S SOCIOECONOMIC DEVELOPMENT

SOCIOECONOMIC CONTRIBUTION – ADIF AV			2020	2019
ECONOMIC	Generation of wealth	Expenditure on personnel (wages) (thousands of euros)	16,752	15,817
		Contribution to stakeholders (economic value distributed)	1,015.2	1,114.4
	Taxes paid	Employee taxes paid (Social Security)	3,120	3,112
		Employee taxes paid (personal income tax)	2,682	2,857
	Promoting economic activity	Use of EU funds (%)	1.12	1.11
		Amount awarded for construction work (€M) (excl. VAT)	340.39	2,224.72
		Expenses incurred on high-speed network maintenance work (€M) (excl. VAT)	295.80	298.9
		Expenses incurred in high-speed network operations (€M) (excl. VAT) (in reference to traffic management)	26.70	29.5

SOCIOECONOMIC CONTRIBUTION – ADIF AV			2020	2019
SOCIAL	Employment	Number of direct jobs created	218	218
		% permanent jobs	95.87%	98.17%
		Training hours (total)	20,113.00	12,824.00
		Investment in training (€) (Adif and Adif AV)	3,082,230	4,227,744
	Service	Investment in developing the high-speed network (€M) (VAT included)	1,062.54	1,110.22
		Kms of total network under management	3,622	3,456
		Train traffic (daily average)	691	952
		Number of stations owned by Adif AV	42	42
		Number of passenger station users	71,138,380	163,081,564
		Station modernisation (millions of passengers to have benefited)	23.02	139.89
		No. of companies operating on the Adif AV network (liberalised business)	15	15
		Urban integration (€M of cumulative investment)	4,194.16	4,067.16
		Number of stations with Dialoga service	20 (16 high-speed)	20 (16 high-speed)

SOCIOECONOMIC CONTRIBUTION – ADIF AV			2020	2019
SOCIAL	Accessibility	Passengers boarding / alighting at accessible stations (% passengers)	84.76%	85.07%
		Investment in accessibility improvement work (€M)	7.92	12.70
		Number of activities of the Open Station programme	197	486
	Social action / contribution to the community	Percentage of purchases with responsible criteria	100	100
		Number of non-profit organisations with which the Company collaborates	71	106
		Investment in the community (loss of profit – Open Station)	267,269	958,548
		Percentage of media information enquiries answered	100%	100%
		Sponsorship agreements signed with non-profit organisations (Adif and Adif AV)	0	2
		Involvement in international associations and organisations	224	224
	Knowledge and research	Involvement in international projects and activities	45	98
		Number of R&D projects (Adif and Adif AV)	41	31
		Investment in R&D (€M)	3.32	1.14
		Number of new patents, technology transfer agreements and manufacturing licences	22 / 11	20 / 16

SOCIOECONOMIC CONTRIBUTION – ADIF AV			2020	2019
SOCIAL	Knowledge and research	Number of companies based at the Centre for Railway Technologies	21	22
		Number of companies taking part in the initiative launched by Adif AV and The Railway Innovation Hub Spain association	80	82
		Number of digital transformation initiatives in progress	23	20
		Investment in digital transformation (€M)	5.35	6.80
ENVIRONMENTAL	Climate change combat	Reduction of GHG emissions (Tn of CO ₂)	13,028	22,712
		Improvement in energy efficiency (GWh equivalent)	104.18	103.56
		Estimated cumulative reduction in energy consumption for the 2018-2030 period (Gwh eq.) (Adif and Adif AV)	2,900	2,900
		Cumulative emissions reduction for the Plan horizon through to 2030 (ktCO _{2eq}) (according to electricity mix) (Adif and Adif AV)	3,700	3,700
		Carbon footprint reduction target by 2030 (%) (Adif and Adif AV)	86%	86%
		Percentage of energy purchased with GdO certificate (Adif and Adif AV)	100%	100%
		Percentage of renewable energies	No data	No data
		Resources deployed for environmental protection (investment + operation) (€M)	59.854 (figure for year-end 2018)	75.123 (figure for year-end 2017)

SOCIOECONOMIC CONTRIBUTION – ADIF AV			2020	2019
ENVIRONMENTAL	Minimisation of impacts	Expenditure on fire prevention (€M)	€2,897,854	€2,230,719
		Number of environmental review reports (projects)	207	225
		Number of environmental monitoring reports for construction work not subject to environmental impact statement (EIS)	190	74
		Number of regulatory reports related with environmental monitoring of works subject to environmental impact statement (EIS)	412	248
		Hazardous waste managed (Tn)	0.69	2.64
		Waste recovered (%)	100	100





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FINANCIAL INFORMATION

10. FINANCIAL INFORMATION

10.1. ANALYSIS OF ACTIVITY AND PERFORMANCE

10.2. FINANCIAL INDICATORS FOR THE BUSINESS

10.3. RAILWAY CHARGES

10.3.1. CHARGES FOR USE OF RFIG LINES

10.3.2. CHARGES FOR USE OF STATIONS AND OTHER FACILITIES

10.4. FINANCING THROUGH GREEN BOND ISSUES

10.5. LIQUIDITY AND CAPITAL

10.6. COVERAGE RATIO – ESA (EUROPEAN SYSTEM OF ACCOUNTS)

10.6.1. INVESTMENTS CARRIED OUT DURING THE YEAR

10.6.2. INFORMATION ON PROCUREMENT

10.1 Analysis of activity and performance

The main items of Adif Alta Velocidad's 2020 income statement compared to previous years are presented below:

FIGURES IN MILLIONS OF EUROS	2019	2020
Operating income	1,168.7	806.7
Operating expenses	1,140.5	1,066.3
Operating profit/(loss)	28.2	-259.6
EBITDA	280.6	-8.5
Net finance income/(cost)	-207.4	-201.3
Profit/(loss) before tax	-179.2	-460.9
Profit/(loss) for the year	-179.2	-460.9

Adif Alta Velocidad reported a loss before tax of €460.9 million in 2020 to €179.2 in 2019, a year-on-year decrease of €281.6 million or 157%.

The most significant changes in income statement headings are as follows:

- **Operating loss of €259.6 million** compared to operating profit of €28.2 in 2019, a difference of €287.8 million.

The main changes were:

- » A 46% drop in revenue to €283.6 million following the declines in sustained in March to December 2020 caused by lower traffic resulting from the state of alarm declared in the wake of the COVID-19 pandemic and the ensuing crisis, not to mention the impact of the adjustments to the C1 parking fee for services subject to public service obligations (obligaciones de servicio público, or OSP).
- » A 21% fall in other operating income, from €436.2 million in 2019 to €345.2 million in 2020. This decrease was due to a reduction in rental and service income caused by the measures put in place to mitigate the impact of the health and economic crisis caused by COVID-19.

Revenue from electricity supply also fell during the year by €65.4 million, though this was partially offset by a reduction in expenditure on energy purchases.

- » A 12% or €90 million decline in "Other operating expenses" from 2019, of which €61 million related to reducing spending on traction power and €12.6 million to third-party investment and other, which were offset by revenue in the same connection. There was also a reduction in infrastructure maintenance costs associated with track exploration along the Adif Alta Velocidad network.

- **Net finance cost in 2020** was €201.3 million in 2020, compared to €207.4 million in 2019. This was mainly the result of:
 - » A 6% year-on-year fall in finance costs, from €333 million in 2019 to €313 million in 2020. This decline was largely due to a reduction in the average debt rate from 1.79% in 2019 to 1.70% in 2020. Meanwhile, the measures deployed by the Company in 2020 led to sharp reduction in the estimated provision for finance costs for late interest payments due to contractors and persons subject to compulsory purchase orders. "Impairment and gains/(losses) on disposal of financial instruments" in 2020 included €4.7 million of impairment on non-trade receivables from associates. This, coupled with the increase in the provision for write-downs of interests in integration JVs, explains the change of €9.5 million from 2019.
 - » Finance income was down 3%, largely due to the commissioning of high-speed lines and the resulting reduction in income from the capitalisation of the related finance costs.

All of the above gives rise to the following figures for **economic value generated, distributed and retained** in 2020.

FIGURES IN € MILLION	2019	2020
Economic value generated*	1,187.6	805.4
Economic value distributed **	1,114.4	1,015.2
Economic value retained***	73.2	-209.8

(*) Economic value generated: ordinary + extraordinary income
(**) Economic value distributed: operating expenses + finance costs + taxes
(***) Economic value retained: Economic value generated – Economic value distributed

Adif Alta Velocidad comprises the following business segments:

- **Network management:** Includes the processes of capacity management, traffic safety, network statement, rail infrastructure maintenance and traffic management.
- **Construction:** Includes construction of the lines entrusted to the Company.
- **Management of stations and other assets:** This segment includes station management, meaning all activities needed to provide services to the end customer, as well as telecommunications management and management of other assets.
- **Energy:** Managing the supply of electricity.



The following table shows **Adif Alta Velocidad's 2020 operating income by business segment:**

IN € THOUSAND	TOTAL	Network management	Construction	Energy	Management of stations and other assets	Common expenses
Revenue	327,388	283,958	0	0	43,430	0
Self-construction property, plant and equipment	10,391	0	10,179	0	212	0
Cost of sales	23,959	0	23,959	0	0	0
Other operating income	309,907	3,281	-11,377	199,531	118,057	415
Staff costs	-27,840	-295	-22,462	-483	-2,315	-2,285
Other operating expenses	-654,750	-322,496	-1,502	-206,029	-105,397	-19,326
Profit/(loss) from intra-group transactions	2,439	-5,292	0	7,089	-295	937
EBITDA	-8,506	-40,844	-1,203	108	53,692	-20,259
Amortisation and depreciation	-373,840	-328,327	-76	-90	-44,637	-710
Recognition of non-financial and other grants	120,588	116,308	0	0	4,227	53
Impairment and gains / (losses) on disposal of assets	2,165	-2,012	-101	-201	4,479	0
Non-recurring income / (expense)	0	0	0	0	0	0
Share of overheads	0	-6,849	-10,518	-789	-2,760	20,916
OPERATING PROFIT / (LOSS)	-259,593	-261,724	-11,898	-972	15,001	0

10.2 Financial indicators for the business

The following table shows various **general economic and financial indicators**:

	2018	2019	2020
SELF-FINANCING RATIOS			
LEVEL OF AUTONOMY Indicates the degree of autonomy in respect of third-party financing.	53.33%	52.70%	52.05%
FINANCING OF FIXED ASSETS Indicates the % of long-term financing for non-current assets.	98.17%	98.61%	98.40%

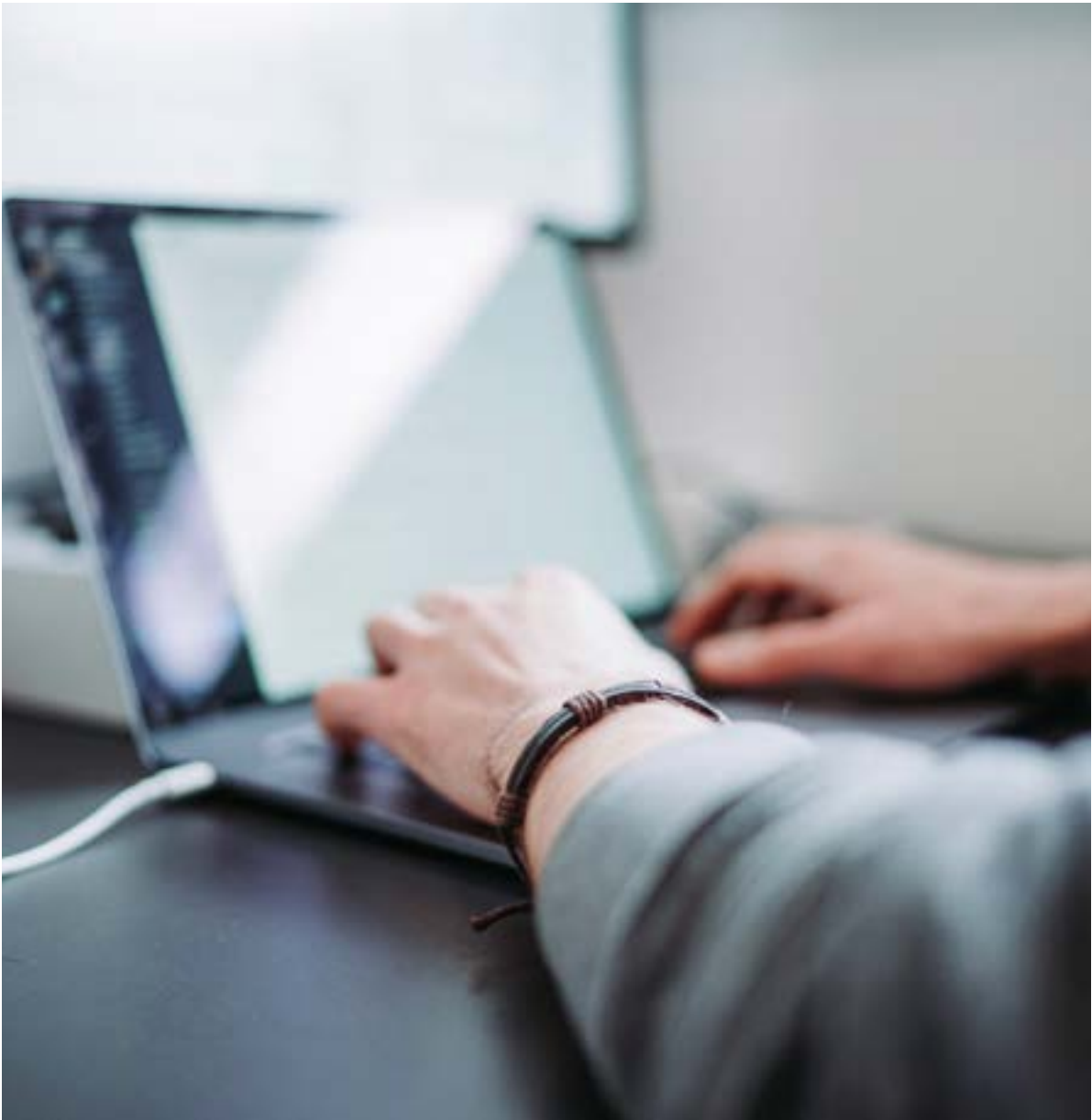
PROFITABILITY RATIOS			
TOTAL ASSET TURNOVER Indicates the degree of efficiency when it comes to asset management.	2.14%	2.22%	1.40%
FIXED ASSET TURNOVER Indicates the degree of efficiency in managing fixed assets.	2.16%	2.25%	1.43%
CURRENT ASSET TURNOVER Indicates the degree of efficiency in managing current assets.	197.61%	148.68%	85.26%

	2018	2019	2020
LIQUIDITY RATIOS			
LIQUIDITY RATIO Indicates how many monetary units are liquid for every 100 assets.	1.08%	1.49%	1.65%
CASH RATIO Shows the Company's ability to honour its current payment commitments.	0.37	0.52	0.51
SOLVENCY RATIO Indicates the Company's ability to cover its liabilities with its assets.	2.14	2.11	2.09
FINANCIAL PROFITABILITY Shows the return on own funds.	-1.60%	-1.28%	-3.32%
ECONOMIC PROFITABILITY Effective capacity to remunerate all capital available to the Company, both own and third-party.	-0.49%	-0.38%	-0.96%
WORKING CAPITAL (€ million) Indicates the Company's ability to honour its short-term obligations.	-833.94	-643.77	-755.56

Average supplier payment period

In accordance with Additional Provision Three of Law 15/2010 of 5 July, the following table provides information for 2018, 2019 and 2020 on payment deferrals made to suppliers, as per the methodology set out in the Resolution of the Spanish Accounting and Audit Institute of 29 January 2016:

Payments made and outstanding at 31 December	2018	2019	2020
	Days	Days	Days
Average supplier payment period	55.53	50.58	54.86
Ratio of transactions paid	57.63	51.37	56.92
Ratio of transactions outstanding	27.38	37.42	34.81
Amount (€ thousand)			
TOTAL PAYMENTS MADE	1,746,167	1,755,053	1,550,533
TOTAL PAYMENTS OUTSTANDING	130,573	104,520	159,131



10.3 Railway charges

Pursuant to the Rail Sector Act (Law 38/2015 or LSF for its acronym in Spanish), Adif Alta Velocidad charges railway companies for use of railway lines attached to the General Interest Railway Network (RFIG) and for the use of stations and other railway facilities.

The Rail Sector Act transposes into Spanish the rules contained in Directive 2012/34/EU of the European Parliament and of the Council of 21 November 2012. It covers almost all aspects of railway legislation, including matters relating to the transparency and sustainability of railway infrastructure financing, and provides a new and more complete classification of railway-related services and new and more precise rules on charging for access to railway infrastructure.

Title VI of the Act regulates the economic and tax regime of the railway sector in a bid to strike a balance between the economic viability of the system and the promotion of rail transport. It seeks to provide incentives to improve network performance, reduce disturbances, optimise the use of the infrastructure and reduce the costs of making it available. It also governs the legal regime of charging for the use of railway lines and for the use of service facilities and provides an updated tariff regime for the provision of services, thus advancing free access to service activities without compromising the sustainability of the railway infrastructure.

Article 23 of the Act explains the remit of the general rail infrastructure managers, including the fixing, review and collection of railway infrastructure charges, in accordance with applicable law and regulations.

Meanwhile, Article 100 states that any proposal to modify or review the charges must emanate from the rail infrastructure manager, that any such proposal must be subject to consultation with the railway corporations and to a report by the National Commission for Markets and Competition, and that the specific amounts of the fees must be fixed and then delivered to the Ministry of Public Works for their inclusion in the preliminary draft of the General State Budget Law.

Although the general rail infrastructure manager Adif Alta Velocidad drew up a tariff proposal for 2020, which was submitted in due course for consultation with the railway corporations and made subject to a report by the National Commission for Markets and Competition, the tariffs applied in 2020 were actually the 2018 tariffs enacted by Law 6/2018 on the General State Budget for 2018. This is because the 2018 law has been extended until the General State Budget Law for 2020 is enacted, which has yet to occur.

The methodology for calculating the charges, in accordance with applicable European regulations and the Rail Sector Act, is to pass on to the railway operator all the costs directly attributable to the rail service.

The tariffs set for 2018 —applicable from 1 August 2018 until 31 December 2020— were calculated in accordance with the model for determining railway charges established by Directive 2012/34/EU, the Rail Sector Act and Regulation (EU) 2015/909, based on the costs directly attributable to the operation of the railway service for 2016 (last closed and audited financial year), broken down by high-performance lines (A lines) and other lines (Non-A lines).

The following **costs are directly attributable to the rail service provided**:

Costs of the capacity adjudication process, traffic management, traffic safety and replacement of safety and traffic control facilities **(recoverable under mode A)**.

Railway infrastructure maintenance and upkeep costs **(recoverable under mode B)**.

Electrification installation maintenance and upkeep costs, and the related replacement costs **(recoverable under mode C)**.

Financial expenses, replacement costs corresponding to platform, tunnels, bridges, track, buildings and resources used for maintenance and conservation, as well as the expenses needed to ensure a reasonable development of such infrastructures and all costs that allow the rail infrastructure manager to achieve the economic sustainability of the infrastructure it manages, may all be recovered, provided that the market can accept it, by adding them to the full amount chargeable for the use of railway lines (mode B).

The COVID-19 crisis severely affected rail traffic in 2020 and tariff income was inevitably impacted by the public health emergency caused by the pandemic and the ensuing disruption to the global economy.

As a result, tariff revenue in 2020 was down 45.78% on 2019 due to the reduction in rail traffic amid the pandemic and the mobility restrictions put in place.

The following table shows **revenues by charge type**, in 2020 and 2019:

	2020	2019
CHARGE FOR USE OF INFRASTRUCTURE	268,075	497,618
Adjudication of capacity	52,413	90,771
Use of railway lines	197,085	371,362
Use of transformer and distribution installations	20,661	36,047
Discounted charge for use of RFIG lines	-2,084	-562
CHARGE FOR USE OF STATIONS AND OTHER FACILITIES	59,007	113,100
Use of Passenger stations	43,000	83,208
Variable gauge	3,377	4,626
Use of Track with platform	12,630	25,266
TOTAL CHARGES	327,082	610,718

In € thousand

10.3.1. CHARGES FOR USE OF RFIG LINES

Revenue earned from use of RFIG lines in 2020 fell by 46% year-on-year owing to a 39% drop in production.

Overall traffic, measured in terms of train-km, fell 39% from 60.3 million train-km in 2019 to 36.6 million in 2020. This change was down to quieter levels of traffic on all lines.

The following table shows **changes in the number of train-km running in 2020 and 2019 on the main Adif Alta Velocidad lines:**

	2019	2020	CHANGE	% CHANGE
THOUSANDS OF TRAIN-KM FROM USE OF THE RFIG				
MADRID – ANDALUSIA	18,670	10,738	-7,932	-42.5%
MADRID – LEVANTE	7,773	4,813	-2,960	-38.1%
MADRID – BARCELONA – FRENCH BORDER	17,636	9,882	-7,754	-44.0%
MADRID – VALLADOLID – LEÓN – ZAMORA	5,556	3,156	-2,400	-43.2%
OTHER LINES	10,708	8,088	-2,620	-24.5%
TOTAL	60,343	36,677	-23,666	-39.2%

To encourage the efficient operation of the rail network and promote new rail transport services in accordance with Article 97.6 of Law 38/2015, in 2020 Adif Alta Velocidad established a discount on the charge for use of the lines that make up the General Interest Rail Network (RFIG), under modes A and B, for annual increases in traffic in accordance with the criteria set out in that law.



The following lines were **offered at a discount in 2020** along the network of Adif Alta Velocidad

Lines along High-Speed Axis 11 Madrid Chamartín – Valladolid – Bifurcación Venta de Baños.

Lines along High-Speed Axis 12 Madrid Atocha – Barcelona – French Border.

Lines along High-Speed Axis 13 Madrid Atocha – Levante.

Lines along High-Speed Axis 14 Madrid Atocha – Toledo / Sevilla Sta. Justa / Málaga María Zambrano.

Lines along High-Speed Axis 16 Olmedo – Medina – Zamora – Galicia



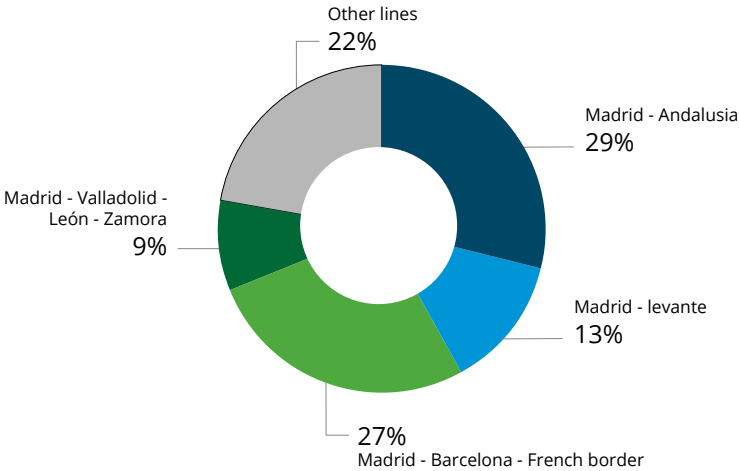
In response to the ongoing COVID-19 pandemic, the requirements for claiming the discount to incentivise the growth of the rail transport sector were eased, with the benchmark and target traffic both modified, thus leading to an increase of 265% with respect to 2019.



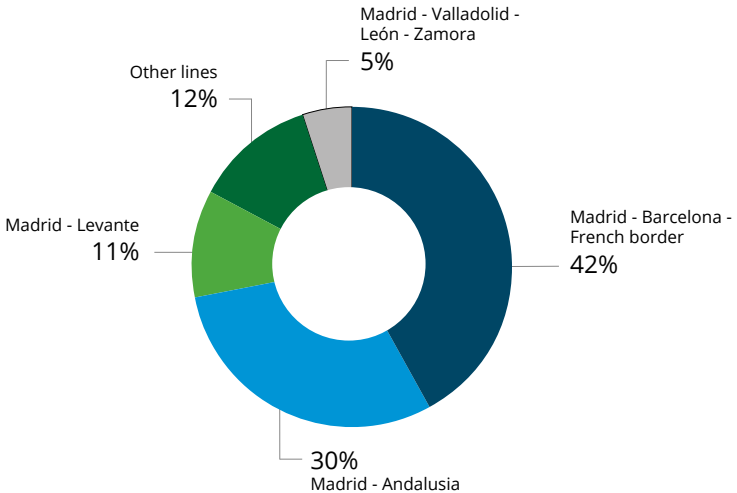
The discount generated in 2020 amounted to €2,083 thousand, compared to €571 thousand in 2019. As just mentioned, this reduction can be explained by the benchmark and target traffic levels set in 2020 to mitigate the effects of the pandemic.

The following charts show the breakdown of revenue and train-km travelled in 2020 along the main lines of Adif Alta Velocidad.

BREAKDOWN TRAIN-KM 2020



COLLECTED BY LINES 2020



10.3.2. CHARGES FOR USE OF STATIONS AND OTHER FACILITIES

Revenue from **charges for station usage** fell by 93% in 2020 due to the mobility restrictions put in place because of the pandemic.

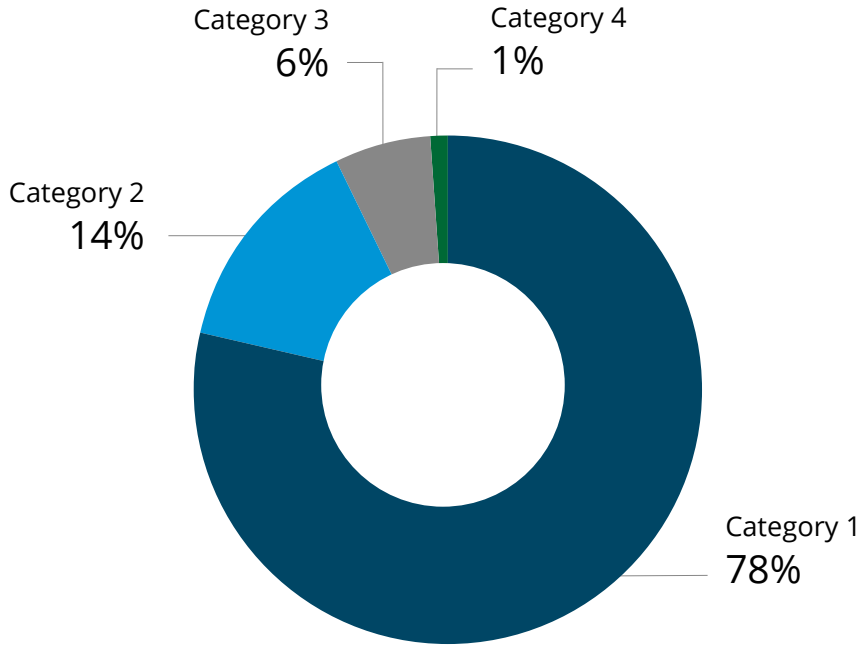
Revenue from charges for station usage fell by 41% compared to 2019 and revenue from the addition station usage intensity by 63%.

The change in the **number of passengers boarding and disembarking at stations** in 2020 compared to 2019 is shown below:



The following chart shows the **distribution by station category of the charges earned from use of Adif Alta Velocidad stations**:

REVENUE FROM CHARGES FOR USE OF PASSENGER STATIONS 2020



Total revenue from **charges for use of other facilities** fell by 87% from 2019.

For comparative purposes, it is particularly relevant to analyse the revenue earned from charging for the use of tracks with platforms at stations for the stabling of trains for commercial passenger services and other operations.

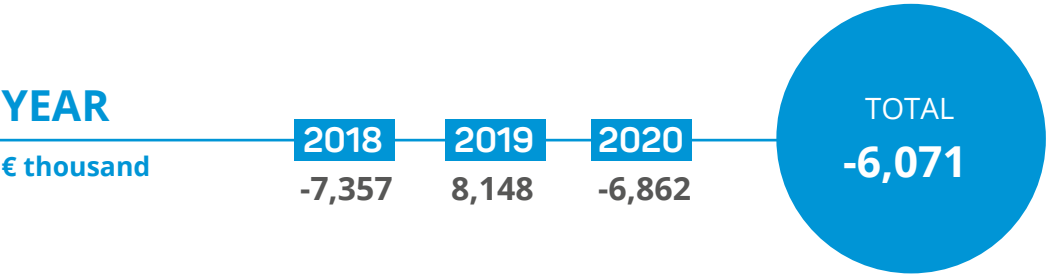
Focusing on the amount shown in 2020, it should be noted that the stabling of trains at passenger stations in 2020 as a result of the pandemic was not due to commercial decision-making of the railway corporations, but to the need to adapt to ongoing needs as the pandemic unfolded. This situation required ongoing collaboration between Adif Alta Velocidad and the railway corporations to offer citizens safe transport services. As a result, stabling times were set without regard to rational operating criteria.

That explains why Adif Alta Velocidad opted for a different calculation method for 2020 that aims to be equitable when determining the impact of the pandemic on this charge.

Broadly speaking, the method involves applying, for each station, the amount of the valuation carried out for financial year 2019 (the last year in which stabling was carried out without restriction, and in accordance with the requests and commercial criteria of the railway companies), corrected by a factor to reflect the impact of the pandemic on rail traffic in 2020. This factor is the proportion of trains scheduled in 2020 to those scheduled in 2019, which have their origin or destination at each of the stations subject to valuation.

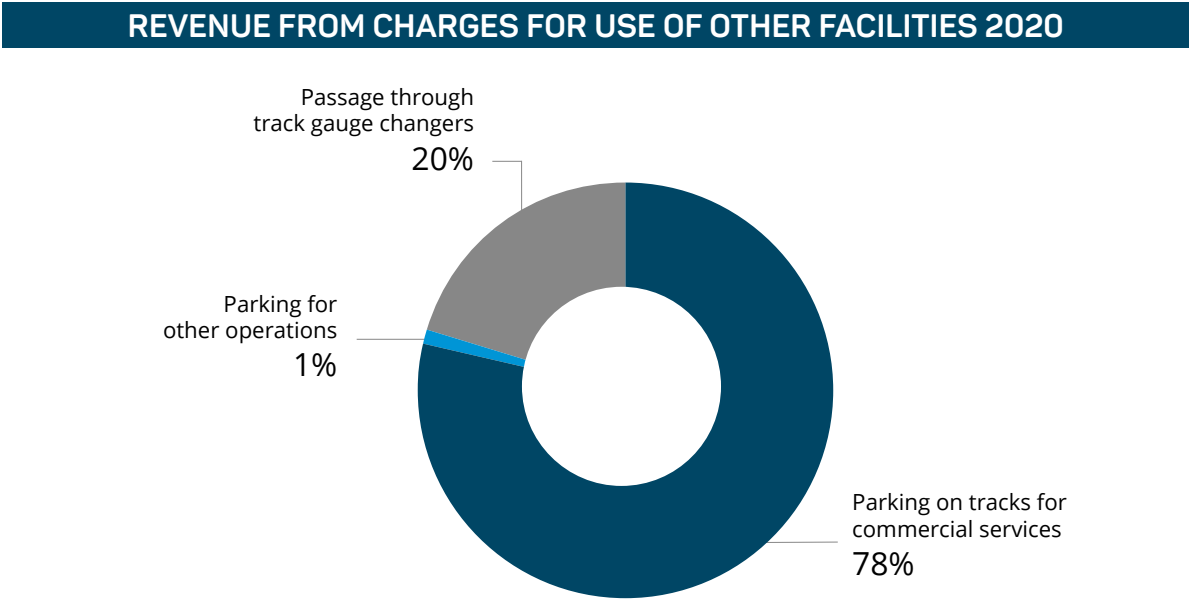
Due to the aforementioned change in the calculation methodology, new appraisals of the track occupancy charts were drawn up, thus generating corrective settlements for the years 2020, 2019 and 2018, the amount of which was recorded in full in 2020.

The relevant **amounts for each financial year** are as follows:



As for the amount shown for 2019, following the extinction of the discount set out in Transitional Provision Three of the Rail Sector Act, the assessments of the track occupation charts for 2018 and 2019 were reworked in accordance with the new circumstances and the charges that had not been paid due to the effectiveness of the discount were calculated. These charges amounted to €14,713 thousand and were recorded in full in financial year 2019.

The following chart shows the **breakdown of revenue from charges for other facilities in 2020**-



10.4 Financing through green bond issues



On 12 February 2020, Adif Alta Velocidad placed its fourth issuance of fixed income securities under the Green Bond format. This transaction is part of the objectives envisioned in our Strategic Plan for the coming years; **2030 Transformation Plan** and the Company's firm commitment to sustainability, as discussed in previous sections of this report. Our entire strategy is aligned with the Sustainable Development Goals (SDGs) of the United Nations and moreover the Plan sets specific strategic objectives in a bid to improve our impact on society from economic, social, environmental and good governance dimensions. For instance, **Objective 3.2 of the Strategic Plan of Adif Alta Velocidad** is "to contribute to an environmentally-friendly mode of transport that makes responsible use of scarce resources". To achieve this, initiatives have been designed to combat climate change, incorporate circular economy projects, apply green purchasing criteria and enhance the environmental monitoring system.

Along these lines, Adif Alta Velocidad carries out its activity as a sustainable issuer, in compliance with the Green Bonds Principles (GBP) of ICMA (International Capital Market Association), and in September 2019 it renewed the framework it had adopted back in 2017 with the aim of ensuring the transparency, disclosure and integrity of its Green Bond issues, while also opening up the possibility of financing through other instruments such as Green Loans.

Under the current framework, the Company remains committed to allocating the proceeds from its green financing instruments to Eligible Green Projects, whether new projects or the continuation of ongoing projects. The proceeds are allocated from two years ahead of the bond issuance up to 24 months following date of issuance. More precisely, Adif Alta Velocidad has pledged to allocate the funds obtained through these bonds to the **two categories of projects** described below:

- a) Investments related to new high-speed rail lines and the extension of existing high-speed lines.
- b) Investments related to the maintenance, upgrading and energy efficiency of high-speed rail lines.

Furthermore, to provide investors with an independent measure of compliance with the Green Bond Principles, Adif Alta Velocidad commissioned **CICERO (Center for International Climate Research)** to review its framework of actions and issue a Second Opinion.



The Second Opinion issued by CICERO on the new Framework upholds the highest rating of “DARK GREEN” and confirms compliance with the ICMA Principles within the framework of Adif Alta Velocidad’s green financing instruments.

CICERO’s assessment also includes an analysis of the governance structure of the Green Finance Framework, rating it as “Excellent”.

The **main features of Adif Alta Velocidad's third green bond issue** are as follows:

Amount	600,000,000 EUR
Effective date	29 January 2020
Payment date	12 February 2020
Maturity date	30 April 2030
Coupon	0.55% per annum
Net amount	€597,558,000

Adif Alta Velocidad is now the **main issuer of green bonds in the Spanish public sector and the third largest issuer at national level**, behind only Iberdrola and BBVA

Sustainable financing grew by 45% in Spain in 2020 to €33.026 billion, according to data provided by the Spanish Observatory of Sustainable Financing – OFISO. One out of every 10 euros issued in the Spanish capital market is now sustainable.

Issuances of green, social and sustainable bonds in the country accounted for €15.024 billion of the above figure, 54% more than the previous year. Meanwhile, sustainable loans, including project finance, contributed €18.002 billion, up 38%.

Green bonds reached €9,123 million, up 44%, through 28 issuances by 22 different issuers, compared to 20 issuances and 14 issuers in the previous year.

In the fourth green bond issuance carried out in 2020, 55% of the investors who purchased these securities are socially responsible investors

10.5 Liquidity and capital

The Company's liquidity is managed centrally in order to optimise its available cash.

The following table shows **cash and cash equivalents** in 2019 and 2020:

	2019	2020
Net cash flows used in operating activities	(102,980)	(240,521)
Net cash flows used in investing activities	(948,103)	(895,083)
Net cash flows from financing activities	1,266,979	1,122,718
Net increase/(decrease) in cash and cash equivalents	215,896	(12,886)

In € thousand





	2019	2020
Grants received	103,344	134,345
Contributions from the State	311,574	311,574
Proceeds from and payments for financial instruments	852,061	676,799
TOTAL CASH FLOWS FROM FINANCING ACTIVITIES	1,266,979	1,122,718

In € thousand

The Company's liquidity is managed centrally to optimise its available cash.

Adif AV's working capital increased from a negative €643.8 million on 31 December 2019 to a negative €755.6 million on 31 December 2020, representing a net negative change of €111.8 million.

This situation has not generated any liquidity stress for the Company, given the contributions received under the General State Budget for 2021 and the fact that external financing may be arranged subject to the authorised debt limit.

The Company also had a total of €485 million in undrawn short-term credit facilities in place with financial institutions on 31 December 2020. These facilities mature in the short term, with some of them tacitly rolling over each year, subject to a maximum number of rollovers.

The Company also pursues a policy of optimising its borrowing costs, reducing its reliance on external borrowing in 2020 as far as possible. While it was authorised to increase its long-term borrowings in by a nominal €1.89 billion, it only did so by €485 million during the year.

Indebtedness in terms of both bank borrowings and bond issues includes debt arranged by Adif AV mainly with the European Investment Bank, to finance investments made in previous years in property, plant, and equipment, as envisioned in the Multi-year Action Plan.

On 26 January 2021, the prospectus for the EMTN Programme with a nominal amount of €8 billion was renewed on the Irish Stock Exchange and passported to the Spanish National Securities Exchange Commission (CNMV) on the same date.

The combination of interest rates and the diversification of funding sources placed the average interest rate of Adif AV's long-term liabilities at 1.70% per annum on 31 December 2020, with an average life of 9.36 years (1.79% per annum on 31 December 2019, with an average life of 9.82 years).

10.6 Coverage ratio – ESA

EUROPEAN SYSTEM OF ACCOUNTS

Spanish Royal Decree-Law 15/2013 of 13 December, on the restructuring of state-owned enterprise Administrador de Infraestructuras Ferroviarias (Adif) and other urgent economic measures, includes an Additional Provision One regulating the criteria and procedures to ensure compliance with the principle of financial sustainability of the new state-owned enterprise Adif AV and, consequently, with the requirements of national accounting regulations.

More specifically, the additional provision states that:

- Adif AV, in accordance with the principle of financial sustainability, shall ensure that the coverage ratio of production costs with sales revenues, as set out in the regulations governing national accounts, allows for its classification as a public unit included in the segment “Non-Financial Enterprises”.
- The timing and amount of the investments budgeted for and effectively executed must never jeopardise Adif AV’s status as a non-financial enterprise for national accounting purposes.

By virtue of this additional provision, the value of the ESA 2010 coverage ratio is calculated as at 31 December 2020, taking into account the amendments proposed by the Comptroller General of the State (IGAE) in this respect:

- The information on financial income has been broken down to show separate figures on the returns earned on financial investments and the income recognised through capitalisation of borrowing costs, thus meeting the 50% ratio, without netting the income from capitalisation of the total borrowing costs. To compare the figures on a like-for-like basis, the same criterion has been applied to the scenarios based on which the split was decided.

- For the purposes of calculating the ratio, the amounts relating to Mode A, the Addition to Mode A and the Addition to Mode B have not been included in the revenues from charging for infrastructure use, as they relate to commuter, city and intercity passenger services linked to Public Service Obligations that are not accepted by Eurostat as market revenues.
- An increase coefficient was applied to the accounting depreciation under the terms proposed by the Financial Comptroller for adjustment to straight-line depreciation. The value of this coefficient for 2019 was 0.80, which was provisionally applied to the 2020 amounts in line with the IGAE’s recommendation.

The **values obtained on 31 December 2020** are as follows:

Revenues in National Accounts	612,485
Expenses in National Accounts	1,645,531
ESA Ratio – 2010	37.22%

While the Company failed to reach the 50% ratio in 2020, this situation will not entail its re-classification in national accounting terms, given the exceptional nature of the current climate amid the pandemic and the declaration of the state of alarm.

10.6.1. INVESTMENTS CARRIED OUT DURING THE YEAR

The following tables show the investments carried out in 2020 (compared to the previous year), broken down by type and by line:

TYPE	2020 € THOUSAND (including VAT)	2019 € THOUSAND (including VAT)	2018 € THOUSAND (including VAT)
ELECTRIFICATION AND TELECOMMUNICATIONS	127,897	71,185	88,029
PLATFORM	482,277	453,024	700,106
SIGNALLING AND SAFETY INSTALLATIONS	154,291	101,898	98,636
EQUIPMENT AND OTHER ACTIONS	195,804	213,966	195,630
TRACK	250,587	298,637	174,649
STATIONS AND FREIGHT TERMINALS	61,717	60,848	53,328
TOTAL	1,272,573	1,199,557	1,310,378

LINES	2020 € THOUSAND (including VAT)	2019 € THOUSAND (including VAT)	2018 € THOUSAND (including VAT)
VANDELLÓS-VALENCIA	52,574	24,357	32,581
H-S LINE LEVANTE	80,641	60,212	83,423
H-S LINE ALMERIA-MURCIA	40,753	38,590	21,379
H-S LINE BOBADILLA-GRANADA	43,120	36,120	73,241
VANDELLOS-TARRAGONA	20,825	19,258	39,091
PALENCIA-AGUILAR DE CAMPOO	682	4,315	586
CABCERA NORTE DE CHAMARTIN	7,956	12,268	857
H-S LINE ASTURIAS (VARIANTE DE PAJARES)	109,098	68,903	67,234
H-S LINE VENTA DE BAÑOS-PALENCIA-LEÓN-ASTURIAS	30,384	34,304	18,580
H-S LINE VALLADOLID-BURGOS-VITORIA	24,614	17,711	48,337
H-S LINE VITORIA-BILBAO-SAN SEBASTIÁN	132,714	111,467	68,155
H-S LINE MADRID-EXTREMADURA	140,760	162,531	139,286
H-S LINE GALICIA (OLMEDO-LUBIÁN-ORENSE)	277,829	362,645	487,652
H-S LINE ZARAGOZA-PAMPLONA (CASTEJÓN-PAMPLONA)	31,580	30,656	7,953



LINES	2020 € THOUSAND (including VAT)	2019 € THOUSAND (including VAT)	2018 € THOUSAND (including VAT)
UIC CONNECTION, CHAMARTÍN-ATOCHA-TORREJÓN	27,731	19,157	36,329
ATLANTIC AXIS (CORUÑA-VIGO)	-34,485	17,453	30,532
ATTRIBUTABLE TO THE ENTIRE NETWORK	79,826	74,761	47,488
INVESTMENT IN OPERATING LINES	175,117	74,213	95,084
OURENSE BYPASS	4,752	14,472	1,393
STATIONS AND OTHER ASSETS	26,105	16,163	11,197
TOTAL	1,272,573	1,199,557	1,310,378

10.6.2. INFORMATION ON PROCUREMENT

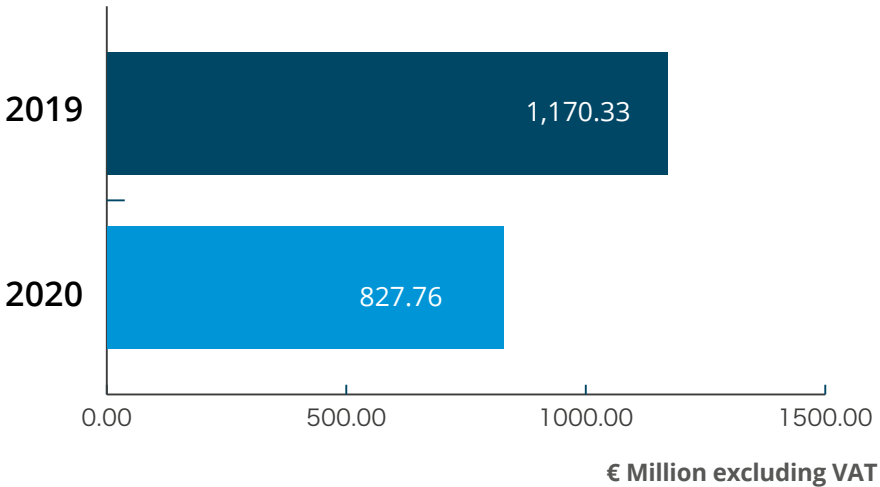
The following tables provide detailed information on procurement activity in 2020:

CUAD BREAKDOWN OF TENDER PROCESSES (Amounts excluding VAT, in € million)				
DEPARTMENT	NO. OF INTERNAL CONTRACTS	AMOUNT OF CONTRACTS	TOTAL NO. OF TENDERS	TOTAL AMOUNT TENDERED
Construction	82	45.12	240	397.71
Energy and Fibre Optics	2	2.75	39	419.98
High-Speed Projects and Stations	2	0.14	18	9.99
Other	0	0	2	0.08
TOTAL	86	48.01	299	827.76

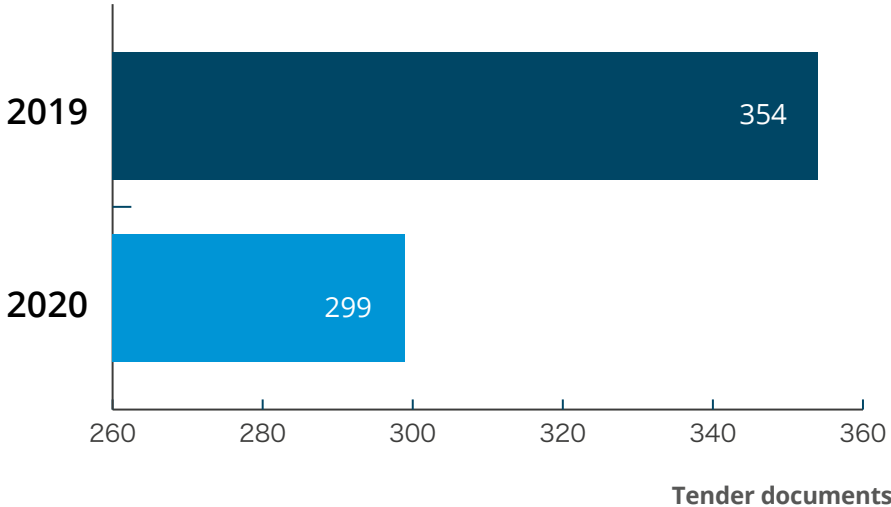
BREAKDOWN OF ADJUDICATIONS (Amounts excluding VAT, in € million)				
DEPARTMENT	NO. OF INTERNAL CONTRACTS	AMOUNT OF CONTRACTS	TOTAL NO. OF TENDERS	TOTAL AMOUNT TENDERED
Construction	82	45.10	243	370.50
Energy and Fibre Optics	2	2.75	45	11.32
High-Speed Projects and Stations	2	0.14	19	11.79
Other	0	0	2	0.08
TOTAL	86	47.99	309	393.69

BREAKDOWN OF TENDERS BY PROCEDURE (Amounts excluding VAT, in € million)			
PROCEDURE / CRITERIA	NO. OF TENDERS	AMOUNT	% OF AMOUNT
OPEN	110	250.68	30.3%
Most advantageous tender (various criteria)	69	225.08	27.2%
Price (one criterion)	41	25.60	3.1%
RESTRICTED	1	3.80	0.5%
Most advantageous tender (various criteria)	1	3.80	0.5%
Price (one criterion)	0	0	0%
NEGOTIATED	93	524.39	63.4%
WITH PRIOR PUBLICATION	2	406.86	49.2%
WITHOUT PRIOR PUBLICATION	32	116.40	14.1%
Emergencies	5	3.73	0.5%
Technology related	23	111.79	13.5%
Other causes	4	0.88	0.1%
MINOR CONTRACTS	59	1.13	0.1%
ORDERS UNDER FRAMEWORK AGREEMENT	9	0,87	0,1%
TOTAL TENDERED	213	779.74	94.2%
ORDERS UNDER FRAMEWORK AGREEMENT	86	48.02	5.8%
TOTAL	299	827.76	100.0%

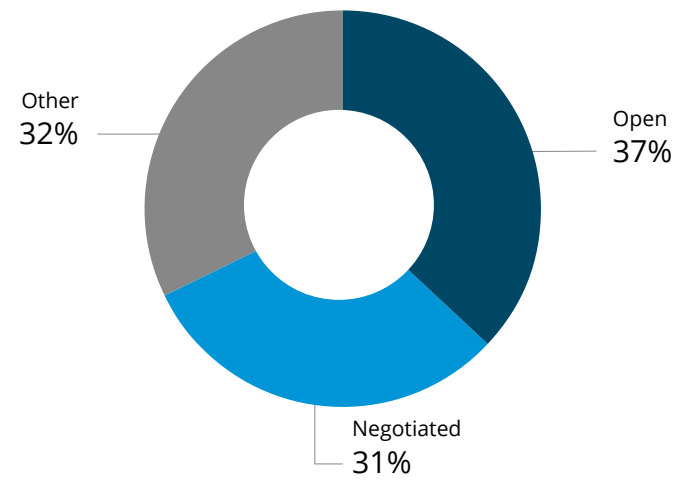
TOTAL AMOUNT TENDERED



TOTAL NO. OF TENDERS



TOTAL NO. OF TENDER DOCUMENTS



TOTAL AMOUNT TENDERED

