

Telecommunications Division

We continue to lead the way toward innovation and expansion in the sector.

We have established ourselves as a benchmark in two key areas: Traditional Telco and the Railway Sector.

Throughout 2024, we have achieved significant milestones that not only strengthen our presence in the national market but also expand our technological capabilities, improving coverage, service quality, and the diversification of our activities.

Our mission in this field is to drive Magtel's growth and leadership by providing innovative solutions in telecommunications and the railway sector, with a strategic vision that promotes geographic expansion and the strengthening of our commercial partnerships.

Our vision is to become leaders in both traditional telecommunications and technological solutions for the railway sector, standing out for our adaptability, innovation, and ability to deliver tailored solutions to our clients.

In 2024, we highlight our solid growth in Traditional Telco and significant progress in the Railway Sector. Geographic expansion, strategic alliances, and the adoption of innovative technologies have been key to consolidating our market position.

We look to the future with optimism, with plans to continue leading in both sectors and to keep offering cutting-edge solutions to our clients.

Magtel
INNOVATION & TECHNOLOGY



FIXED NETWORK

- » ENGINEERING, PERMITS AND LEGALIZATION
- » DEPLOYMENT OF FTTH-FTTN-FTTX-MAN-LD-HFC NETWORKS
- » EXTERNAL PLANT MAINTENANCE
- » AFFECTED SERVICES
- » ASSEMBLY AND INSTALLATION
- » COMMISSIONING

MOBILE NETWORK

- » END-TO-END PROJECT DEVELOPMENT
- » INSTALLATION AND COMMISSIONING OF TELECOMMUNICATIONS EQUIPMENT
- » ENGINEERING SERVICES
- » RADIO LINKS
- » RADIATING SYSTEMS
- » CONSTRUCTION OF RURAL/URBAN SITES AND TECHNICAL ROOMS
- » ADAPTATION OF BASE STATION INFRASTRUCTURES
- » PLANT AUDITS

CUSTOMER R&D

- » FTTH AND ADSL INSTALLATION
- » HFC TECHNOLOGY
- » WIRING AND TESTING
- » CUSTOMER INSTALLATION AND MAINTENANCE SERVICE

RAILWAY INFRASTRUCTURE INSTALLATIONS

- » COMMUNICATIONS
- » SIGNALING
- » SECURITY
- » GSM-R SYSTEMS

SPECIAL PROJECTS

- » SECURITY INSTALLATIONS
- » CCTV
- » PUBLIC ADDRESS SYSTEMS
- » CONTROL AND HOME AUTOMATION



Main areas and key projects

› Traditional Telco

Throughout 2024, the Traditional Telco area has continued its path of growth and consolidation. The most important milestones in this area include::

- › Consolidation as a main provider for operators: we have strengthened our position as one of the key providers for major telecommunications operators in the country, such as MasOrange, Vodafone, Finetwork, and Avatel. Additionally, we have consolidated our alliance with Telefónica, actively participating in the development of the Hispalnet telecommunications network.
- › Geographic expansion of branches: we have expanded our national coverage with the opening of new branches in Asturias and Gran Canaria, allowing us to provide better service to our clients in these new strategic locations.
- › Expansion of rural 5G coverage: In 2024, we have intensified our expansion of 5G coverage in rural areas, especially in the regions of Andalusia, Extremadura, and Castilla La Mancha, improving connectivity in underserved areas and contributing to the technological development of these regions.



› Innovation and Technology

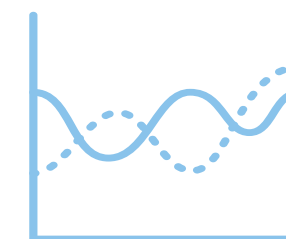
- › Both areas have been driven by the adoption of new technologies, with a strong emphasis on innovation to improve service quality:
- › 5G Networks: we continue to lead the expansion of the FTTN network throughout the country, with a special focus on rural areas, ensuring that technological advances reach more regions and benefit less connected communities.
- › Internet of Things (IoT): we have integrated IoT solutions for infrastructure monitoring and maintenance, improving safety and reducing system downtime.

› Challenges and Solutions

- › Challenges in integrating new technologies: the implementation of advanced technologies, especially in the railway sector, has posed a challenge. However, we have successfully addressed these challenges thanks to specialized training and collaboration with trusted technology partners.
- › Geographic and logistical expansion: expansion into new branches and rural areas has presented logistical challenges, but we have overcome these obstacles with a strategic deployment plan and key partnerships.

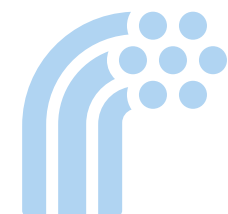
› Future Plan

- › In 2025, we have major plans for expansion and consolidation in both sectors:
- › Expansion of the 5G network: we will continue to expand 5G coverage, focusing on new regions and industrial sectors.
- › Development of railway projects: we will continue collaborating with ADIF and other key players in the railway sector, expanding our presence in new signaling and railway systems projects, both in urban and rural areas.



+13,4%

Growth recorded in 2024 mainly driven by the increase in 5G projects and railway developments



+500Km

More than 500 km of networks (FTTN / FTTH) installed and several railway installations in various locations



Deployment of FTTH - FTTN networks for Más Orange

> Design and construction in 23,000 UUIs

Mainly targeting cities with low, medium, and high population density in Andalusia, Extremadura, and Castilla La Mancha.

The work has mainly consisted of obtaining permits, design and registration of as-built plans, civil works, cable installation and fiber optic splicing, and commissioning and coverage of the UUIs.

Civil Works Project for Vodafone ONO

> MAINTENANCE AND DEPLOYMENT OF HFC AND FO NETWORKS

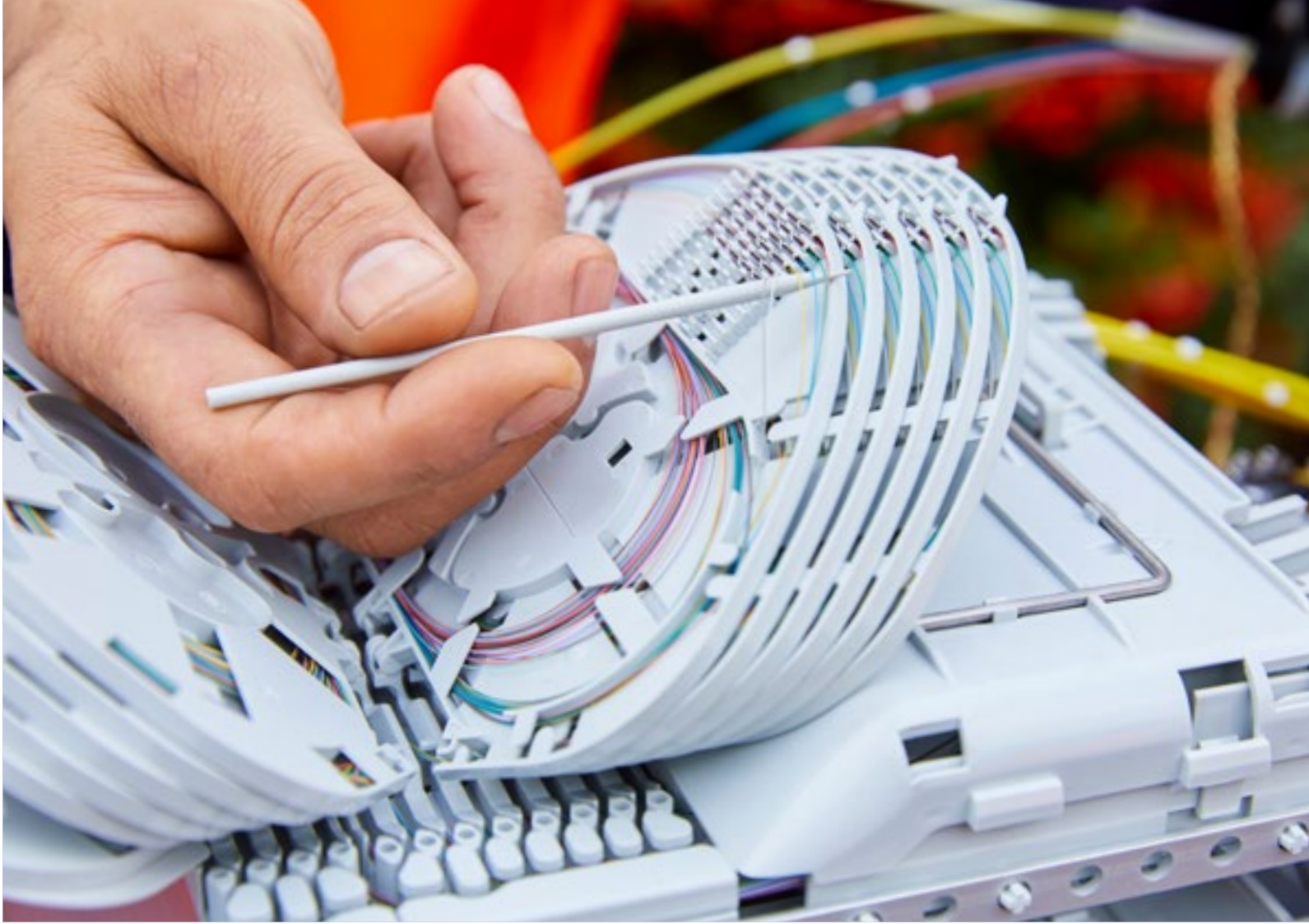
Expansion, construction, maintenance, site adaptation, and implementation of network deployment projects in the fixed universe, within Vodafone's own infrastructure or that of third parties.

The scope of this project includes high-impact incidents that occurred in the Vodafone network, and customer provisioning failure incidents caused in the network, in Vodafone or third-party infrastructure.

Services have also been extended to companies and organizations and have included the development of new FTTH and CTV networks.

The activity has been carried out in Andalusia, Extremadura, and Melilla.

We have more than fifteen years of experience working with the different companies that have managed this operator (Supercable, Auna, ONO, Vodafone).



Installation and civil works

> FOR FIBER OPTIC INFRASTRUCTURE

Civil works, installation, splicing, and fiber optic measurements have been carried out for clients such as Adif, Cobra, Kapsch Trafficcom Transportation, Reintel, etc.

External plant maintenance

FOR MORE THAN ONE MILLION MÁS ORANGE CUSTOMERS

Troubleshooting and fault resolution in Orange's fiber optic network; expansion of CTs due to saturation and maintenance of more than one million households in Eastern Andalusia, Melilla, and Madrid.

Installation and Maintenance (I+M) of Más Orange

> Around 66,023 installations completed

Installation of FTTH and ADSL up to the customer's home, wiring, testing, and commissioning of telephone, internet, and television installations.

External plant maintenance of the FTTH network has also been carried out.

These works have been executed in Eastern Andalusia, Melilla, Madrid, and Las Palmas de Gran Canaria.



► **Experts in railway infrastructure, communications, and signaling**

We are backed by 25 years of experience in executing projects throughout the national territory

Extensive experience in railway communications through fiber optic deployment, operation and maintenance of networks and communications on High-Speed Lines (LAV):

- Construction and maintenance of tracks
- Switch assembly
- Track welding
- Rail replacement
- Buffer stop construction
- Certification for aluminothermic welding and stress neutralization (special class C permit)
- Certification as infrastructure machinery operator
- Certification for traffic safety (safety pilot)

► **Railway Sector**

The Railway Sector has been one of the most dynamic areas in 2024, positioning us as a key player in the field of signaling and railway systems. The main milestones include:

- **Collaboration with ADIF:** We have established ourselves as collaborators with various ADIF regional offices, working mainly with our client CAF Signalling on several large-scale projects. Some key achievements are:
- **León Subdirectorate:** Engineering and commissioning services in the Galicia region.
- **Catalonia Subdirectorate:** Railway signaling installations on the Grañén – Monzón section (Huesca)..

- **Madrid Subdirectorate:** Collaboration in installation and civil works for the execution of the Cotos – Cercedilla section.
- **Levante Subdirectorate:** Railway signaling installations between La Gineta and Socuéllamos.

Expansion in Tram and Metro Projects: This year we have gained significant experience in tram and metro installations, with the launch of the Railway Systems project for the tram line to Alcalá de Guadaira.

This project is being developed in collaboration with our partners Enyse and Syneox, which strengthens our capacity to participate in urban railway infrastructure projects.

► **Modernization of the railway line between Pablo de Olavide and Montecarmelo**

The joint venture formed by Magtel, Enyse, and Sineox Raíl is currently executing the modernization project of the railway system of the tram line that connects Pablo de Olavide University with Montecarmelo, in Alcalá de Guadaira, currently out of service.

This project to improve the railway transport infrastructure in the province of Seville aims to ensure the efficient and safe operation of this line, which is used daily by thousands of passengers.

The project, with a budget of 23.2 million euros, includes the installation and commissioning of signaling, communications, control, and security systems, and the execution of the contract has an estimated duration of 16 months.

Among the technical aspects of the project, the goal is to implement signaling and safety systems to reduce the possibility of failures, improve train flow management, and monitor the status of the line in real time. At the same time, energy consumption will be optimized to reduce environmental impact.