

*Una manera de hacer Europa*



# BUENAS PRÁCTICAS

## Actuaciones Cofinanciadas

Atlantic Corridor. High speed line for mixed traffic Madrid-Lisboa. Track, electrification and installations actions. PHASE II.  
ADIF

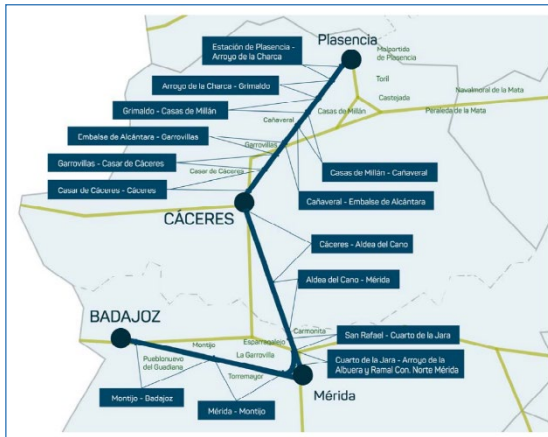
**Programa Operativo  
Plurirregional de España**

Año 2022

**Fondo Europeo de Desarrollo Regional**

## ATLANTIC CORRIDOR. HIGH SPEED LINE FOR MIXED TRAFFIC MADRID-LISBOA. TRACK, ELECTRIFICATION AND INSTALLATIONS ACTIONS. PHASE II

### DESCRIPTION OF THE ACTION



Adif Alta Velocidad presents as good practice the actions that have allowed the commissioning of the first section, located between Plasencia and Badajoz, of the Madrid-Extremadura High Speed Line.

These actions, which consist in the assembly of the track, the electrification and the safety and communications facilities of the section, have been carried out with the contribution of the European Regional Development Fund (ERDF).

With its construction and commissioning, this first Plasencia-Cáceres-Badajoz section enables the high-speed rail system to reach Extremadura, and it will bring improvements in the journey times for citizens.



*Tajo Viaduct*

This action has an investment of 457,76 million euros, an eligible cost of 348,48 million euros and an **European Regional Development Fund (ERDF)** co-financing of 264,95 million euros, and it has enabled to extend the high-speed rail network in Spain by 161,1 km.

***It is considered a Good Practice because it meets the following criteria:***

***The action has been appropriately disseminated among potential beneficiaries and the general public.***

Different communication actions have been carried out to inform citizens of the importance of the European Regional Development Fund (ERDF) participation in the construction of this infrastructure from the beginning of the works.



*Billboard erected on site during the works*

Several campaigns with informative panels have been launched in the Adif stations of Plasencia, Cáceres, Mérida and Badajoz.



*Estación de Plasencia*



*Estación de Mérida*

In addition, an outreach campaign has been carried out on trains. This campaign consisted of projecting a 30" video on the trains that circulate through the national territory. And headrests covers were also placed on the seats of trains with routes on the high-speed lines of Sevilla, Alicante and Malaga.







*Panel at stand of Adif (FITUR 2019)*



*Drawing activity for children  
Stand of Adif (FITUR 2020)*



*Interactive game "12 Estrellas"  
Stand of Adif (FITUR 2021)*



*Merchandising delivered to visitors  
Stand of Adif (FITUR 2022)*

For the commissioning of the first phase of the Extremadura High Speed Corridor, an inaugural trip was made between Cáceres and Badajoz. On this occasion, panels were made, and a video was disseminated through social networks, highlighting the participation of the European Regional Development Fund (ERDF) in the construction of this infrastructure.



*Inaugural trip of the first phase of the Extremadura High Speed Line (July 2022)*



<https://vimeo.com/729135849>  
<https://www.youtube.com/watch?v=ZMalN9QpkFU>

***The action incorporates innovative elements***

The construction of the Plasencia-Cáceres-Badajoz section incorporates an innovative element which had not been used up to now in the railway infrastructure of Extremadura, such as the electrification system of the lines, because previously the infrastructure was not electrified.

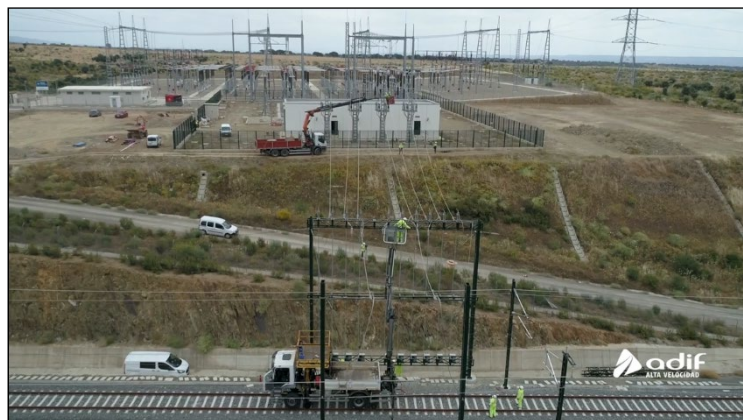
The railway electrification system is used to provide energy to the train so that it can move. The process begins with the electricity supply from Electrical Network (electric connection), and the



*Electrical substation of Cañaverall (Cáceres)*

electricity is taken to a traction electrical substation that transforms the voltage. For the electrification of the Plasencia-Badajoz section, three electrical substations have been built: Cañaverall in Cáceres, and Carmonita and Sagrajas in Badajoz, which have a favorable resolution from the Environmental Authority.

From the substation the energy goes to the associated auto-transformation substations, where electricity is transformed from alternating current to direct current, and which supplies the energy to the overhead contact line called catenary, and an element located on the roof of the train, called a pantograph, captures this electricity for its movement.



### ***The results obtained are adapted to the target established***

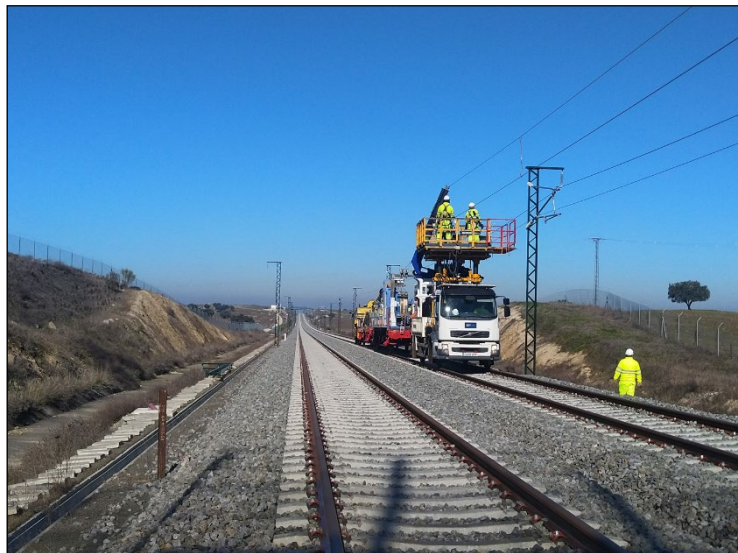
Adif Alta Velocidad advances with this action in minimizing possible environmental risks and contributing to an environmentally friendly transport by reducing CO2 emissions with an annual saving of 142 tons. And to achieve this objective, the Plasencia-Cáceres-Badajoz section is electrified.

The main advantage of the implementation of this railway electrification system on the Extremadura line is that it allows to dispense with trains that use diesel combustion engines to travel by electric traction trains, thus favoring a mode of transport with lower emissions. In addition, the transport of flammable fuel in the machine tanks is avoided.

Another advantage of the railway electrification system is that it makes possible for the passengers to arrive at their destination in less time, because the train has engines of greater pulling power, reaching higher speeds.

### ***Contribution to resolving a regional or weakness problem***

Until the electrification works of the Plasencia-Badajoz section began, the Autonomous Community of Extremadura did not have any kilometers of electrified railway track, which also made it the only Autonomous Community in Spain without electrification of railway tracks.



*Electrification works  
Overhead contact line assembly between Plasencia and Cáceres*

The development of this action contributes to this Autonomous Community, which is part of less developed regions, having railway infrastructures similar to its surroundings regions, to improve the mobility of its citizens, with shorter journey times, and to attract visitors. Improving connection with the rest of Spain and Europe, because this line is part of the Trans-European Transport Network TEN-T.

It should also be note that it is a line designed for both the movement of passengers and goods, so it will increase the competitiveness of the regional economy.

### ***High degree of coverage of the target population***

Plasencia-Badajoz section represents a new high-performance infrastructure of 161.1 kms that will benefit the inhabitants of 14 towns in Extremadura and its neighboring towns, not only

because it increases the number of Long Distance, Medium Distance and Regional circulations, but also because it means increasing the number of stops at their stations.

	ACTUAL	DESDE 19 JUL 22	DIFERENCIA
Navalmoral M.	57	64	7
Monfragüe-Plasencia	43	64	21
PLASENCIA	27	50	23
CÁCERES	77	84	7
MÉRIDA	112	120	8
Aljucén	28	40	12
Garrovilla L.V.	35	47	12
Montijo E.M.	35	47	12
Guadiana C.	21	33	12
BADAJOS	72	80	8
Villanueva S.	42	54	12
Don Benito	42	54	12
Valdetorres	42	54	12
Guareña	42	54	12

*Comparison of train stops in Extremadura*

This has a positive impact on its population because it means increasing mobility, attracting tourism to the region, and improving the competitiveness of the regional economy.

***Consideration of horizontal criteria of equal opportunities and environmental sustainability***

For the development of the actions that have allowed the commissioning of this first section of the Madrid-Extremadura high-speed line, demanding environmental sustainability criteria have been considered. This infrastructure has very complex elements but integration with the environment has been achieved. As examples, the construction of a viaduct for crossing of the Tajo River, or the Santa Marina tunnel, with a length of 3.4 kms., to overcome the Port of Los Castaños.



Viaduct for crossing of the Tajo River



Santa Marina tunnel

From the beginning of this action, the horizontal criteria of equal opportunities have been considered because it is a benefit for citizens. Public information has been disseminated through campaigns in stations and trains, on social networks or fairs open to the general public.

Moreover, concerning the contracting procedure, the tenders for the construction of these infrastructures have been carried out through the public procurement model of "open procedure", to comply with the principles of equal opportunities, free participation in the process and transparency of the procedure.

***Synergies with other policies or instruments of public intervention***

This action has synergies with the construction of the Southwest European logistics platform in Badajoz, within a Global Project of the Junta de Extremadura and that for the urbanization of the 1st phase and railway connection considers three stages of execution. The first stage is funded through the Connecting Europe Facility of the European Union (CEF) – Action 2014-ES-TM-



0547-M-, and the urbanization of the 2nd and 3rd stage is financed through the European Regional Development Fund (ERDF) within the Operational Program of Extremadura 2014-2020 linked to "Actions to improve logistics infrastructures for freight transport" to achieve intermodality in freight transport, facilitating road-rail transfer.

In addition, it should be noted the synergies with the works of connection of the business areas Expaciomérida and Expacionavalmoral to the existing conventional railway network that is part of the Trans-European Transport Network TEN-T. They are also actions of the Junta de Extremadura and with European funding through the European Regional Development Fund (ERDF) within the Operational Program of Extremadura 2014-2020.

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