

## Environmental and Social Data Sheet

### Overview

Project Name:	VALENCIA - LA ENCINA RAILWAY LINE
Project Number:	20150142
Country:	Spain
Project Description:	Superstructure, electrification, signalling and environmental impact mitigation measures of a high speed railway line of about 120 km from Valencia to La Encina (Spain), part of the Mediterranean Core TEN-T Corridor.
EIA required:	Yes
Project included in Carbon Footprint Exercise <sup>1</sup> :	Yes
(details for projects included are provided in section: "EIB Carbon Footprint Exercise")	

### Environmental and Social Assessment

#### Environmental Assessment

The project is included in the Infrastructure, Transport and Housing Master Plan "Plan de Infraestructuras, Transporte y Vivienda PITVI (2012-2024)", which has been subject of a Strategic Environmental Assessment (SEA) in accordance with Directive 2001/42/EC.

The project falls within the scope of Annex I of the Environmental Impact Assessment (EIA) Directive (Directive 2011/92/EU as amended by 2014/52/EU).

The project consists of a new high speed line from Valencia (Picanya) to La Encina node, where it will be connected to the existing Madrid – Alicante/Murcia high speed line.

From Valencia (Picanya) to Xàtiva the project is mostly on new alignment.

From Xàtiva to La Encina node the project is mostly on existing alignment, which is currently used for conventional rail services, with track bed and engineering structures suitable for high speed. The project also includes rehabilitation of an old alignment running functionally parallel to the new line. This old alignment has been for several years mostly out of service; conventional rail services will be relocated to this rehabilitated line.

Several EIA procedures, in accordance with Directive 85/337/EC applicable at the time, have been carried out for different sections of the project, as described in the following paragraphs.

- For the sections Valencia (Picanya) – Benifayó and Benifayó - Xàtiva, consisting of, respectively, around 18 km and 37 km of double track high speed line mostly on new alignment, the EIA procedures, i.e. full EIA with public consultation, were completed and environmental consents granted in 2002. Civil engineering works, such as earthworks, engineering structures, drainage, as well as affected roads and utilities relocation have

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<sup>1</sup> Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 100,000 tons CO<sub>2</sub>e/year absolute (gross) or 20,000 tons CO<sub>2</sub>e/year relative (net) – both increases and savings.

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already been completed. The superstructure and installations works to be financed by the Bank will be largely carried within the same works sites.

- Section Xàtiva – La Encina was included in the EIA procedure for Albacete – Xàtiva section of the high speed line Madrid – Albacete/Valencia. On the Xàtiva – La Encina section included in this project, the works consist of the following:
  1. Change of the track gauge, electrification and signalling works of an existing line of around 36 km without any changes to its alignment. This section is currently in operation; it was originally built in the 1990s with an alignment, track bed and engineering structures appropriate for high speed.
  2. Two branches in La Encina node, with cumulative length of 25.6 km, for connection of this existing alignment to the Madrid – Alicante/Murcia high speed line. The civil engineering works have been mostly completed.
  3. Rehabilitation of the old conventional railway section Xàtiva – La Encina.

Full EIA with public consultation was completed and environmental consent granted in 2005. In November 2008 a modification of the alignment in the La Encina node was screened out by the Competent Authority. This decision was taken following an analysis in accordance with the criteria set out in Annex III of the EIA Directive.

During construction, the impacts are largely temporary and localised, and are being addressed through an environmental monitoring plan. The main impacts are those corresponding to the green field section Valencia – Xàtiva, such as a significant amount of excavated material and its treatment in controlled dumps or assignment to other infrastructures with soil shortfall. There is also significant temporary disruption during construction because of noise, vibration, dust, etc. In addition to standard good practice, the mitigation measures include special water treatment, archaeological monitoring, and landscape reparation after the execution of the works.

In the operation phase, for the Valencia - Xàtiva section the main impacts of the project are those typical for greenfield projects of a major linear infrastructure, such as change in land use and severance. The mitigation measures include alternative routes for affected roads and cattle routes, adequacy of culverts for fauna crossings and landscaping. For both Valencia - Xàtiva and Xàtiva – La Encina sections, there will be additional impacts related to noise and vibration. The main mitigation measures will consist of installation of around 48 km of noise screens in the locations defined in an acoustic study carried out by the Promoter.

Both the high speed and the conventional line to be rehabilitated cross on existing alignment a Natura 2000 site, Sierra de Martés - Muela de Cortes (ES0000212), over 0.5 km and 2.1 km, respectively. The new high line also crosses Riu Xúquer (ES5232007). The conventional line to be rehabilitated also runs at 400 m distance from another site, Serra d'Enguera (ES5233045). Other sites are located further than 1 km from the project.

For the La Encina node and sections Benifaió – Valencia and Xàtiva Novetlè – Xàtiva, the competent authorities concluded that the project is not likely to have a significant impact on the sites and, therefore, no assessment according to Article 6(3) of Directive 92/43/EEC (the Habitats Directive) was necessary. For sections Alcodia de Crespins - Xàtiva and Xàtiva – Benifaió an appropriate assessment was carried out and the competent authority concluded that no adverse effect on any Natura 2000 site is expected. This has been confirmed and documented by the competent authorities. A statement of the competent authority concerning the section La Encina – Alcodia de Crespins crossing on existing alignment the Sierra de Martés - Muela de Cortes site is not yet available.

Overall, the project will have some positive environmental effects in comparison with the current situation, as it will have a significant contribution to increasing the modal share of rail

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versus road and air transport in the corridor, with environmentally favourable impact related to energy consumption, noise, pollutants and green-house gas emissions.

### **EIB Carbon Footprint Exercise**

The project is included on the following basis:

Estimated annual third party greenhouse gas emissions (vehicular use, from existing and induced demand) from the use of the project in an average year of operation over a 50-year assessment period:

- Forecast absolute (gross) emissions are 70,000 tonnes of CO<sub>2</sub> equivalent; and
- Forecast emissions savings are 36,000 tonnes of CO<sub>2</sub> equivalent.

The project assessment boundaries are:

- In the absolute case:
  - the new high speed railway line Valencia – La Encina, totalling 120 km of new infrastructure and a parallel conventional rail line of approximately the same length;
- In the baseline case:
  - the existing conventional railway line, and road network of approximately the same length.

The forecasts in the baseline and absolute cases are based on Services' project specific assumptions about the workload of rail services (freight and passenger trains) and fuel efficiency of rail operations. In the baseline case, a portion of emissions from cars, buses and trucks is included using project specific emission factors, equivalent to those passenger or freight trips expected to shift from road to rail in the "with project" case.

For the annual accounting purposes of the EIB Carbon Footprint, the project emissions will be prorated according to the EIB lending amount signed in that year, as a proportion of project cost.

These forecasts may differ from those of the Promoter due to different assumptions, boundaries and baselines.

### **Social Assessment, where applicable**

Land acquisition process followed the applicable legislation and is completed.

### **Public Consultation and Stakeholder Engagement**

Public consultation took place as part of the EIA procedures described above.

### **Other Environmental and Social Aspects**

The Promoter, ADIF Alta Velocidad, has an established environmental policy and operates an Environmental Management System in accordance with ISO 14001:2015.

Significant archaeological sites corresponding to prehistoric, ancient and medieval times were found during the construction of the track bed. Strict archaeological monitoring was put in place in accordance with the Promoter's Good Archaeological Practice Protocol; the works were suspended when necessary, so that proper archaeological heritage preservation actions could be carried out under the supervision of the Competent Authority.

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## Conclusions and Recommendations

The project falls within the scope of Annex I of the EIA Directive.

The EIA procedures have been completed and the Promoter has obtained the environmental consents for the whole of the project and opinion of the competent authorities concerning the absence of significant impact on Natura 2000 sites for most of it.

The project's residual negative impacts during construction and operation are limited and partly offset by the expected modal shift towards rail facilitated by the investment.

The Promoter will be required to submit to the Bank evidence of absence of significant negative impacts on Natura 2000 sites of the section La Encina – Alcudia de Crespins crossing the Sierra de Martés - Muela de Cortes site.

With these conditions in place the project is acceptable for EIB financing in environmental and social terms.