

Environmental and Social Data Sheet

Overview

Project Name:	FOMENTO – BARCELONA AIRPORT RAIL CONNECTION
Project Number:	2017-0831
Country:	Spain
Project Description:	The project consists of a double track railway line of approximately 4.5km, mostly in a tunnel, to access the two terminals of El Prat airport in Barcelona.
EIA required:	Yes
Project included in Carbon Footprint Exercise ¹ :	No

Environmental and Social Assessment

Environmental Assessment

The project consists of a double track railway line that will connect the two terminals of the airport of Barcelona with the existing suburban railway network at El Prat station. The new alignment will be mostly in tunnel, the only part at grade being the connection to the existing network, which will be followed by a ramp for the transition to the tunnel. The project also includes the dismantlement of the existing at grade rail connection to Terminal 2 and recovery of the land occupied by it.

The project is part of a broader plan of modernisation and improvement of Barcelona's suburban rail services network. This plan 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. It was also included in earlier strategic plans, such as the "Strategic Plan for Transport Infrastructure 2005-2020", which was also subject of a SEA.

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

The project has been subject of an EIA procedure, in accordance with Directive 85/337/EC, applicable at that time. The EIA procedure was carried out between 1999 and 2006.

Initially, it was planned that the airport of Barcelona would host a new station of the Madrid – Zaragoza – Barcelona – French border high-speed railway line. In 2003, it was agreed by the Ministry of Transport, the *Generalitat de Catalunya* (the Catalan autonomous Government) and several surrounding Municipalities that the access to the airport would instead be made by means of the suburban rail network. The EIA was adapted to reflect the new scope of the project, the public consultation was carried out in February – March 2004 and an environmental consent (*Declaración de Impacto Ambiental, DIA*) was granted in December 2006.

¹ 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 CO₂e/year absolute (gross) or 20,000 tons CO₂e/year relative (net) – both increases and savings.

Luxembourg, 23 July 2018

The most relevant environmental aspects of the project are the following.

- Two aquifers of the Llobregat Delta are present in the project area. A superficial aquifer is used for irrigation. A deeper aquifer is used for drinking water supply to Barcelona and Baix Llobregat area. The aquifers of the Llobregat Delta are protected under the Catalan law.
- The project is located in the Baix Llobregat agricultural area. This area is of significant importance and diversity. A Protection and Improvement Plan for the area was established by the Barcelona City Development Commission in 2003.
- The protected Nature 2000 site "*Delta del Llobregat*" (ES0000146) is located in the vicinity of the project. It is home to some bird species listed in Annex I of Directive 79/409/EEC (the Birds Directive).

The DIA requires specific measures for avoiding and mitigating the impacts.

As required by the DIA, for the detailed design of the new line, cumulative impacts of all the projects in the area have been taken into account. In particular, this included the projects of extension of the airport and related facilities, road and rail projects. The mitigation measures have been defined considering these cumulative impacts.

Concerning the preservation of the aquifers, specific measures are required for, among other, avoiding pollution of the water and avoiding the connection of the two aquifers with each other. The DIA requires specific hydrologic studies to be carried out prior to commencement of the works. These studies were carried out and taken into account in the detailed design and during construction. In particular, all underground structures are located at least 5 metres above the deeper aquifer. At present, all works that have a highest risk of intercepting the deeper aquifer, such as construction of diaphragm walls, have been completed and no significant incidents occurred. Other related mitigation measures include special water treatment and monitoring during and after the construction.

Concerning the project being located in agricultural area, it requires some land expropriation and temporary land occupations. Following the dismantlement of the existing line, the net effect on land take will be negative for agricultural land and positive for urban land, as summarised in the following table.

Type of land	Land taken by the new line	Land liberated by the dismantlement of the existing line	Balance*
Agricultural	3.95 ha	2.06 ha	1.89 ha
Urban	0.03 ha	2.09 ha	- 2.06 ha
Total	3.98 ha	4.16 ha	- 0.17 ha

* Negative values mean on the balance more land is liberated than taken.

For the temporary occupations any vegetal soil removed during the works will be stored and after the land liberation properly restored. In addition, the land liberated after the dismantlement of the existing link will be appropriately treated for making it suitable for agricultural use.

Concerning the Natura 2000 site "*Delta del Llobregat*", it is located some 700 m from the project. The EIA included an appropriate assessment under the Habitats Directive and the DIA required a specific avifauna study and consideration of the birds breeding season in the work plan. The construction works started in September 2015, after the end of the breeding season. In February – March 2016 the avifauna study was carried out; it included an observation campaign that surveyed the birds present in the project area. Its conclusion was that the implementation of the project as per the established work plan would have no impact

Luxembourg, 23 July 2018

on any protected species. The competent authority concluded that the construction of the new railway link is not likely to have a significant impact on the Natura 2000 site and issued a formal declaration in this respect in February 2015. This declaration does not cover the dismantlement of the existing at grade railway link, which is located fewer than 100m from the Natura 2000 site; the Bank will require a separate declaration concerning this last phase of the project.

Other impact mitigation measures include limiting dust, avoiding noise generating activities during the night-time and archaeological monitoring.

During construction, the residual impacts are largely temporary and localised. The main impacts are the ones related to a significant amount of excavated material, its treatment in controlled dumps or re-assignment to other infrastructures with soil shortfall, disruption because of noise, vibration, dust, etc. The impacts are addressed through an environmental monitoring plan.

In the operation phase, the impacts are limited, as most of the line will be in tunnel and it will replace an existing at-grade line. The project will result in net reduction of noise pollution caused by the railway.

A continuous monitoring of the impacts of the projects and the adequacy of the mitigation measures of the project is being implemented within the project management structure. In addition, in particular for monitoring the cumulative impacts of all the relevant projects in the area, a joint technical group has been set up by the Ministry of Agriculture, Food and Environment and the Department of Territorial Sustainability of the *Generalitat de Catalunya*.

Social Assessment

Land acquisition process follows the applicable legislation.

The two stations of the new railway line will be in conformity with the requirements concerning accessibility for persons with disabilities and persons with reduced mobility.

Public Consultation and Stakeholder Engagement

Public consultation took place in 2009 as part of the EIA procedures for the initial scope of the project consisting of the high speed line station and in February – April 2004 for the current scope of the project.

Other Environmental and Social Aspects

ADIF, the rail infrastructure manager that will operate the project, has an established environmental policy and operates an Environmental Management System in accordance with ISO 14001:2015.

Conclusions and Recommendations

The project falls within the scope of Annex I of the EIA Directive. The Promoter obtained an environmental consent for the project.

The Promoter has obtained an opinion of the competent authorities concerning the absence of significant impact of the construction of the new railway line on Natura 2000 sites. The Promoter will be required to obtain and submit to the Bank a similar opinion for the dismantlement of the existing railway link, prior to the commencement of the dismantlement works.



Luxembourg, 23 July 2018

The project has positive net impact in terms of noise pollution produced by rail. 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.

With this condition in place the project is acceptable for EIB financing in environmental and social terms.