

## **MAJOR PROJECTS**

## San Sebastián Metro, Spain



## **Project details**

**Customer:** Euskal Trenbide Sarea **Date:** 2016 **Country:** Spain **Scope**: Specialised engineering **Activity:** Construction project

## Project for the construction of the Lugaritz-Miraconcha section of the San Sebastián metro

The growing demand for mobility in recent years in the metropolitan area of San Sebastián has led the Basque government's Department of Transport to develop a high-performance metro line materialised through actions on the existing railway lines and the development of new sections.

In 2015, Prointec, head of a consortium with ASMATU, was awarded the contract to develop the construction project for the new Lugaritz-Miraconcha section, with a length of 2.14 km and entirely executed in an excavated tunnel. The section in question will begin with the duplication of the Lugaritz tunnel, increasing the section of the current cavern for this purpose while maintaining rail traffic. The excavation of the section then continues until the execution of the cavern for the station of Bentaberri, and subsequently extends until it reaches the future station of Miraconcha.

Prointec carried out the following specific works:

- Geological and geotechnical study.
- Design of the tunnel and cavern. Geometry, support and cladding.
- Design of the construction process for the widening of the Lugaritz telescope.
- Numerical calculations for tunnels and caverns.
- Calculation of the outlets for the access ramps and tunnel bores through micropile screens.
- Calculation of auxiliary works.
- Design of the exploration plan.