



ESS BILBAO FACT SHEET

ESS Bilbao is a public consortium of the Central and Basque governments which brings knowledge and added value in particle accelerator and neutron scattering science and technologies by leveraging its In Kind Contributions to the European Spallation Source (ESS) in Lund, Sweden.

The main objective of ESS Bilbao for the period of 2018-2025 is to manage the Spanish contribution to the construction of ESS. Spain is contributing 3% of the total ESS construction cost during the construction phase (2014-2025), equivalent to 55.29 M€2013. This contribution is 90% in-kind (49.76 M€) and 10% cash (5.53 M€).

Spain's membership together with ESS Bilbao's work related to In-Kind Contributions have demonstrated that the investment by the Spanish and Basque governments has made positive impact on the local, national and international level.

ESS Bilbao is unique responsible to manage all the Spanish In-Kind Contributions to ESS. These are related to Accelerator Systems; the design, manufacturing and testing of the MEBT (Medium Energy Beam Transport); as well as the Radio Frequency (RF) Systems for the warm linac section of the Accelerator. For the Integrated Control system (ICS), ESS Bilbao has developed the completed control system for the MEBT.

Related to the ESS Target, ESS Bilbao is making key contributions of several critical components in the Target system: the spallation material, the monolith vessel, the target wheel, shaft and drive unit; the proton beam instrumentation plug; the proton beam window and proton beam window port block and tuning beam dump.

Also, ESS Bilbao is the prime contractor for the design, construction, installation and cold commissioning of MIRACLES instrument, a time-of-flight backscattering spectrometer.

All this work is carried out by highly qualified staff, most employees have a background in physics and engineering. The staff has increased over the years until reaching around 50 employees. The organisational structure of ESS Bilbao is divided in topic-based divisions, complemented by specific, task-based projects which are in turn complemented by back-up divisions. Most of the staff are from the Basque Country, which demonstrates the positive influence of ESS Bilbao for the attractiveness of the region and for employment in the Basque Country in general.