RED ELÉCTRICA DE ESPAÑA

Spain-France electricity interconnection

across the Bay of Biscay

inelfe

Co-financed by the European Union
Connecting Europe Facility

Contents

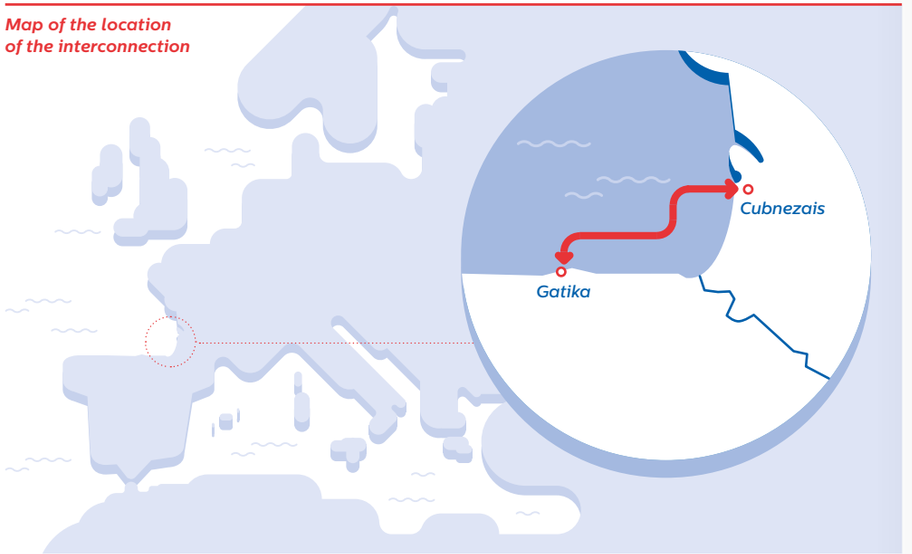
Electricity interconnection across the Bay of Biscay

Project presentation

This project consists of creating an electricity interconnection across the Bay of Biscay between the French electricity grid, from one of its substations, located to the north of the city of Bordeaux, and the Spanish electricity grid, through the Gatika substation, located in Biscay.

The new underwater interconnection between Spain and France across the Bay of Biscay is, therefore, an objective of great interest as it represents a significant asset for Spanish system quality and security on reinforcing the interconnection with the European

Map of the location of the interconnection



The new submarine interconnection between Spain and France across the Bay of Biscay was designated as a "Project of Common Interest", due to its strategic nature, by the European Commission and Parliament on 14 October 2013.

system, as well as being considered one of the most important means for integrating the ambitious plans for renewable energy.

Due to its strategic nature, this project was designated as a "Project of Common Interest" (hereinafter PCI) by the European Commission and the Parliament on 14 October 2013, in the framework of the European Regulation on energy infrastructure 347/2013, within the "Energy Infrastructure Package" of the European Commission. It also forms part of ENTSO-E's 2012 Ten-Year Network Development Plan. As well as being a PCI, it has a dual qualification, as it is also catalogued within the concept of "electricity highways", which implies that it has a strategic long-term utility.

What are the international interconnections?

International interconnections are the set of lines and substations that allow the ex-change of energy between neighbouring countries and generate a series of advantages in the connected countries.

The creation of interconnections for exchanging energy between electricity systems is a technical and economic need accepted by the European Union as the best manner of facilitating the use and optimisation of Europe's energy resources and, consequently, tending towards an integrated European market for electricity.

Furthermore, the development of interconnections between states is necessary for the operation of internal markets and to ensure the reliability and interoperability of electricity networks.

It also offers better meshing with the rest of the European system, enables system security to be augmented and increases the possibility of mutual support in case of incidents and extreme situations, to avoid the installation of peak-demand generation in the two systems, and it offers the possibility of sharing balancing mechanisms, making the overall European system more efficient.

International interconnections contribute to the security and continuity of the electricity supply in interconnected systems, thanks to the fact that they enable energy exchanges.

Advantages of interconnections

The main advantage is the contribution to electricity supply security and continuity in the interconnected systems, thanks to exchanging energy in case of need. Interconnections are the most significant instantaneous backup to security of supply.

The second advantage, subordinated to the first, is the increased efficiency of the interconnected systems. With the vacant capacity in the lines, not destined for security of supply, commercial exchanges of electricity are established daily, taking advantage of the differences in energy prices between the interconnected electricity systems. These exchanges enable electricity generation to be performed with the most efficient technologies, with energy flowing from where it is cheaper to where it is more expensive.

A third advantage is the increased competition between neighbouring systems. Imports of energy from other countries oblige agents in the country itself to have more competitive proposals if they are to be accepted, generating a reduction n the price of electricity at the wholesale level.

Finally, it provides for greater integration of renewable energies. As the interconnection capacity increases, the volume of renewable production that a system is capable of integrating

safely is maximised, as renewable energy for which there is no capacity in its own system can be sent to other neighbouring systems, instead of being wasted. At the same time, in the case of a lack of renewable production or network problems, a high level of exchange capacity enables energy to be received from other countries.

Interconnections in Spain

The Spanish electricity system is interconnected with the Portuguese system (so configuring the Iberian system), with the North African system, through Morocco, and with the Central European electricity system across the border with France. In turn, the Central European electricity system is connected to that of the Nordic countries, to that of the countries of Eastern Europe and to the British Isles, forming the largest electricity system in the world.

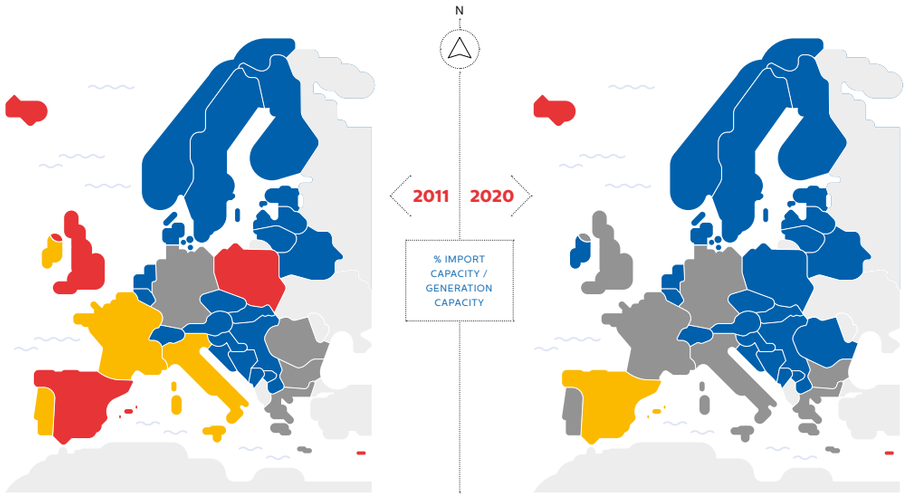
In 2002, the European Union recommended that Member States should achieve a minimum interconnection ratio of 10% by 2020, with this ratio being the sum of import capacities over installed generating power, to eliminate isolated systems, facilitate mutual support and promote the Single Market for electricity.

Spain's current interconnection ratio, of under 5%, is still far from the recommended target. Considering that real support to the

Interconnection ratio

■ >15% ■ ≥10% and ≤15% ■ ≥5% and <10% ■ <5%

Source: ENTSO-E

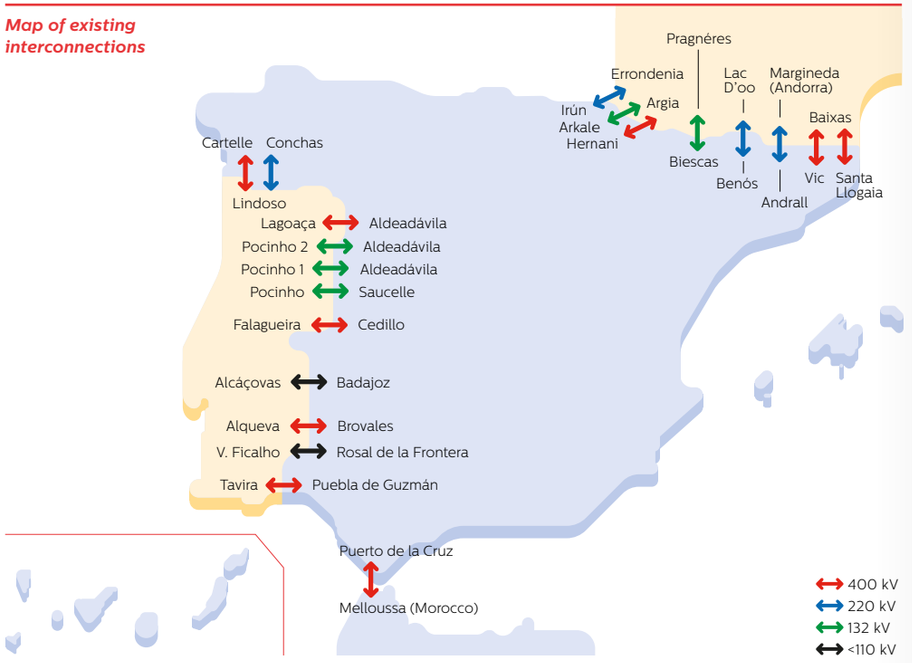


Iberian Peninsula can only come from Central Europe across the border with France, the interconnection ratio of the Iberian Peninsula is 2.8% with the new interconnection between Spain and France over the eastern Pyrenees. Even so, Spain may still be considered to be almost an electricity island.

In 2020, with the anticipated interconnections, Spain will be the only country in continental Europe below the 10% target, hence it will be necessary to continue to develop new interconnections.

Boosting the interconnections is the top priority to undertake in the coming years in the development of the transmission network. Investment in this infrastructure will be the priority, hence for full implementation it will be necessary to fulfil some fundamental premises, such as maintaining regulatory stability and adequate returns on investment, as well as improving the social acceptance of the installations.

Map of existing interconnections



Energy planning

Energy Plan 2015-2020

The Spain-France underwater interconnection across the Bay of Biscay project is included in the Energy Plan 2015-2020 document.

http://www.minetad.gob.es/energia/planificacion/Planificacionelectricidadygas/desarrollo2015-2020/Paginas/desarrollo.aspx

It has been entitled “Action TI-2 New Spain-France interconnection across the Bay of Biscay”, in the following terms:

The project responds to the need to increase exchange capacity between France and Spain with the aim of reducing Spain’s isolation from the rest of the European system, to increase system security, facilitate the integration of renewable energies in the Iberian system and contribute to the Iberian Electricity Market forming part of the Internal Electricity Market promoted by the European Commission.

Scheme of the objectives of the installations planned and included in the Energy Plan 2015-2020

Planning of the electricity transmission network

General objectives for the planned infrastructure

Grid

- Resolution of technical restrictions
- Security of supply
- Reliability
- International connections
- Iberian Peninsula-non-peninsular system connections
- Interconnections between island systems

Other actions

- Development of the network associated with the high-speed rail programme
- Support to distribution and large consumer demand
- Generation feed in
- Connection of energy storage facilities

LThe Energy Plan is drawn up by the Spanish Ministry of Energy, Tourism and the Digital Agenda (MINETAD), with the participation of Spain's Autonomous Regions and the electricity system operator, as well as the National Commission on Markets and Competition (CNMC) and the Ministry of Agriculture and Fisheries, Food and Environment (MAPAMA), finally being approved by Government after being submitted to the Congress of Deputies.

The Energy Plan is binding on the Spanish national grid company, Red Eléctrica, as in its capacity as the sole transmission agent and system operator, it is obliged to comply with that specified in the Electricity Planning, in the terms developed and established.

Strategic environmental assessment

The Energy Plan 2015-2020 has been submitted to the procedure for environmental assessment of plans and programmes, also known as Strategic Environmental Assessment (hereinafter SEA), by means of the preparation of the Environmental Sustainability Report and the procedure that entails.

http://www.minetad.gob.es/energia/planificacion/Planificacionelectricidadygas/desarrollo20152020/Informesostenibilidad/ISA_VERSI%C3%93N_WEB_E.pdf

E The SEA procedure is regulated under Law 21/2013 and the said law incorporates into the Spanish legal system Directive 2001/42/EC, of 27 June, of the European Parliament and of the Council, relating to the assessment of the effects on the environment of certain plans and programmes; and Directive 2011/92/EU, of 13 December, of the European Parliament and of the Council, relating to the assessment of the repercussions of certain public and private projects on the environment.

The fundamental aspects that shape the SEA are the precautionary principle and the need to protect the environment through the integration of this component into sector policies and activities to guarantee that the anticipated effects on the environment of investment actions are taken into account before adoption and during the preparation of plans and programmes in a continuous process, from the preliminary draft phase, before consultation, to the latest phase of plan or programme proposal.

The ultimate objective is to guarantee more lasting, just and healthy development that makes it possible to tackle the great challenges of sustainability: rational use of natural resources,

The 2015-2020 Energy Planning was submitted to the Strategic Environmental Assessment, whose ultimate goal is to guarantee a more durable, fair and healthy development that allows the enormous sustainability challenges to be tackled.

pollution prevention and reduction, technological innovation and social cohesion. Furthermore, it responds to the objective of promoting transparency and public participation through access to exhaustive and reliable information on the planning process.

Application of the SEA procedure in the process of preparing and approving plans and programmes involves the following actions:

- The preparation of the Environmental Sustainability Report, the scope, level of detail and degree of specification of which will be determined by the environmental body.
- Opening of a period of consultation on this document.
- The preparation of the Environmental Report.
- The consideration of the Environmental Sustainability Report, the result of the consultation and the Environmental Report in decision-making.
- Publication of the information on plan or programme approval.
- Monitoring of the effects on the environment of the application or implementation of the plans and programmes.

Therefore, the Energy Plan 2015-2020 and the electricity projects included in it have been subjected to the SEA procedure, including a process of Public Information, with this mechanism being the procedure in which pleas can be presented to all the projects for electricity lines included in this plan.

After the entire SEA procedure, as established by Law 24/2013, the Energy Plan for 2015-2020 was approved by the Council of Ministers on 16 October 2015, as reflected in Order IET/2209/2015, of 21 October 2015.

Companies involved

Inelfe. A joint venture, established on 1 October 2008 in equal parts by the Spanish and French electricity grid management companies, Red Eléctrica and RTE, with the aim of developing the electricity interconnections between the two countries.

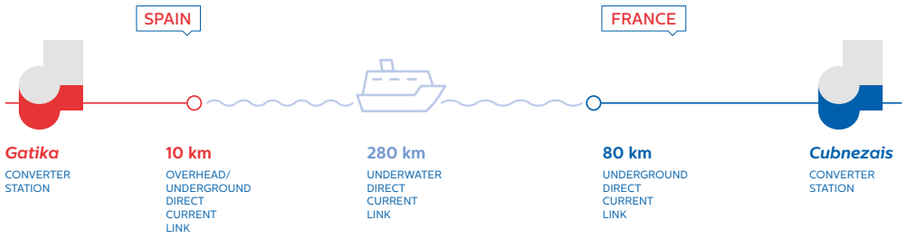
Red Eléctrica de España. Grid manager and sole transmission company, it is assigned the function of transmitting electricity, as well as constructing, maintaining and operating the transmission installations in Spain.

Réseau de Transport d'Électricité (RTE). French company responsible for the development, maintenance and operation of all the electricity transmission assets in France, and for ensuring security of energy supply. RTE owns all the electricity transmission assets in France.

Main project characteristics

Red Eléctrica, together with RTE, designed a plan to execute the "Spain-France underwater interconnection across the Bay of Biscay". This project consists of the creation of an underwater electricity interconnection across the Bay of Biscay, between the French electricity grid, from one of its substations, located to the north of the city of Bordeaux, and the Spanish electricity grid, through the Gatika substation, located in Biscay, including the following elements:

Diagram of the interconnection



- HVDC converter station (CS): Converter station with "Voltage Source Converter" (VSC) technology and configuration as two 2-terminal circuits of 1,000 MW (2x1,000 MW), assuming a maximum loss of 1,000 MW.
- Connecting power lines: Two overhead and underground direct current power lines, as a single circuit, for connection between the Converter Station and the land-sea connection point.
- Land-sea connection point: Connection point of the power line (overhead or underground) for the land zone with the underwater cable.
- Underwater power line (underwater cable): Spain-France interconnection, corresponding to four underwater cables (2 per 2-terminal circuit).

Converter station (CS)

The converter station is very similar to a conventional electricity substation, as a significant part of it is comprised normal substation switchgear and the only difference in its external appearance is the presence of two buildings, housing the valves for transforming alternating current to direct current and vice versa.

According to this, the first part of the converter station, the part that occupies the larger area, is comprised a conventional alternating current station (substation), with the line arrival porticos, added to which are some alternating current filters, very similar to the ballasts and banks of capacitors of a conventional electricity

Converter station (Baixas, France).

substation, a control building and a battery of transformers, to reduce the voltage from the nominal at each connection point of the grid, to that used for transformation to direct current.

There are then two buildings where the valves are located to transform alternating to direct current, for which there are cable entries, three on the side facing the outdoor station, and the exit of the two direct current cables on the opposite side.

It is, then, the two valve buildings, which house the necessary switchgear for changing from alternating to direct current, that distinguishes the CS from a normal substation.

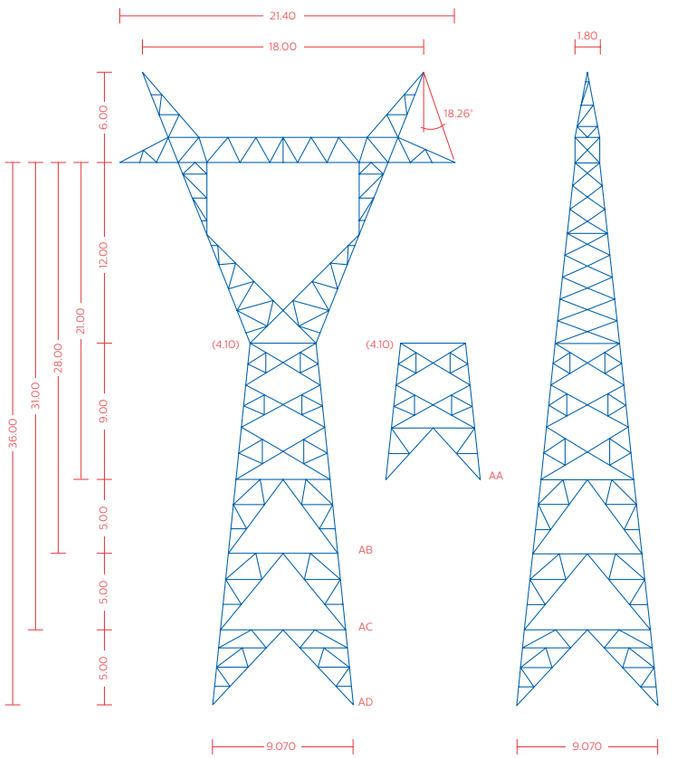
Connecting power lines

These are the two connecting or electricity transmission lines that will carry the electricity from the CS (converter station) to the landfall point of the underwater cables.

The single circuit 400 kV direct current overhead lines will consist of conducting cables grouped into two poles and one return, with each group constituting one circuit through which electricity is transmitted. The bracing elements or supports serve to keep the conductors separated from each other and to maintain the regulation distance from the ground. The specifications dictated by the High Voltage Overhead Power Lines Regulation (RLAT) in accordance with Spanish Royal Decree 223/2008, of 15 February, are met in this way.

The main technical characteristics of the overhead, direct current, single circuit power lines are as follows:

Technical characteristics of overhead direct current power transmission lines



System	Direct current
Rated voltage	400-500 kV
Thermal transport capacity	1,000 MVA
No. of circuits	1
No. of phases per circuit	2 poles and 1 return
Type of conductor	CONDOR (AW) or similar
Insulation type	Glass or silicone-rubber insulators
Supports	Metal lattice towers
Foundations	Separate mass concrete feet
Earthing	Closed rings in decarburised steel
Illustrative length (*)	10 km

(*) The real length will be obtained in the Execution Project, after the study of alternative corridors and the design of the route in the corridor of least impact.

The supports will be constructed with rolled and galvanised angular profiles, with a height defined by the RLAT in its Complementary Technical Instruction LAT-07, complying with the minimum regulatory distance from the conductor to the ground and adapted to the topography of the land and to the particular features of the elements in the surroundings. The mean distance between supports is 300 to 400 m, possibly reaching, in the maximum case, a distance of between 700 and 900 m, depending on the characteristics of the environment, the topography and morphology to minimise their effects.

Underground cable

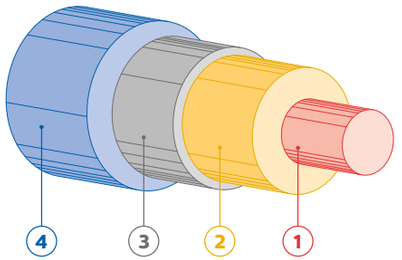
A pair of cables will be located in each trench, with a minimum distance between the two trenches of 1 m. Once the work is complete, these will be concealed by means of a lining.

The underground cables will be installed in stretches of approximately 1 km, connected together in connection chambers. A similar device will be used to connect the underwater cables to the underground cables, although a little larger. These devices will be located far from the shore and will be covered finally, as permanent access is not required, being completely concealed.

Submarine cable

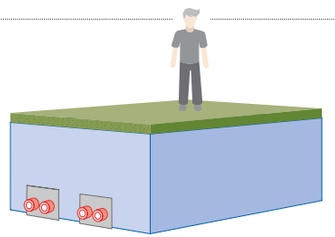
Each cable will be laid on the seabed with the help of a cablelaying ship. As a general rule, the cables will be buried as a protective measure, except if the bed is too hard, in which case they will be covered.

Underground cable

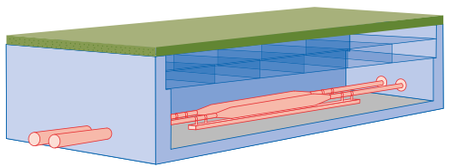


Ø 10-20 cm

1. Copper or aluminium conductor
2. Insulation
3. Metal screen
4. External protection sheath

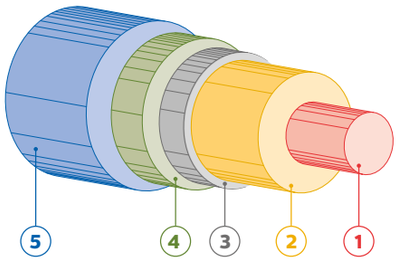


Underground cable trench



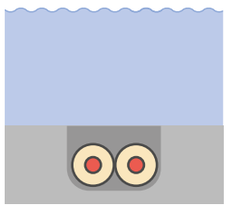
Underground cable joint

Submarine cable

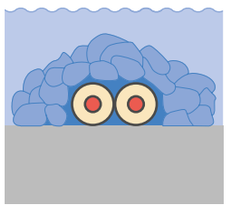


Ø 10-20 cm

1. Copper or aluminium conductor
2. Insulation
3. Metal screen
4. Armouring
5. External protection sheath

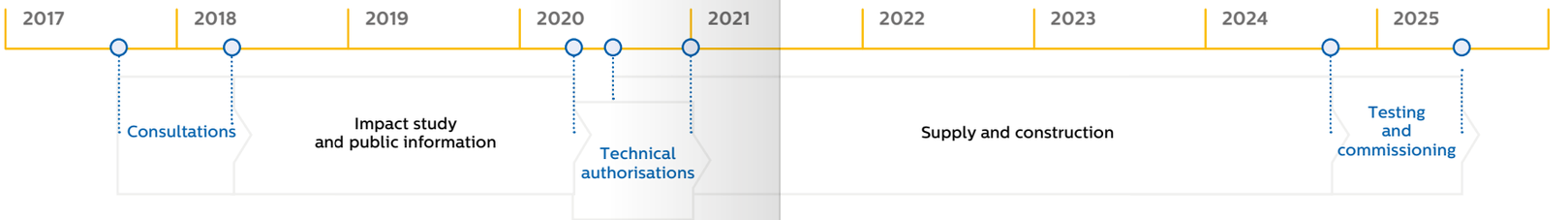


Submarine cable laying - buried



Submarine cable laying - covered

Project timetable



The territory

Scope of land study

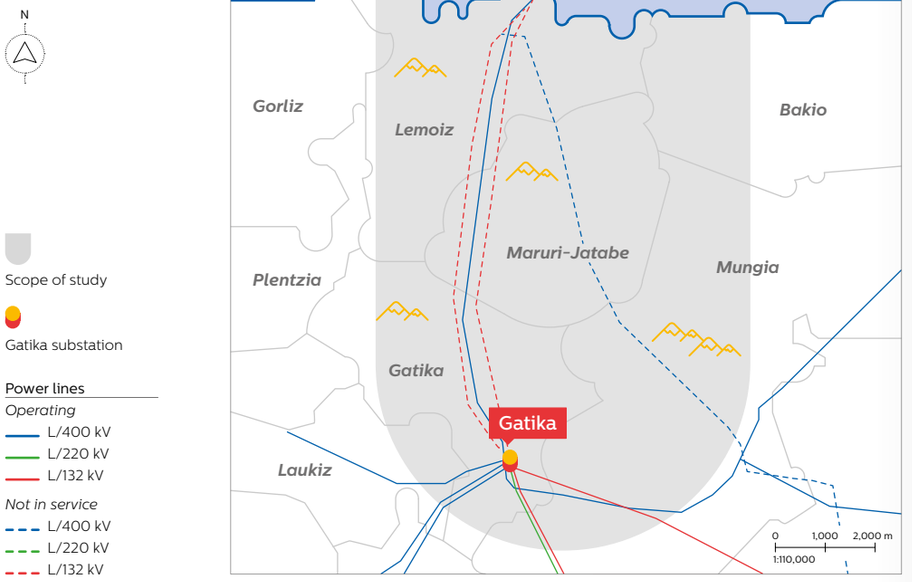
EThe scope of the study established for the project, on the land part, has an area of 7,608 hectares (approximately 76 km^2). This area includes a total of six municipal areas, corresponding to: Lemoiz, Bakio, Gatika, Laukiz, Maruri-Jatabe and Mungia.

This covers all the coastal front, running from the village of Armintza to the village of Bakio. Inland, the area borders the village of Gamiz to the south. To the east it borders the area of Meñaka and to the west the villages of Butrón and Berreaga. Within the area is the 400 kV Gatika substation and the 400 kV Lemoiz substation and the following power lines:

- 400 kV Gatika-Itxaso line.
- 400 kV Gatika-Azpeitia line.
- 132 kV Gatika-Lemoiz II and 400 kV Gatika-Lemoiz 1 and 2 lines.
- 220 kV and 400 kV Gatika-Güeñes lines.
- 132 kV Gatika-Euba 1 and 2 line.
- 132 kV Basauri-Gatika 1 and 2 line.
- 132 kV Gatika-Fadura 1 and 2 line.
- 132 kV Gatika-Leioa 1 and 2 line.
- 200 kV I/O line in ST Zamudio de L/Güeñes-Gatika.
- 132 kV Lemoiz line.

The electricity interconnection project across the Bay of Biscay has a land study area of 7,608 ha (approximately 76 km^2) and includes a total of 6 municipalities (Lemoiz, Bakio, Gatika, Laukiz, Maruri-Jatabe and Mungía), and a marine study area of 262,275 ha (2,600 km^2).

Map of the location

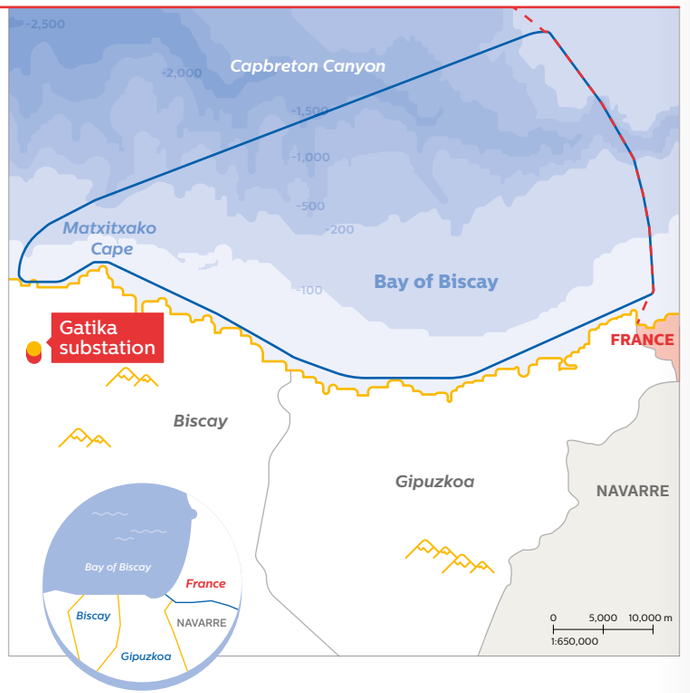


Scope of marine study

The marine study scope covers an area of 262,275 hectares (2,600 km^2) and is located in the Bay of Biscay.

It extends from the coastline at Armintza to that at Bakio, covering 6.5 km, which zone represents the limit of the land area. At this point the area turns to the east, skirting Cape Matxitxako and running along the whole length of the Basque coast, at the bathymetric depth of -50 m, avoiding the shore, to the limit with the French border (Irún-Hondarribia). Its northern limit runs from the bathymetric depth of -200 metres, in the northeasterly direction, crossing the Capbreton Canyon through a zone with a maximum depth of -1,500 m, as greater canyon depths are a limiting factor for the project; to end on the continental shelf at a bathymetric depth of -200 m, at the limit with the French border.

Map of the location



Maritime boundary Spain/France

Gatika substation 400 kV

Marine zone

Description of alternative solutions

The procedure for selecting the route alternatives for a project of these characteristics is a complex process in which multiple combinations and possible solutions are suggested, studied and evaluated, analysing as project alternatives only those solutions that are technically and environmentally viable.

Given that this is an electricity connection (linear infrastructure) that includes several elements that have already been described (converter station, connecting power lines, etc.), the first location solutions that need to be resolved are those corresponding to the project nodes, i.e. the converter station and the land-sea connection point.

Converter station (CS) site

An appropriate site for the CS must avoid the most sensitive areas from the environmental and social point of view and enable the entry/exit of future connecting power lines to it. Those locations that house infrastructure of an industrial nature will also take priority, as they are zones of the territory that have already been transformed.

When designing alternative sites for the converter station, it is always considered that the best option consists of locating it next to an existing substation, as this is a zone that has already been transformed. It also avoids the need to lay new connecting overhead lines needed between the two infrastructures.
In those cases where the installation of the converter station next to a substation is not viable or is not advisable, other location alternatives would be studied.

Analysing the existing infrastructure included in the project area, two zones are identified that house infrastructure of an industrial

nature, which have the characteristics for the possible location of the converter station. These zones are: the area housing the 400/220 kV Gatika substation and that where the unfinished installations of the Lemoiz Nuclear Power Station are located. As regards the viability of the proposed alternatives, this is explained in greater detail in the Initial Project Document.

Location of the beach joint

Once the alternatives for locating the CS have been established, the connection alternatives for the power line from the CS to the connection with the underwater cable need to be identified, for which it is necessary to evaluate the viable corridors for the passage of the power line to the connection.

The coast in the project setting has been analysed, taking into account that this is a coastline with a large number of cliffs and points of geological, palaeontological and geomorphological interest, which make it possible, among other aspects, to observe the "slumping" of Armintza, characteristic of the "flysch" of the coast of Biscay. Taking all the variables into account, it was determined that the areas from which the power line could have a viable exit to the sea were: the beach at Bakio, the beach at Armintza and the zone of the Lemoiz Power Station. As regards the viability of the areas, this is explained in greater detail in the Initial Project Document.

Converter-landfall point connecting power lines

Once the alternatives for the location of the CS and the possible landfall positions of the cable have been established, the alternatives for the connecting power line from the CS to the landfall point (beach joint) need to be identified, for which it is necessary to evaluate the viable corridors for the passage of the power line to that connection.

The alternatives for the overhead direct current electricity transmission line will have a run of approximately 10 km from the CS to the landfall point of the underwater cable, located in the setting of Lemoiz Power Station.

The study of alternatives was designed to minimise the impact on the buildings (hamlets), the most relevant zones from both

The choice of alternatives for the interconnection route of such a project is a complex process in which the multiple combinations that are technically and environmentally viable are studied and assessed.

the environmental and cultural heritage point of view and to seek greater integration into the landscape and the best possible adaptation to the existing topography. Use has been made of the corridor of the existing, currently out of use, electricity infrastructure.

From the Gatika substation to the Lemoiz Power Station, there are currently two 400 kV overhead electricity transmission lines that are out of service. These two lines were designed to provide service to the power station, although they never came to be used. Consequently, buildings and other elements have been constructed within their easements over the years, especially in the stretches closest to the Gatika substation.

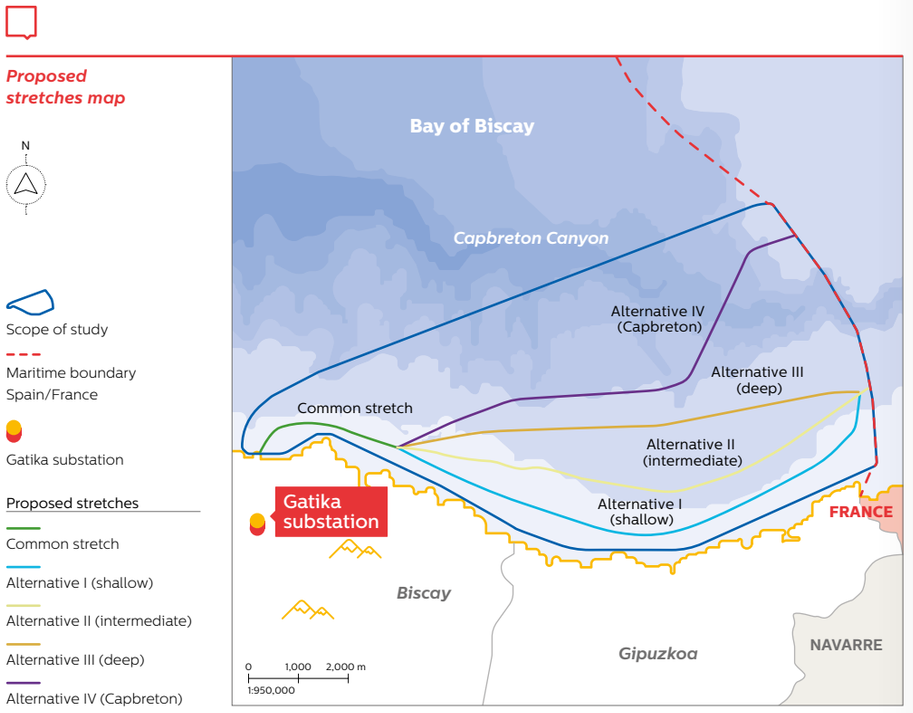
The use of this corridor of 400 kV infrastructure is proposed as an alternative in this project, provided it is technically possible, making isolated modifications to the current route, due to the technical impossibility of laying lines over homes or other type of existing buildings, which in some cases have been located under or near the existing route after its installation.

The use of the existing lines has the advantage that there are already accesses to the supports for the two existing 400 kV lines. Furthermore, the impacts would not be increased and nor would synergistic or cumulative effects be generated, given that the possibility is considered of dismantling the stretches of the line not in service that are not used in this project.

In total, three overhead alternatives have been raised, consisting of two single circuit AC power lines each (comprising two poles per circuit), the lengths and routes of which are detailed in the Initial Project Document.

Underwater cable

As the zone of the connection to the land part must take place in the setting of the Lemoiz Nuclear Power Station, as well as taking the technical and environmental constraints presented by the underwater cable into account, a total of four possible solutions (alternatives) have been established, to the connection point with the stretch of the underwater cable from the French side. The alternatives raised are described in the Initial Project Document.



Significant impacts

The main impacts arising from the various project elements are identified below:

Soil

During the construction phase, the potential impacts generated on the soil are mainly caused by earth movements and the covering and waterproofing of surfaces. Earth movements will produce the elimination of the vegetation cover, which in the case of steep slopes can lead to problems of erosion. It will also modify the edaphic evolution of the land affected. The waterproofing and covering of these surfaces will impact the processes to which they are currently subjected, due on the one hand to the fill and on the other to the floor slabs and rock fills spread as bases of operations.

Accessibility

Good accessibility makes it possible to minimise access roads to the works area and, therefore, avoids the need to open a new access, with the earth movements, loss of vegetation cover and risks of erosion that implies.

Atmosphere

The possible impacts related to the atmosphere are mainly caused by particulate emissions during the works, due to movement of machinery, the generation of noise during the works and in the operating phase, due to the emitted sound levels.

Hydrology

The possible impacts on the water network are primarily caused in the construction phase and in the modification or cutting of the drainage network, due to the occupation of the platform.

Vegetation

The impact produced on this element occurs due to the loss of vegetation cover, in the zone where the CS is located,

in the zone of the supports, in the construction of new accesses. The magnitude of this depends on the value of the ecosystem.

Fauna

Alterations to the behaviour of populations of fauna, influenced by the movement of machinery and people in the construction phase, and noise during the operating phase of the CS, are the main potential impacts considered. It will also give rise to loss of habitat, due to the removal of vegetation in the occupied zone, which will lead to the displacement of communities that were established in the area.

Socio-economic

The potential impacts on the socio-economic environment have been evaluated by summing the individual effects of a series of variables: population, employment, socio-economic sectors, infrastructure, tourism, etc.

Cultural heritage

Impacts on cultural heritage are caused by direct effects on the existing heritage elements, with the most effective measure for minimising them being site selection, locating them as far as possible from these elements.

Landscape

The possible impacts that can be caused to the landscape are derived from the impacts generated on the elements that compose it, whether natural or man-made, which have been evaluated previously, and due to the visual quality and fragility of the landscape.

Marine geomorphology

No detailed information is currently available on the characteristics of the marine substrate in the study area. This information will be obtained through the technical studies that will be included in the future EIA.

Sedimentary dynamics and hydrodynamics

The presence of countless geographical irregularities and numerous submarine canyons, the heads of which are at the external limits of the continental shelf, generate circulations of large amounts of sediments, destined for the base of the Capbreton Canyon. Due to these processes, unstable zones are originated, with a tendency to generate failures, especially at the head of the canyon, affecting the Capbreton alternative as it crosses the canyon at a maximum depth of 1,350 m.

Coastal ecosystems and benthic habitats

As regards the coastal ecosystems that could be affected by the project, it is important to note that the location proposed for the landsea connection point is in an area that is already anthropic, occupied by the Lemoiz Nuclear Power Station, which was never put into service. For this reason, the potential impact on the coastal ecosystem in this area is expected, in principle, to be insignificant.

Fishing activity

The possible interactions that could occur between fishing activity and the underwater cable, once in operation, are associated with possible snagging and breakages that dragnet fishing could cause in the zones where the cable is located. This aspect will be reduced a priori by burying the cable.

Marine historical-artistic heritage

The presence of only two shipwrecks is known in the study area, one located at a depth of approximately 30 m and 1 km from the coast of Cape Matxitxako and the other at a depth of 90 m and 5 km from the coast of Lemoiz (Biscay).

Protected areas or areas of special interest in the marine environment

Identified in the marine study area are the following protected natural spaces: the “Mundaka estuary-Cape of Ogoño marine space” (ES0000490) marine Zone of Special Protection for Birds (ZEPA) and the “Deba-Zumaia coastal stretch” (ES212016) protected biotope.

Once the possible impacts the project could have on the elements of the environment have been identified, described and evaluated, the preventive and corrective measures will be defined to minimise their consequences up to allowable limits, acting in the various phases of project execution: construction phase and operating phase and maintenance.

It should be emphasised that the main preventive measure adopted is to consider the various conditioning environmental factors presented by the project elements in the territory, selecting the site with the least conditioning factors, in the case of the CS, and the route of least environmental impact, in the case of the underwater cable or the power lines.

The main potential impacts will be identified and evaluated for each of the solutions raised. To do this, each element of the environment capable of being affected is analysed, assigning it one of the following impact levels:

- **Highly significant:** this value will be assigned when the selected project alternative could negatively affect environmental values of interest, present in the study area. However, the impact of these elements would in no case make project execution impossible, as corrective and/or protective measures would be included in the project that would eliminate or minimise the potential negative effects.

- **Significant:** this value will be chosen in the case that the alternative could affect elements present in the zone that have some interest. As in the previous case, neither would the impacts of these elements make the implementation of the Converter Station or the corridor impossible, with the appropriate measures being taken.

- **Insignificant:** this value will be established for project alternatives that affect environmental elements or parameters of little value or interest, hence development of the project would not present any environmental limitation.

- **Nil:** this value will be established when the project alternative does not affect any environmental element or parameter of interest.

- **Positive:** this value will be chosen when project development foreseeably produces beneficial effects on the variable analysed.

Public participation

This project was, on 14 October 2013, designated by the European Commission and the Parliament as a “Project of Common Interest” (PCI), in the framework of Regulation 347/2013, within the European Commission “Energy Infrastructure Package”. It forms a part of the ENTSO-E July 2012 Ten-Year Network Development Plan.

As it is considered to be a European PCI, the processing of this project must comply with Regulation 347/2013, which, among other things, requires a process of public participation in the initial processing stage that is coordinated on dates with that of the French side.

The **objectives** of Public Participation are:

- To take on-board the environmental and social feeling of the population at the project’s onset.
- To ensure that no major decision is made without consulting the public concerned or affected public administrations.
- To make relevant information on the project accessible, in a way that is easy for citizens to understand (no technical terms).
- To inform of the right to participate and how it can be exercised.
- To identify the public concerned and the affected public administrations that may participate in the PCPP.
- To establish a direct channel of communication between queries of the population and the experts and parties responsible for each phase and area of an extraordinarily complex project.

- To continually involve the public from the beginning of the decision-making process, facilitating understanding of the project, explaining clearly and transparently the need for the project and defining the matters to be addressed at each stage. This must all be carried out in comprehensible language that is accessible to the whole population, highlighting how environmental, social and landscape variables have been taken into account.
- To obtain useful information from the public concerned.
- To justify the option adopted and the way in which the public contribution has been included.

The duties of the agents involved in the participation process:

Developer duties

- To provide the necessary resources to the public participation process.
- To ensure that citizens have the appropriate participation opportunities.
- To guarantee that the information presented to citizens is clear, complete, truthful and comprehensible.
- To take citizens' points of view into consideration.
- To give due attention and response to citizens' comments, recommendations and interests.
- To seek a consensus.
- To make final decisions.

Duties of the public concerned

- To take an active part in the participation process.
- To gain awareness of the various interests and visions at play and understand the need to find consensual solutions.
- To contribute from each perspective to improving and enhancing proposals.

All parties involved in the process of granting authorisations shall respect the principles for public participation established in Appendix VI of Regulation 347/2013, without prejudice to any requirement applicable in accordance with the Aarhus and Espoo Conventions and European Union legislation.

Public participation will take place at two stages of the procedure:

1.- In the Preliminary Procedure, *the public consultation will be performed with the purpose of informing all interested parties on the project in its early stages. It will help to determine the most appropriate location or trajectory and the pertinent issues that must be addressed in the application.*

During the public consultation, national, regional and local authorities, land owners and citizens residing locally to the project, the general public and their associations, organisations or groups will be informed.

The information will be provided through the following **channels:**

The website, which will include the following documentation:

a) Informative brochure.

b) Non-technical summary.

c) The scheduling of the project and the public consultation, dates and locations of public consultations and hearings.

d) Contact details for obtaining documents.

e) Contact details for comments and objections.

This website will be established and updated regularly by the project developer and will be linked to the Commission website.

The informative brochure that includes:

a) A general description of the objective.

b) A project schedule.

c) Alternative routes.

d) Envisaged impacts.

e) Palliative measures.

Face-to-face public communications plan:

As part of the consultation, the public will be invited to town hall meetings, where they will be provided with all relevant information

on the project, and attendees may make statements and comments as they deem fit.

The project developer will prepare a report summarising the results of activities relating to public participation before submitting the application, including activities taking place before the start of the authorisation granting process. The project developer will present this report and the application to the pertinent authority. These results will be duly taken into consideration in the overall decision.

Phase	Action	Activity
PHASE 1	Presentation and start of participation process	· Press release · Announcement in the Official State Gazette, Official Basque Country Gazette, Official Biscay Gazette · Institutional project presentation act
	PUBLIC CONSULTATION	
PHASE 2	Provision of information	· Website · Information points in Local Councils included in the scope of study · Mail drop of documentation in the municipal areas included in the scope of study · Invitations to attend the meetings · Radio-press-television · Information boards distributed around the municipal areas included in the scope of study
PHASE 3	Active consultation and participation	· Public participatory meetings · Meetings with experts · Consultation with Administrations
PHASE 4	Closure of public consultation	· Press release
PHASE 5	Incorporation of the results obtained	· Preparation of a report in which the results obtained from public consultation are detailed

2.- In the Procedure for granting regulatory authorisations, *the public may participate as part of the public information process, defined, as appropriate, in Royal Decree 1955/2000, of 1 December, regulating transmission, distribution, marketing and supply activities and electricity facility authorisation procedures, and in Law 21/2013, of 9 December, on environmental evaluation.*

This public information will be provided in a project authorisation procedure that is inclusive of all options concerning the determination of content, extent and definition of the project.

The developer will present the project and the environmental impact study will be subject to public information for 30 days, following an announcement published in the Official State Gazette, the Official Gazette of the affected historical territories and, if declaration of public use has been specifically requested, in a major newspaper of each of the affected historical territories.

Likewise, this information will be communicated to the local councils in the municipal district in which the goods or rights affected by the facility are located, for dissemination to the public, for the same amount of time.

The announcement will include the locations where the public can consult information, as well as other technical matters.

Additionally, the various administrations, bodies and, if appropriate, public service or general services companies that have or may have affected goods or rights will be informed, as will the affected public administrations and persons concerned in the environmental procedure.

Detailed below in outline is information concerning:

- **Public consultation:** Preliminary Procedure.
- **Public information:** Procedure for granting regulatory authorisations.

1.- Article 10.1.a) Preliminary Procedure Regulation 347/2013

-3-0 months

Admission of application MINETAD (DGPEM [Directorate General for Energy and Mining Policy]) Article 10.1.a) RTO 347/2013

0-3 months

MINETAD

Approval application (PCPP) Article 9.3 RTO 347/2013

Application EIA submission Article 34 Law 21/2013

4-6 months

MINETAD

Appendix VI Regulation 347/2013

- Interested parties
- Time and place of meetings
- Schedule
- Allocated human resources

MAPAMA

Consultation with affected public administrations, individuals and entities (30 days)

Scope and content of the **EIA**

Preliminary consultations report Article 35 Law 21/2013

7-18 months

Information and results of the public consultation Article 9.4 RTO 347/2013

Alternatives study and solution adopted

Topographic Survey, Detailed Technical Study and List of Assets and Rights

19-24 months

Public participation report (PPR)

EIA

Execution project

2.- Article 10.1.b) Procedure for granting regulatory authorisations Regulation 347/2013

18 months

1	**Processing body: DIA, AAP, AAC and DUP application**
2	**PUBLIC INFORMATION (Execution Project and EIA)**
3 / 4	**Referral to developer of submissions and conditions and response**
5 / 6	**TECHNICAL REPORT submissions and conditions**
7	**Sending of DGPEM case file**
8 / 9 / 10 / 11 / 12 / 13	**MAPAMA Technical Analysis DAY**
14 / 15	**CNMC Report**
16 / 17 / 18	**DGPEM Decision AAP, AAC and DUP**

Additional information

Red Eléctrica personnel assigned to the project:

- Juan Prieto
  Project leader
- Antonio Miranda
  Leader of the participation process

Red Eléctrica has made various channels for attention to queries, doubts, complaints and suggestions available to the public:

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All the information about the project is available to the public on the following website:

https://www.inelfe.eu/proyectos/golfo-de-bizkaia

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Red Eléctrica works on selecting the most legible typographical font for their publications. Typographical fonts Centrale Sans and Silica have been used for the texts and graphics in this report.