

Environmental and Social Data Sheet

Overview

Project Name:	AFR-IX MEDUSA SUBMARINE CABLE SYSTEM
Project Number:	2021-0166
Country:	PORTUGAL SPAIN FRANCE ITALY GREECE CYPRUS MOROCCO ALGERIA TUNISIA EGYPT
Project Description:	The project concerns the construction and deployment of a submarine cable system in the western Mediterranean interconnecting five European countries (Portugal, Spain, France, Italy, Cyprus) with four North African countries (Morocco, Algeria, Tunisia and Egypt). In addition to providing a significant upgrade of the connectivity among the targeted countries, the project will specifically include direct terrestrial links from the submarine cable landing stations in the North African countries to their national research and education networks. The system will be operated on an open access basis, subject to local regulations, it will have a total length of 7,100 km and will include 12 landing points in the nine countries mentioned.
EIA required:	no
Project included in Carbon Footprint Exercise ¹ :	no
(details for projects included are provided in section: “EIB Carbon Footprint Exercise”)	

¹ Only projects that meet the scope of the Carbon Footprint Exercise, as defined in the EIB Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: 20,000 tonnes CO₂e/year absolute (gross) or 20,000 tonnes CO₂e/year relative (net) – both increases and savings.

Environmental and Social Assessment

Environmental Assessment

The submarine cable included in the project will be around 7,100 km long and is expected to include 12 landings in nine countries. In addition, the cable will have two additional landings in the south of Spain (Torreguadiaro and Zahara de los atunes), for the purpose of crossing the straits of Gibraltar by land. The project is known as the Medusa Submarine Cable System.

Submarine cables are linear infrastructures with relatively high deployment speed and a small local footprint. The cable diameter ranges from 15 to 40 mm and, in case of buried sections, the trench is typically from 50 to 100 cm wide and from 100 to 150 cm deep. In general, submarine cable projects typically have minor residual environmental impacts thanks to their small footprint and short time of the construction activities in each given point of the cable route, combined with the avoidance of sensitive areas when designing the system, and the application of well-known industry standard mitigation measures. In addition, in the particular case of Medusa, the submarine cable vendor is a well-established company with a long experience in the deployment of large-scale submarine systems and a high quality implementation track record. In addition, the promoter will closely monitor the cable system deployment with the support of a highly specialised consultancy, which will include an expert aboard the cable ship during the deployment phase. The promoter has commissioned the usual desktop study and subsequent maritime survey to identify the most adequate cable route and landing points, avoiding environmentally sensitive areas as much as possible, and planning for the appropriate deployment techniques to adapt to the seabed characteristics, including environmental aspects.

Neither submarine nor terrestrial fibre optic network projects are included in Annex I and II of the European EIA Directive 2011/92/EU amended by Directive 2014/52/EU. However, in general the promoter will have to conduct E&S assessment studies as part of the permitting process for all the cable landings on the European side of the cable based on the national legislations. On the African side of the project, the EIA requirements are the following:

- In Morocco, no specific legislation exists about submarine cables systems. However, several national laws regulate planning of infrastructure affecting the country's coasts: the Law 99-12 "National Charter for the Environment and Sustainable Development" of 2009; the Law No. 49-17 (passed in July 2020) on Environmental Assessment, and Decree No. 2-17-585 on regulatory impact assessment (implementing provisions of Organic Law No. 065-13); and the Law 81-12 of 2015 related to "Coastal Management". Based on these laws, the cable project is subject to an EIA, which should be finally approved by the Ministry of Energy, Mines and Environment.
- In Algeria, there are several national laws regulating environmental issues: the new "Environmental Protection" Law 03-10 of 2003, which substitutes the previous (Law 83-03), the Decree 90-78 about "EIA regulation" and the Law 02-02, released in 2002 and concerning the "Protection and Valorization of Coastal Areas". Related to planning affecting coastal areas: the Decree 09-114, about "Coastal Development Plannings" and the Decree 06-424, which defines the composition and the coordination of the "Coastal Coordination Council". Based on the mentioned legislation, the project is subject to an EIA, which should be approved by the Ministry for the Development of territory, Environment and Tourism.
- In Tunisia, several national laws are regulating environmental issues, the Law 88-91 and Décret 2005-1991 related to "EIA regulation" and EIA contents. The Law 2003-78 "Code for the Territorial and Urban Planning", the Law 2005-50 about the "Economic

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Exclusive Zone, EEZ” and the Law 2009-49 about “Coastal and Marine Protected Areas”. In addition, the “Maritime Public Domain” is regulated by the Law 95-73 of 1995, modified by Law 2005-33. The project is subject to an EIA, which should be approved first by the ANPE (Agence Nationale de Protection de l’Environnement) and then by the Ministry of Environment and Sustainable Development.

- In Egypt, the Environmental law (Law 4/1994) and its executive regulations (1995) define the roles and responsibilities of the Egyptian Environmental Affairs Agency (EEAA) in order to avoid a conflict with existed laws, which include regulation of air pollution, control of hazardous substances, management of hazardous waste and control of discharges to marine waters. It requires all new projects and activities to submit an Environmental Impact Assessment (EIA), which has to be approved by the EEAA.

The permitting processes for all landings are currently ongoing, except in the case of Barcelona for which the permits have already been awarded.

In addition, based in the current design and performed desktop studies, pending the maritime survey results, the project’s submarine cable system has been designed to minimise the crossing of Natura 2000 areas. However, for the landings in Marseille, Yeroskipos and Lisbon there was not a viable alternative and the cable will have cross a Natura 2000 area (Parque de Calanques, Thalassia Periochi Moulia and Cabo Raso respectively). Similarly, the cable will have to cross the Mediterranean Cetacean Migration Corridor that occupies an area of 46 385 km² in front of the Spanish east coast. The promoter will provide a Form A for these areas or evidence that an appropriate assessment for impacts to these Natura 2000 sites is not significant, as a condition for disbursement related to the landings mentioned. Mitigation measures, based on preliminary analysis would consist of:

- Marseille: the main expected impact is related to crossing of seagrass meadows (*Posidonia oceanica*). In this case, the usual mitigation measure relates to laying the cable on the seabed, instead of burying it, and attaching it with corkscrew fixings.
- Yeroskipos: the study and survey will confirm the optimal cable route to avoid any environmentally sensitive areas and archaeological remains.
- Lisbon: analysis of potential impact on endangered migratory bird species and if relevant, mitigation measures during cable laying operations.
- Marine cetacean corridor: Marine cetacean experts go on the cable ship and apply a protocol whereby the ship reduces the speed; they monitor the presence of cetaceans and make sure they are not in the area before starting work.

The Bank will require the EIAs and other E&S studies approved by the relevant competent authorities for each landing, at the latest before disbursement of the tranche of the loan that will fund the deployment of the landing in question. If required, depending on the location and jurisdiction, the EIA / E&S study for the terrestrial link from the beach manhole to the cable landing station, as well as these infrastructures, will also be required before the corresponding disbursements. The same will apply to EIAs / E&S studies required for the terrestrial links that will connect the landing stations to the national research and education networks, for the segments that involve new construction activities. Finally, the promoter will prepare and provide a complementary E&S impact study for the part of the system, including the main trunk in international waters, not covered by the landing studies, to the satisfaction of the Bank, before first disbursement.

Digitalisation and ICT infrastructure play an important role in the transition of several sectors to a low carbon and climate resilient economy. The project is fully aligned with the Paris

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Agreement on climate change according to the Bank's definition (Annex 2 Table H of EIB's climate bank roadmap - CBR).

Social Assessment, where applicable

Maritime and coastal activities in the project area and consultation with the potentially affected communities will be conducted by the promoter in the scope of the EIAs / E&S studies for the project mentioned in the previous section. As a result, potential mitigation and compensatory measures will be put in place to address identified impacts.

On the other hand, the project entails wide-ranging socio-economic benefits in the targeted regions with regard to the creation of new employment. Capacity increases in transmission networks will enable a faster digital transformation across different sectors and stimulate innovation-related business activities. In particular, the project will provide best in class direct digital connectivity among national research and education institutions in North Africa and with their peers in the EU, which is expected to result in increased innovation by cross-fertilisation and collaborative work.

Conclusions and Recommendations

Submarine cable projects have minor environmental impacts during implementation that can be appropriately addressed by applying well-known mitigation and compensatory measures.

The project is not expected to have significant negative social impacts either, and in fact is expected to generate substantial positive social impacts by contributing to accelerating the transition to a digital economy in North Africa. In addition, the direct connection of the national research and education networks to the system will provide best in class digital connectivity to education institutions and will stimulate innovation by increasing collaboration opportunities among research centres on both sides of the Mediterranean.

The promoter is relying on well-established suppliers and highly specialised consultants to ensure a high quality implementation. The promoter will provide to the Bank the EIAs / E&S studies, and Natura 2000 Form A's if applicable, before deployment of the corresponding network segments and before the first disbursement for the parts not covered in the landing point studies, notably the main trunk of the system.

Therefore, the project is acceptable for EIB financing in E&S terms.