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Luxembourg, 23 September 2020

# Public

# **Environmental and Social Data Sheet**

Overview	
Project Name:	ILIAD 5G NETWORK DEPLOYMENT FRANCE
Project Number:	2020-0383
Country:	FRANCE
Project Description:	The project relates to the design and early rollout of a 5G mobile telecommunications network throughout France as well as the densification and upgrade of a 4G network. The project, implemented by the fourth operator in France, will be rolled out throughout the country and includes the deployment of the physical infrastructure (antennas, power and cooling facilities) and the active Radio Access equipment. In order to cope with the increased traffic, the project also includes the expansion of the core, backbone and OSS systems as well as upgrades to the backhauling to provide fibre connectivity to the mobile sites.
EIA required:	No
Project included in Carbon Foo	tprint Exercise <sup>1</sup> : Yes

(details for projects included are provided in section: "EIB Carbon Footprint Exercise")

## **Environmental and Social Assessment**

#### **Environmental Assessment**

The project consists of three main components:

- 1) Deployment of 5G radio access network (RAN) nodes and associated equipment, mostly in existing towers and rooftop sites throughout the country;
- 2) Upgrade of existing sites and deployment of new 4G sites for network densification and capacity upgrade; and
- 3) Upgrade of the promoter's core network to 5G together as well as expansion of the fibre connectivity to mobile sites.

Activities included in components 1 and 3 involve to a large extent the installation of equipment in existing infrastructures (towers, rooftop sites and other radio access and core network buildings) that will not change their scope due to the project. These installations might require minor refurbishment or adaptation works, which are not expected to have a significant negative environmental impact. These activities are not specifically mentioned in the EIA Directive 2011/92/EU as amended by 2014/52/EU on Environmental Impact Assessment (EIA).

<sup>&</sup>lt;sup>1</sup> 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.



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The promoter confirmed that none of the sites requires an EIA under the relevant national legislation (French Code de l'Environnement, which transposed the EIA Directive into national legislation).

Regarding component 2, the project may include the construction of a small number of new mobile sites (masts, etc.) in Natura 2000 or other environmentally sensitive areas (seaside, protected forestry). In this case, as part of the permitting process, the project is presented to the regional technical and environmental authorities (DDT - Direction départementale Technique and DREAL - Direction Régionale de l'Environnement, de l'Aménagement et du Logement) that determine the conditions and mitigation measures required to approve or not the proposed site deployment. The promoter will inform the Bank about these conditions or mitigation measures.

### EIB Carbon Footprint Exercise

The project's **Absolute** annual emissions in a standard year of operation are estimated at about 26.9 kT CO2e/year. The **Relative** annual emissions are expected to be -1.8 kT CO2e/year (decrease).

The absolute values concern the emissions of the new and the sites upgraded with 5G and 4G functionalities at a normal year of operation once the project has been completed.

Baseline scenario: In line with the Banks GHG methodology 11.1, all of the new equipment for new sites and updated sites has been assumed as state of the art equipment. With this assumption, the criteria to comply with the baseline definition are met. For the equipment related to the ongoing rollout in 700 MHz, it includes a swap out leading to improved energy efficiency. These improvements result in the expected decrease of relative emissions.

### **Other Environmental and Social Aspects**

During the operations phase, the main potential impact would be related to exposure to EMF (Electro Magnetic Field) emissions by RAN equipment. Studies continue to be conducted to further assess the potential long-term effects of exposure to EMF emissions on human health. So far, mitigation measures adopted are limits to the radiation of the mobile base stations and restrictions to their locations. France has adopted exposure limits aligned with the ones stipulated by the EU recommendation (1999/519/EC), which is based on the ICNIRP (International Commission on Non-Ionizing Radiation Protection) 1998 guidelines. ICNIRP has recently stated that in terms of the 5G exposure levels measured so far, its 1998 guidelines would also provide protection for the frequency bands that the promoter's network would use. To verify compliance with the exposure limits, the French National Frequency Agency (ANFR) performs audits at the request of citizens and city councils. During 2019, ANFR performed 3,020 measurements, which were below the regulatory thresholds. In addition, some specific measurement campaigns are done in schools and municipal squares and parks for the ministry of environment and sustainable development.

If relevant, visual nuisance due to towers and rooftops is mitigated by following the corresponding requirements of the ABF (Architectes de Bâtiments de France) that is consulted as part of the permitting process and may impose height restrictions, specific disguising site formations (tree shape, chimney, etc.) and other similar measures.



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As part of its annual report, the promoter publishes a chapter on Environment, highlighting the main environmental and social actions it has undertaken.

## **Conclusions and Recommendations**

The project consists mostly of the installation of telecommunications equipment in existing sites already approved for such purposes, including also a smaller component of newly built sites. Potential environmental impact during construction is expected to be limited and, where applicable, the relevant environmental authorities will determine the required mitigation measures as a condition to approve the project. The environmental impact of mobile networks during operations is mainly related to electromagnetic field (EMF) emissions that are mitigated by operation under the exposure limits determined by the regulation and based on the best science currently available.

Therefore, the project has been classified as acceptable in environmental and social terms for the Bank's financing.