

## Environmental and Social Data Sheet

### Overview

Project Name: TDC NETWORK EXPANSION  
 Project Number: 2017-0310  
 Country: Denmark  
 Project Description: The project concerns the promoter's investments in Denmark to increase mobile coverage and capacity, to upgrade and expand the coax network, enhance and expand the fibre access networks and to upgrade the existing copper access networks with vectoring technology.

EIA required: No

Project included in Carbon Footprint Exercise<sup>1</sup>: No

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

### Environmental and Social Assessment

#### Environmental Assessment

The project relates to investments in fixed and mobile telecommunications equipment mainly in existing network sites. For the mobile component of the project, it will only include a small number of new mobile towers; the impact related to construction and visual nuisances will therefore be limited. The main environmental impact will be electromagnetic field (EMF) radiation from base stations and microwave radio equipment. The EMF radiation produced by mobile handset is classified by the International Agency for Research on Cancer, a WHO specialized agency, as possibly carcinogenic to humans. Studies are ongoing to further assess the potential long-term effects of use. So far mitigation measures adopted are limits to the radiation of the mobile base stations, restrictions to their locations, the control of the power of the handsets and guidelines for consumer usage.

Denmark has adopted exposure limits for these radiations that follow the limits stipulated by the EU recommendation (1999/519/EC), which is based on the International Commission for Non-Ionising Radiation Protection (ICNIRP) guidelines.

<sup>1</sup> Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 100,000 tons CO<sub>2</sub>e/year absolute (gross) or 20,000 tons CO<sub>2</sub>e/year relative (net) – both increases and savings.

Luxembourg, 24 July 2017

The disturbances during civil works related to the construction of fixed telecommunication systems will be mitigated by appropriate measures and by the objective to maximize the re-use of existing infrastructure. No aerial connections or connections on poles are foreseen as part of the network roll-out. The project does not include any installations (neither fixed networks nor mobile base stations) in Natura 2000 sites.

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

Although not yet ISO14001 qualified, the promoter is currently working towards that certification as well as the ISO50001 certification. The promoter monitors and reports on its environmental impact as part of its annual CSR report which is done according to its commitments to the UN Global Compact.

Improved energy efficiency of its network, both for the mobile and fixed, is an important criteria in the promoter's equipment selection. The promoter foresees its total power consumption to remain stable over the next years, as the effects of the exponential growth in data traffic and network expansion will be compensated by an improved energy efficiency of the network.

## **Conclusions and Recommendations**

Neither the installation of mobile nor fixed telecommunication networks fall under Annexes I and II of the EIA Directive 2014/52/EU amending the Directive 2011/92/EU, and are therefore not subject to mandatory Environmental Impact Assessment. Mobile telecommunications systems have limited environmental effects, apart from the visual impact of base station towers and EMF radiation. The disturbances during civil works related to the construction of fixed telecommunication systems will be mitigated by appropriate measures.

The residual project risks are related to the impact of EMF exposure to the general public, a subject that is under continuous study by international organizations.

Hence, the project is considered as acceptable for the Bank's financing.

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