

## Environmental and Social Data Sheet

### Overview

Project Name:	DNA 4G & 5G NETWORK EXPANSION
Project Number:	2018-0159
Country:	Finland
Project Description:	The project relates to the capacity expansion and technological upgrade of the promoter's 4G mobile broadband network, as well as the initial deployment of a 5G network, to accommodate the expected high growth of data traffic that comes with the favourable mobile pricing plans with unlimited data volume marketed by the promoter. It includes investments in the radio access network, transmission, core network and related IT systems.
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 will not include a relevant number of new sites, but capacity upgrades of existing sites, which will limit significantly the potential impact of construction works or visual nuisances caused by new site deployment. The main potential environmental impact would be related to electromagnetic field (EMF) radiation from base stations and microwave radio equipment. Studies are ongoing to further assess the potential long-term effects of use on human health. In the meantime, the EMF radiation produced by mobile handsets has been classified by the International Agency for Research on Cancer, a WHO specialized agency, as possibly carcinogenic to humans. 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. Finland 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) guidelines. The project is not expected to include any activity in environmentally protected areas (Natura 2000), but if there was a need for additional coverage in environmentally protected areas, the promoter is obliged to conduct the construction in accordance with national legislation and in cooperation with authorities.

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<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, 18 September 2018

The promoter's performance in recent years with respect to environmental aspects has been excellent. In the last three years, the promoter has managed to reduce absolute scope 2 emissions, which include the ones related to the mobile network covered by the project, by more than 50%. Combining this with the strong growth of mobile data traffic during the same period has resulted in a reduction of 90% in the CO2 emissions by the radio network in proportion to the volume of data transmitted. These achievements have been due to the implementation of the following specific measures:

- DNA's directly procured energy is renewable, either hydro or wind power, and comes with a guarantee of origin. This amounts to 70% of the energy consumed by the network, with the other 30% corresponding to equipment located in third party sites where DNA does not control the energy procurement.
- Continuous upgrade of the network with the installation of more energy efficient equipment.
- Active network sharing agreement with another operator for 50% of Finland's territory.

The improvements in energy efficiency are expected to continue during project implementation and operation. As a result of the project implementation, DNA will be able to decommission either its 2G or its 3G network, with the corresponding energy saving. In addition, the project includes the first phase of the deployment of a new 5G network, which is expected to be significantly more energy efficient than the promoter's existing network.

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

DNA has a full-time Sustainability Manager who decides on the main principles of corporate responsibility together with the CEO and the Vice President, Corporate Communications, and is responsible for meeting the targets and implementing the measures related to corporate responsibility.

Based on the Great Place to Work® survey conducted at the end of 2017, DNA was awarded as the second best workplace in Finland in the category of large organisations. The promoter has developed a Group Code of Conduct, which applies to all employees and a Supplier's Code of Conduct to ensure that they operate according to DNA's CSR principles.

DNA's annual corporate responsibility report is assured by an independent external party and is prepared in accordance with the Core option of the Global Reporting Initiative (GRI) Standards (2016).

### **Conclusions and Recommendations**

Mobile telecommunication networks do not fall under Annex I or II of the EIA Directive 2014/52/EU amending the Directive 2011/92/EU, and are therefore not subject to Environmental Impact Assessments. The environmental impacts of mobile networks are mainly visual nuisance and electromagnetic field (EMF) radiation. Potential health risks from EMF radiation are being studied at an international level. Exposure limits in Finland are aligned with the ICNIRP guidelines.

Hence, the project is considered as acceptable for the Bank's financing in environmental and social terms.