

## Environmental and Social Data Sheet

### Overview

Project Name:	KPN 5G NETWORK INITIAL DEPLOYMENT
Project Number:	2018-0652
Country:	Netherlands
Project Description:	The project relates to the expansion in capacity of the promoter's mobile broadband network and the initial deployment of a 5G network, in order to cope with the expected growth of data traffic and demand for higher data rates. It covers investments in the radio, access network, transmission, core network and IT systems. The project also includes improvements of the promoter's cybersecurity capabilities.
EIA required:	no
Project included in Carbon Footprint Exercise <sup>1</sup> :	no

### Environmental and Social Assessment

#### Environmental Assessment

The project mainly consists of capacity upgrades of existing sites and the construction of a limited number of new sites. The potential impact of construction works or visual nuisances caused by new site deployments is therefore limited and will be mitigated by appropriate measures.

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 World Health Organization 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. The Netherlands 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.

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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.

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The project is not expected to build any new activity in environmentally protected areas (Natura 2000), but if there were a need for additional network coverage in environmentally protected areas, the promoter would be obliged to conduct the construction in accordance with national legislation and in cooperation with authorities.

The promoter's performance in recent years with respect to environmental aspects has been very good and is fully supported by the Management team. The company is recognized as a sustainable telecom operator and is climate neutral since 2015. The majority of its energy consumption (85%) consists of electricity, which is fully generated by green electricity providers operating local wind farms and biomass plants. Its remaining CO<sub>2</sub> emissions (9%) due to gas (buildings), gasoline and petrol (cars and emergency power) are compensated with Gold Standard projects and REDD+ forest compensation projects.

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

The promoter has been listed for the seventh consecutive year in the Dow Jones Sustainability World Index (DJSI), indicating that the company is one of the most sustainable telecom operators in the world. Moreover, the promoter has implemented adequate labour condition policies and frequently performs risk assessments and evaluations as required by law. KPN is also a member of the Joint Audit Cooperation (JAC), an industry initiative of 16 telecom operators that monitors and raises social, environmental and ethical standards within the supply chain.

Investments in mobile 4G/5G networks have an effect to improve significantly the quality of broadband services, with widely reported positive social benefits. Furthermore, by improving its cybersecurity capabilities, the promoter contributes to create a safe and secure digital environment for consumers and enterprises that will foster the spreading of the Gigabit society.

### **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 mandatory 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 the Netherlands are aligned with the ICNIRP guidelines.

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