

Environmental and Social Data Sheet

Overview

Project Name: VODAFONE DEUTSCHLAND MOBILE BROADBAND NETWORK
Project Number: 20130281
Country: Germany
Project Description: The project concerns the investments in the expansion and upgrade of the promoter's German mobile network. The objective is to improve the customer experience in terms of 4G broadband services, overall network coverage and also voice quality through the rollout of latest radio access nodes and high capacity transmission systems.

EIA required: No
Project included in Carbon Footprint Exercise¹: Yes

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

Summary of Environmental and Social Assessment, including key issues and overall conclusion and recommendation

The project activities do not fall under Annexes I and II of the EU Directive 2011/92/EC, and are therefore not subject to mandatory Environmental Impact Assessments (EIA). Generally, mobile networks based on UMTS/LTE technology have limited environmental effects.

The impact during implementation will be limited as the vast majority of new equipment will be put on existing sites and replace old and less efficient equipment. The main impact during operation, such as the radiation emissions or the visual detraction, will be mitigated by appropriate construction and operation measures within the national regulations.

Potential health risks from electromagnetic radiation are still being studied at an international level. Therefore, more research on the link between cell phones and the cancer risk is proposed and also users are asked to handle the cell phone more carefully particularly in the case of high usage. Still, the ICNIRP thresholds are considered appropriate.

Therefore the project is classified as acceptable and it is therefore eligible for the Bank's financing.

¹ 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 CO₂e/year absolute (gross) or 20,000 tons CO₂e/year relative (net) – both increases and savings.

Environmental and Social Assessment

Environmental Assessment

In Germany the exposure limits stipulated by the EU recommendation (1999/519/EC / based on the ICNIRP principles) have been mostly implemented for the frequency bands used by mobile Telecommunication networks. These rules are further complemented by a self-commitment of the mobile operators. This commitment targets to improve the safety and consumer, environmental and health protection, information and confidence building measures in setting up mobile radio networks. The effectiveness of the cooperation is verified by a bi-annual reports and it confirmed its effectiveness by a declining number of public issues around mobile networks rollouts.

The project is mainly about the installation of new and additional equipment at existing sites and the construction of small number (4%) of additional new sites. Therefore the implementation impact will be limited. In Germany such installations require a site certificate which is issued by the federal network agency. Also sites with configuration changes will require a renewal of such a certificate. The certificate will assess the operational parameters under a worst case scenario and check whether it is still within the legal limits. Finally the agency will also verify the sites through site inspection and regular measurements at public sites.

The promoter has beside a very well-developed and wide policy in terms of corporate social responsibility also developed a code of conduct and special group wide polices in order to provide guidance and high quality for the risk management of electromagnetic fields. In line with the group policy the German subsidiary has a certification according to ISO 9001 and the external reporting of the entire group is benchmarked against the Global Reporting Initiative (GRI) standard.

EIB Carbon Footprint Exercise

For the annual accounting purposes of the EIB Carbon Footprint, the project emissions will be prorated according to the EIB lending amount signed in that year, as a proportion of project cost.

The estimated annual emissions of the project after the implementation will be:

- absolute (gross): 149.6 kT CO₂e/year
- relative (net): -49.9 kT CO₂e/year

The absolute CO₂ emissions of this mobile Telecom network are particularly high due to the fact that the network is really large and the investment program concerns the renewal of most of the mobile network.

The promoter is very cost conscious and therefore is really measuring instead of only estimating the power consumption of most sites. Based on such historic measurements and also considering that the network is composed of partly quite old equipment, an emission comparison before and after the investment program results in an estimated saving of about 100 kt CO₂.