

Environmental and Social Data Sheet

Overview

Project Name:	TELEFONICA DEUTSCHLAND MOBILE BROADBAND
Project Number:	2015-0442
Country:	Germany
Project Description:	The project concerns the investments in the expansion, modernisation and consolidation of the promoter's mobile access network after the acquisition of its competitor E-Plus. The objective is to create an optimized network with significantly better network quality through increased coverage for a wider provision of advanced mobile broadband services in Germany. The main implementation phase will be carried out during the years 2016 and 2017.

EIA required:	No
Project included in Carbon Footprint Exercise ¹ :	Yes
(details for projects included are provided in section: "EIB Carbon Footprint Exercise")	

Environmental and Social Assessment

Environmental Assessment

The project relates to investments in mobile network infrastructure which uses radio based technology with electromagnetic emissions.

In Germany the exposure limits, in respect to these emissions, are stipulated by the EU recommendation (1999/519/EC / based on the ICNIRP principles) and have been implemented for the frequency bands used by mobile Telecommunication networks. These rules are further complemented by a self-commitment of the mobile operators. Those commitment targets aim to improve the consumer, environmental and health protection through better cooperation with communes, assessment of alternatives, better information and confidence building measures when setting up or modifying mobile radio networks. The effectiveness of the cooperation is verified by a bi-annual report and they confirmed the gradually improving effectiveness by a declining number of controversial issues around mobile networks rollouts.

The project is mainly about the installation of new and additional equipment at existing sites and the decommissioning of excess sites. Therefore the impact during implementation 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. Depending on the installed equipment on bigger sites it might even result in an emission power reduction. Finally the agency will also verify the sites through site inspection and regular measurements at public sites.

The promoter, which belongs to one of biggest European Telecom operators, has a very well-developed and wide policy in terms of corporate social responsibility.

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.

The annual CSR reporting is done according to the Global Reporting Initiative (GRI 4) standard including also external reassurance. In line with the group policy the German subsidiary has a certification according to ISO 14001 (environmental management) and plans to achieve in 2016 also ISO 50001 (energy management) certification.

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): 146.9 kT CO₂e/year
- relative (net): -48.98 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 nearly the entire mobile network, using more energy efficient equipment.

In general the overall CO₂ emission are expected to decline significantly after the network consolidation as the number of sites will be reduced and the newly installed 3G and 4G access nodes will have a 30 – 40 % lower power consumption compared to the equipment currently installed in the network. Therefore it is expected that after the project implementation the power consumption will be much lower compared to before project implementation.

Conclusions and Recommendations

The project activities do not fall under Annexes I and II of the EU Directive 2011/92/EC, and are therefore not subject to an 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 being studied at an international level. Still, the ICNIRP thresholds are considered appropriate.

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