

Environmental and Social Data Sheet

Overview

Project Name:	VODAFONE MOBILE UK
Project Number:	20120687
Country:	UK
Project Description:	The project concerns the expansion of 3G technology-based mobile broadband telecommunications network and its upgrading to HSPA+ (Evolved High Speed Packet Access) together with the roll-out of a new 4G LTE (Long Term Evolution) network throughout the UK. The project, to be implemented from April 2013 until March 2015, provides a combined 3G<E coverage to 76% of the population and the roll out of the 3G technology in the 900 Mhz spectrum. The project also includes the related investments in the transmission and core components of the network.

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

Investments in mobile telecommunication projects (including investments in base stations, transmission systems and OSS) do not fall under Annex I or II of the EIA Directive 2011/92/EC. The environmental impacts of mobile communication systems are mainly visual nuisance, and electromagnetic field (EMF) radiation from base stations and microwave radio towers.

Regarding the limitation of EMF exposure to the general public, the promoter will adhere to the guidelines set out by the International Commission for Non-Ionising Radiation Protection (ICNIRP). EMF is however under continuous study by international organizations, and in the most recent development in 2011 the WHO/International Agency for Research on Cancer (IARC) has classified EMF radiation as possibly carcinogenic to humans.

Hence, the project is considered as acceptable for the Bank's financing, with minor negative residual impacts.

Environmental and Social Assessment

Environmental Assessment

Investments in mobile telecommunication projects (including investments in base stations, transmission systems and OSS) do not fall under Annex I or II of the EIA Directive 2011/92/EC.

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.

Regarding Natura 2000, the promoter has indicated that around 10 new sites are planned to be erected in Special Areas of Nature protection. The promoter will follow all the requirements from the competent authorities for the implementation and operation of the sites.

The environmental impacts of mobile communication systems are mainly visual nuisance, electromagnetic field (EMF) radiation, and noise from diesel generators located at base stations and microwave radio towers. Other impacts will be mitigated by appropriate construction and operation measures.

Regarding the energy consumption reduction, the project includes the roll-out of leading-edge eNodeB's will lower power consumption compared to the older equipment in use. The energy-efficiency levels of the equipment were one of the selection criteria during the tendering process. In addition, the promoters overall energy efficiency will be improved through the RAN-Sharing agreement with O2 which reduces the number of sites owned and operated by the promoter.

EIB Carbon Footprint Exercise

The projects annual absolute emissions during a standard year of operation have been estimated to be around 110 kT CO₂e. This emission is composed from the emissions coming from the Radio Sites amounting to around 75 kT CO₂e/year and from 35 kT CO₂e/year coming from the backhauling, transmission and core network. As the project comprises the swap-out of old radio access equipment by a more energy efficient equipment estimated emission savings are around -7.5 kT CO₂e/year.

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.

Other Environmental and Social Aspects

Regarding the EMF radiation, the promoter will adhere to the guidelines set out by the International Commission for Non-Ionising Radiation Protection (ICNIRP). The ICNIRP guidelines are also the basis for the levels defined in the EU recommendation 1999/519/EU. In the UK, the ICNIRP guidelines are being followed by all the mobile operators following the Independent Expert Group on Mobile Phones (IEGMP) report May 2000.

Apart from the network related energy efficiency plans, the promoter is continuously reviewing other aspects of its business in order to reduce its energy consumption. Employees travel, stores, etc... are some of the aspects being analysed on a yearly basis.

The promoter also has in place plans for waste reduction, and is committed to support the communities in which it works via initiatives like the Vodafone Foundation, the free text donation service JustTextGiving, etc...

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