

Environmental and Social Data Sheet

Overview

Project Name:	SONAECOM BROADBAND MOBILE NETWORK
Project Number:	20120251
Country:	Portugal
Project Description:	Roll-out of a Long Term Evolution (LTE/4G) mobile telecommunications network and upgrade of the UMTS network.
EIA required:	No
Project included in Carbon Footprint Exercise:	No

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

The project is considered as acceptable for the Bank's financing, with minor negative residual impacts after application of mitigation and impact management measures and with a low or moderate environmental risk.

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

The mobile telecommunications systems have limited environmental effects, apart from the visual impact of base station towers and the electromagnetic field (EMF) radiation. Both issues have been mitigated by the promoter with appropriate construction and operation measures.

Portuguese law transposed the EU Council Recommendation of 1999 on the limitation of EMF exposure to the general public which is respected by the promoter. Potential health risks from EMF radiation are still being studied at the international level but in 2011 the WHO/International Agency for Research on Cancer (IARC) has classified such radiations as possibly carcinogenic to humans (Group 2B).

Environmental and Social Assessment

The project's migration of radio access networks to Single RAN (SRAN) hardware brings savings on space and buildings, reduction of noise of power generators, on the number of transmission links and on the energy consumption (typically 30% to 40% less on radio access sites e.g. due to lower losses with Remote Radio Units). Radio installations with lower demand for energy may drive the use of renewable power sources that the promoter is testing. To reduce the visual impact of installations, existing towers and masts will be used as well as dual band antennas as much as possible.

Radio networks in Portugal operate with general licenses by the regulator ANACOM and with specific radio sites' permits by the municipalities that encompass the assessment of other authorities and authorisations of the affected inhabitants. At the EU level the "Habitats" Directive 92/43/EEC and the related Natura 2000 protection sites have no provision regarding

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telecoms networks since its individual infrastructure schemes are small and are not expected to have any significant negative impact. A monitoring undertaking is however proposed to the promoter to provide annually the list of its sites operating inside Natura 2000 areas.

ANACOM is the entity responsible for monitoring the EMF levels from telecom systems. The telecom operators have to present each year for its approval an EMF monitoring programme for each radio site and communicate quarterly the measurements. Additionally ANACOM checks periodically the operators' site installations. Optimus has complied with obligations regarding EMF.

The EU Council Recommendation of 1999 on the limitation of exposure of the general public to EMF is based on the ICNIRP guidelines (International Commission on Non-Ionizing Radiation Protection, a body of independent scientific experts). The practical reference levels for EMF radiation were defined taking into account the proved effects of EMF (that are mostly thermal/tissue heating) but with a large safety factor, which would reduce the risk of potential but still unproven long term effects of EMF. The recent WHO/IARC classification of EMF radiations as possibly carcinogenic to humans (Group 2B, along many other elements and substances) so far has not resulted in a new approach to the definition of EMF safety levels for mobile telecoms and/or in new international or EU recommendations.

The project is not included in the EIB Carbon Footprint Exercise because its emissions are below the defined thresholds.