

Environmental and Social Data Sheet

Overview

Project Name:	PLAY P4 NETWORK DEVELOPMENT 5G
Project Number:	2018-0493
Country:	Poland
Project Description:	The project concerns investments in the capacity expansion and technological upgrade of the promoter's mobile network towards a 5G ultra-high speed broadband services capable platform. The investment focuses on the rollout of new densifications sites in urban areas, and strengthens capacity and coverage along highways and main railroads, as well as in rural areas. The project also includes the deployment of distributed cloud systems to allow virtualized network functions and edge computing, as required by the latest mobile technologies, as well as cybersecurity improvements to secure the infrastructure.
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 mainly consists of the construction of new access network sites of a mobile network in dense areas, in rural areas and alongside motorways and railroads during years 2021-2023. Mobile telecommunication networks do not fall under the Annexes of the EU Directive 2014/52/EU amending the EIA Directive 2011/92/EU. Therefore, neither an Environmental Impact Assessment (EIA) nor a screening will be needed according to the Directive.

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 Organisation specialized agency, as possibly carcinogenic to humans.

¹ Only projects that meet the scope of the Carbon Footprint Exercise, as defined in the EIB Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: 20 000 tonnes CO₂e/year absolute (gross) or 20 000 tonnes CO₂e/year relative (net) – both increases and savings.

Luxembourg, 23 September 2021

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. Poland has adopted exposure limits under the ones stipulated by the EU recommendation (1999/519/EC), which is based on the ICNIRP (International Commission on Non-Ionizing Radiation Protection) guidelines. Indeed, the Polish exposure limit for the public for the 300 MHz – 300 GHz frequency is 0.1 W/m², about 20 to 100 times more restrictive than the 2-10 W/m² recommended by the ICNIRP reference levels.

The visual impact represents another residual environmental impact. However, the promoter is experienced in mitigating the visual impact through specific measures or the use of site sharing possibilities when possible.

A significant part of the new sites will be built on 60-metres-high steel towers. Such a type of installation requires the promoter to launch an EIA process, which receives in general a screened-out conclusion by the relevant authorities, even in protected areas (Natura 2000).

The promoter works to improve energy efficiency in its infrastructure. It is one of the key criteria in its procurement process. For instance, outdoor installations of active equipment are preferred against installations in shelters, to get rid of air-conditioning systems. In addition, the promoter studies the possibility to switch off radio carriers at night, based on traffic load.

EIB Carbon Footprint Exercise

The project includes installations of new equipment in existing sites (upgrades) as well as roll-out of new sites in the promoter's mobile network. In total, about 10 000 new pieces of equipment operating in different frequency bands will be installed. There is no replacement of outdated equipment included. Therefore, all emissions are additional to the existing ones and have been estimated at 63 kt CO₂ equiv/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

The promoter applies rigorous approach and monitoring procedures to mitigate any Health & Safety (H&S) risks during construction. All contracts with subcontractors for work at heights contain provisions on H&S requirements, such as medicine exams, H&S trainings and adequate personal protective equipment (PPE). Random controls and sites inspections are organised to verify that employees of subcontractors follow the regulations. Employees performing particularly hazardous work at heights are provided with additional annual specialist training.

Gender equality, equal ease of access to resources and opportunities regardless of gender are domains that are seriously taken into consideration by the promoter. Female employees totalized 47% of the staff at the end of 2018, which is remarkable and still quite unusual in a technology company.

Luxembourg, 23 September 2021

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 Poland are below the ICNIRP guidelines.

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

Undertaking:

- The promoter will timely provide the Bank with evidence of Environmental permit for new sites in Natura 2000 areas.