## Environmental and Social Data Sheet

## Overview

Project Name:
Project Number:
Country:
Project Description:

EIA required:

## PLK GSM-R IMPLEMENTATION

20170353
Poland
Deployment of GSM-R (ERTMS telecommunications component) and optic fibre transmission network over around $13,800 \mathrm{~km}$ of the Polish national railway network.
Multi-scheme project, requirements may vary

Project included in Carbon Footprint Exercise: No

## Environmental and Social Assessment

The Project consists of deployment of GSM-R (mobile telecommunications system for railways) and fixed telecommunications (optic fibre cables and transmission equipment) over around $13,800 \mathrm{~km}$ of the Polish railway network.

The project forms part of the Polish Railway Master Plan to 2030 and the Transport Development Strategy to 2020 (with perspective to 2030). These two programmes have been subject to a Strategic Environmental Assessment (SEA) as set out in Directive 2001/42/EC.

The project falls outside the scope of the Environmental Impact Assessment (EIA) Directive (Directive 2011/92/EU as amended by Directive 2014/52/EU).

The works include installation of base transmission stations (BTS). Each BTS site will consist of approximately $6 \mathrm{~m}^{2}$ container building and a $40 \mathrm{~m}-50 \mathrm{~m}$ high mast for the associated GSM-R antennae. The BTS sites will be located within the railway right of way, approximately every $5 \mathrm{~km}-10 \mathrm{~km}$ of track. Overall, there will be around 1200 sites. The radio planning for the project is on going; and the exact location of the BTS sites has not yet been defined.

The installation of the transmission network will require construction of ducts along the tracks, installation of telecoms cables, as well as telecoms equipment in existing PLK buildings.

In the construction phase, the impacts are those usual of civil works, such as noise and vibration, dust, road traffic. Due to the small size of the sites, these impacts will be minor and will be mitigated by usual good construction practice mitigation measures.

The construction of BTS sites will follow the planning process within each local authority area. Visual impact assessments are provided as part of the application for the building permit.

In the operation phase, the environmental impacts of mobile communication systems are mainly visual impact and electromagnetic field (EMF) radiation from base stations.

Regarding the EMF exposure, depending on the distance from the antenna to publicly accessible areas and the output power of the antenna, the Polish legislation, being in this respect stricter than the EU EIA Directive, requires a screening for EIA by the Competent Authority. The thresholds requiring screening are significantly lower than those in the
guidelines set out by the International Commission for Non-lonising Radiation Protection (ICNIRP) and in Council Recommendation 1999/519/EC on the limitation of exposure of the general public to EMF ( 0 Hz to 300 GHz ). For the majority of the sites, the thresholds requiring screening are not likely to be reached. If any of the sites requires a screening, the screening application and, if required, an EIA will be carried out by the contractor. After the completion of the construction, measurement of EMF for each BTS site will be carried out by an accredited laboratory.

The project will be undertaken over a major part of the Polish railway network and hence it is geographically spread across the whole country. Some BTS sites will be located in or close to Natura 2000 sites. The Competent Authorities, the Regional Directorates for Environmental Protection of the 16 Voivodships, on basis of expected locations reviewed the scope of works and the likelihood of significant impact on Natura 2000 sites. In all 16 cases the Competent Authorities concluded that no significant impact is likely and no assessment in accordance with Article 6(3) of the Habitats Directive is needed. These conclusions have been properly documented. If the position of BTS sites indicated to the Competent Authorities substantially changes during the radio planning phase, the Promoter will inform these authorities in order to check whether the conclusions regarding absence of significant impact remain valid.

The project will contribute to supporting sustainable transport given that it will improve interoperability of the Polish railway network, contribute to competitiveness of railways and thus to a modal shift from road to rail, in comparison with a without project scenario.

## Conclusions and Recommendations

The project does not fall within the scope of the EIA Directive 2011/92/EC as amended by Directive 2014/52/EU.

Visual impact and EMF exposure are the main environmental impacts of the project, and are well managed by the Promoter in line with the current legislation. The disturbances during civil works related to the construction will be mitigated by appropriate measures.

The project will contribute to supporting sustainable transport given that it will improve interoperability of the Polish railway network. The project's residual negative impacts during construction and operation are limited.

The Promoter will undertake to inform the Competent Authorities if, following the radio planning, the position of the BTS sites is substantially different from the one indicated in the information provided originally and on the basis of which the absence of significant impacts on Natura 2000 sites was established. The Promoter will inform the Bank concerning any updates of the opinions of the Competent Authorities.

The Promoter will undertake to inform the Bank concerning the need of screening or EIA for any of the BTS sites; and for the sites where screening or EIA is necessary submit to the Bank the screening out decision or the EIA report and the environmental consent, as applicable.

Under the conditions indicated above the project is acceptable for EIB financing in environmental and social terms.

