



Luxembourg, 15.5.2018

# **Environmental and Social Data Sheet**

# Overview Project Name: POWER TRANSMISSION MODERNISATION AND EXTENSION Project Number: 2017-0682 Country: Hungary Project Description: The project consists of the reinforcement and extension of the electricity transmission network in Hungary to be implemented over 2018-2022. EIA required: yes (for 6 Programme components) Project included in Carbon Footprint Exercise<sup>1</sup>: no

(details for projects included are provided in section: "EIB Carbon Footprint Exercise")

# **Environmental and Social Assessment**

## **Environmental Assessment**

The project is a multi-component investment Programme to be implemented over 2018-2022 aiming at reinforcing and modernising the electricity transmission network of Hungary. The Programme comprises the (i) erection of the Hungarian sections of two new 400 kV overhead lines interconnecting Hungary to Slovakia (22 km and 1.7 km), (ii) construction of four new substations and associated overhead connecting lines, (iii) refurbishment and extension of existing substations, (iv) replacement of optical ground wires on high voltage lines.

Six Programme components, which involve the construction of new high voltage overhead lines and new substations, require an Environmental Impact Assessment (EIA) in accordance with Directive 2014/52/EU amending the EIA Directive 2011/92/EU. The screening for the need of an Appropriate Assessment and, as relevant, Appropriate Assessment in line with Article 6.3 of the Habitats Directive are carried out in the context of the EIA process. Four Programme components have already received environmental permits:

- the Sajóivánka National border (Rimavska Sobota) new 400 kV overhead line;
- the Gönyű National border (Gabcikovo) new 400 kV overhead line;
- the new 400/132 kV substation and related overhead lines in Kecskemét;
- the new 750/400 kV substation and the related overhead lines in Szabolcsbáka.

The environmental impact studies for the new Nyíregyháza and Székesfehérvár substations are not finalised yet. The Promoter expects to receive the corresponding environmental permits in 2019 and 2021, respectively.

At this stage, none of the remaining sub-projects is expected to require an EIA and/or Appropriate Assessment.

<sup>&</sup>lt;sup>1</sup> 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.



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The EIAs that have been carried out did not identify significant impacts. During construction, the environmental impacts are expected to relate to dust, noise, vibrations and vegetation clearance. Environmental impacts during operation will concern electromagnetic fields (EMF), noise disturbance, vegetation clearance and impact on flying vertebrates.

The proposed routes for the the Sajóivánka – National border (Rimavska Sobota) and Gönyű - National border (Gabcikovo) new 400 kV overhead lines in multiple locations will cross or will be located in near proximity of Natura 2000 sites. On the basis of the biodiversity studies the competent authorities for nature and environment concluded that the projects will not have an adverse impact on the integrity of the protected sites.

Appropriate mitigation measures will be implemented to minimise impacts in accordance with the conditions expressed in the EIA consents. These include measures to contain the effect of noise and EMF during operation, protection of vegetation, compensatory plantings, installation of bird diverters when appropriate, coordination with local authorities and property owners as well as specific measures for cable transport where protected plants or species are involved or across watercourses.

Some of the project schemes have certain positive impact in environmental terms. The reconstruction works aimed at replacing aging assets on the electricity transmission system will reduce the environmental load caused by the old equipment (e.g. soil and ground water pollution) and will reduce energy losses in transformers.

# Public Consultation and Stakeholder Engagement

The Environment and Nature Conservation Departments of the competent Government Offices are responsible for evaluating the EIA documentation supplied by the Promoter and collection of the opinion of the public, including arrangement of public consultations. For those Programme components, which require an EIA the necessary public consultations have been carried out. The major concerns raised by the public were related to the potential impact of electromagnetic fields (EMF) in proximity of the high voltage overhead lines.

These concerns raised by the public were addressed in the context of the public consultation. Indeed, the EMF values of high voltage overhead lines are regulated by Hungarian legislation, which is harmonized with the EU recommendations concerning the limitation of exposure of the general public to electromagnetic fields. The Promoter ensures that the recommended reference levels applicable both for the general public and for the workers are not exceeded. In the substation bays of 750 kV voltage level the Promoter uses shields to reduce the electric field. During planning of new overhead lines the Promoter uses optimal phase order to reduce EMF values. Before commissioning and during operation the Promoter conducts measurements of the actual EMF values either by own staff or by experts of accredited laboratory if requested by the affected owners. In addition the Promoter has a publication on EMF reachable in paper form and on their website. In this document the most important facts are clarified in style understandable for people who are not experts of electricity.

## **Other Environmental and Social Aspects**

The appraisal reviewed the experience and capacity of the Promoter to manage environmental aspects of the projects. The Promoter confirmed to have in place the main typical measures to mitigate the impacts on the environment of power lines and substations. These include the installation of flight diverters and nesting platforms on sensitive corridors to prevent birds' impact and electrocution, the encapsulation of transformers to reduce noise



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levels and proper containment in substations to avoid seepage of oil into the soil. Moreover the Promoter confirmed that in order to minimize the environmental risk when designing and implementing new transmission lines the following main principles are applied:

- The transmission lines are routed as much as possible through peripheral, mainly agricultural areas and through forests only when necessary.
- Where it is conceivable the new transmission lines are routed next to the existing lines in order to reduce occupation of new territory and mitigate visual impact.
- The air pollution related to the construction works has to be limited and kept local to the construction area in order not to affect populated areas and a negligible impact on local emission characteristics has to be retained.
- Appropriate mitigation measures are planned to minimize and keep below the authorized limits the noise level related to the construction and operation of the overhead transmission line and transformer substations.
- The strength of electromagnetic fields related to the transmission lines has to remain below the internationally accepted limits.

The transmission lines are going to be built according to common practices that are applied internationally and within EU.

The Promoter runs an Integrated Quality System covering the entire operation. The company's certificates verify that the Promoter is in compliance with the requirements of standards ISO 9001:2008, ISO 14001:2004, OHSAS 18001:2007 and ISO/IEC 27001:2005.

Trying to go beyond basic compliance with environmental protection regulations the Promoter has established voluntary environmental programs involving the entire company. As a pilot, "close-to-natural" maintenance of openings has been introduced along transmission line routes. The Promoter also conducts successful bird protection programs in cooperation with bird preservation organisations and in 2012 won the Hungarian Corporate Social Responsibility Award in the category of "Environment/Green Excellence".

## **Conclusions and Recommendations**

The Bank reviewed the environmental and social capacity of the Promoter including its organisation, processes and procedures, and deemed them to be good. Based on presented information on Programme components, the available environmental and social impact studies prepared by the Promoter, as well as permits and screening decisions issued by the competent authorities the programme is expected to have minor negative residual impacts and thus with the conditions listed below is acceptable for Bank financing from an environmental and social perspective.

Part of the loan (20%) can be attributed to some Programme components, for which the required environmental and social impact assessment, including the appropriate assessment if necessary in accordance with the EIA Directive and the Birds and Habitats Directives has not been completed yet at the time of appraisal. Therefore, disbursement of 20% of the loan is conditional upon completion of the still pending EIA and environmental permitting processes to the satisfaction of the Bank.

The promoter undertakes not to allocate the Bank's funds to the Programme components that require an Environmental Impact Assessment (EIA) until the EIA with the integrated



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biodiversity assessment has been finalized, approved by the competent authority and sent for review to the satisfaction of the Bank together with a signed declaration by the competent authority that indicates the compliance with the provisions of the EU Habitats and Birds Directives.

The promoter undertakes to take into account and implement conditions expressed in any screening-out decision or EIA consent granted by the competent authority for nature and environment.

The Promoter shall store and keep updated any documents as may be relevant for the project supporting the compliance with the provisions of the EU EIA, Habitats and Birds Directives and shall upon request promptly deliver such documents to the Bank.

The Promoter agrees that electronic copies of the Environmental Impact Studies of the Programme components will be made accessible through the public project register on the Bank's website.

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