

Environmental and Social Data Sheet

Overview

Project Name: *UK Power Network – RIIO-ED1 Network Upgrade*
 Project Number: *2014-0659*
 Country: *UK*
 Project Description: *The Project concerns the upgrading and reinforcement of the electricity distribution networks of three licensed Distribution Network Operators - LPN, EPN, SPN - serving respectively London, the East of England and the South East of England.*

EIA required: not expected

Project included in Carbon Footprint Exercise¹: Yes

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

The project comprises an investment programme consisting of a large number of schemes having operating voltage from 132 kV down to low voltage. Some programme schemes fall under Annex II of the EIA Directive (2011/92/EU) thus implying a review by the competent authorities at the planning stage with due regard to the necessity for an environmental and biodiversity assessments. Given their characteristics and voltage range, none of the schemes are expected to require a full EIA, although environmental studies have been carried for some major schemes to accompany the planning applications and to support the public consultations required within the planning authorisation process.

Overall the environmental impacts of the programme are expected to be of a low order, and mainly relate to noise, vibration, dust, and traffic disruption during the construction and electromagnetic fields (EMF) and noise disturbance during operation. The vast majority of the programme schemes are related to refurbishment and upgrading of existing infrastructure with limited environmental impact.

The relevant authorities are consulted where required to ensure proper protection of environmental aspects relating to plants, animals and their habitats, and designated areas of conservation as per environmental management system operating procedure of the Promoter.

The Promoter has the experience and the capacity to appropriately manage the programme. Based on the information available, the programme is expected to have only minor negative residual impacts and thus is acceptable in environmental terms for Bank financing.

Environmental and Social Assessment

Environmental Assessment

During the appraisal mission the Promoter confirmed to have in place the main typical measures to mitigate the impact on the environment of power lines and substations. Disposal of all obsolete equipment and waste management is carried out in accordance with UKPN's

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.

environmental control procedure addressing all relevant UK legislations. The impact of the programme in term of SF6 emissions² is negligible.

EIB Carbon Footprint Exercise

Absolute CO₂ emissions from the network programme in a standard year of operation are estimated at 175 kT of CO₂e/year. This includes electricity losses associated with the refurbished network and electricity losses associated with additional demand for new connections.

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 environmental management capacity of the Promoter is strong as reflected in its Environmental Management System (EMS) which is designed to comply with the requirements of the ISO-14001 standard. The Bank has one previous operation with this Promoter which was positive and reaffirms that the environmental management capacity of the Promoter is good.

The Promoter does engage with Museum of London Archaeology Service (MoLAS) and a number of ecologists when planning any new cable or overhead line routes that are off of the public highways.

Bank Environmental Conditions

The Bank will require the Promoter to undertake not to allocate Bank's funds to distribution programme components that require an Environmental Impact Assessment (EIA) until the EIA and/or the necessary biodiversity assessment have been finalized, satisfactory to the Bank, and approved by the competent authority. When the EIA is made available to the public, an electronic copy of the full EIA study shall be sent to the Bank.

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 undertakes to store and keep updated any documents as may be relevant for the programme supporting the compliance with the provisions under the EU Habitat and Birds Directives and shall promptly upon request deliver such documents to the Bank.

² Sulphur hexafluoride (SF6) is a powerful greenhouse gas with a [global warming potential](#) of about 23,000 times that of CO₂. SF6 is the electric industry's preferred gas for high voltage electrical insulation, current interruption and arch quenching. It is extensively used in circuit breakers and gas insulated substations because of its inertness and dielectric proprieties. The emission of SF6 is mainly due to fugitive emissions that may occur during installation, operation, maintenance and disposal of the equipment.