

## Environmental and Social Data Sheet

### Overview

Project Name: NORTHERN GAS NETWORKS 2014-17 (RIIO-1 PHASE I)  
Project Number: 20140109  
Country: UK  
Project Description: Investments to upgrade Northern Gas Networks' gas distribution networks, including 1485 km of pipeline replacement and 32,700 new connections.

EIA required: no

Project included in Carbon Footprint Exercise<sup>1</sup>: yes

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

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

This is a typical gas distribution project in the EU applying proven technologies. The investments are split into four categories: the replacement of metallic pipes by polyethylene pipes; the extension of the network to connect more customers; the upgrading of obsolete above ground equipment; and network information systems. The main environmental impacts will occur during construction, are temporary in nature, and will be mitigated according to established practices in the sector. An environmental benefit from the project will be to reduce methane leakages.

The project components fall under Annex II of Directive 2011/92/EU. In the UK, the primary environmental legislation applicable to the promoter is Regulation 14 consent of the Public Gas Transporter Pipeline Works Regulations, amended 2007. The scope of the EIB project will not include any components that would require a full environmental impact assessment.

Every project scheme requires local authority approval. However, if the local authority believes that an EIA could be required (e.g. due to scheme location in a sensitive area), the competent authority is informed and depending on its screening result could require the promoter to undertake an EIA per the Regulation cited above. At appraisal, none of the schemes is expected to be located in sensitive areas.

The following has been included in the contract:

The promoter undertakes to provide to the Bank, if requested, any decisions that screen out project components from undertaking a full EIA.

The promoter's emergency management procedures follow international good practice.

In view of the above, the project is considered to be acceptable for Bank financing from an environmental perspective.

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<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 CO<sub>2</sub>e/year absolute (gross) or 20,000 tons CO<sub>2</sub>e/year relative (net) – both increases and savings.

## Environmental and Social Assessment

### Environmental Assessment

The majority of the investments involve the replacement of old metallic pipes with polyethylene ones. This is achieved by inserting the polyethylene pipe into old pipe. The disturbances are therefore minimal and temporary, given that significant open cut trenching is not needed.

Part 1 of Regulation 14 makes an EIA mandatory if the pipeline is >800 mm diameter and >40 km length while Part 2 requires a screening determination if the pressure is >7 bar or the construction is within a sensitive area. The screening obliges the promoter to produce a supporting statement or volunteer an Environmental Statement. The screening and assessment for nature conservation issues are fully integrated in the EIA procedures.

The promoter working with the government undertook an initial flood risk assessment of its network in 2008. Strategic Sites were defined as those supplying more than 50,000 customers on a peak day. They included NTS offtakes, Pressure Reduction Installations (PRIs) between LTS Pressure Tiers and PRIs supplying below 7 barg Networks. Forty five sites were identified and an initial risk of flooding assessed by utilising flood maps provided by the Environment Agency (EA) on their Website.

Subsequently, the risk assessment was expanded to provide each Local Authority with an assessment specific to their geographical area. All of the Strategic Sites were covered but the work was expanded to include all LTS offtakes and Gas Holder Stations. In addition to EA Flood Maps specific information on each site was included and a general guidance on how flooding affects Gas Transportation Infrastructure was detailed.

The forty five Strategic Sites identified previously were ranked into

Significant: the chance of flooding in any year is greater than 1.3% (1 in 75)

Moderate: the chance of flooding in any year is 1.3% (1 in 75) or less, but greater than 0.5% (1 in 200)

Low: the chance of flooding in any year is 0.5% (1 in 200) or less

Of the 45 strategic sites 4 were categorised as significant risk and 5 as moderate. A detailed flood risk assessment was undertaken on these sites including recommendation of flood mitigation measures including costings. These are input into the promoter's requirements when undertaking capital projects on above ground facilities.

### EIB Carbon Footprint Exercise

The project's source of CO<sub>2</sub>e emissions is from the fugitive emissions of gas. The absolute emissions of the project during an average year of operations are estimated to be 1.1 kT CO<sub>2</sub>e/y. The network that is not part of the project emits 352 kT CO<sub>2</sub>e/y. The alternative to the project would be to use the existing network which has higher fugitive emissions. The baseline emissions are 403 kT CO<sub>2</sub>e/y, resulting in relative emissions of -65 kT CO<sub>2</sub>e/y.

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.

### Public Consultation and Stakeholder Engagement

The new regulatory framework incentivises good customer engagement and feedback. The promoter and its contractors put significant efforts into this aspect prior to, during and after construction activities, which was observed during appraisal site visits.

## **Other Environmental and Social Aspects**

The promoter has provided evidence of sound practice with respect to environmental management and confirmed that all new projects are assessed for environmental impact including the impact on sensitive areas which include nature conservation sites. A site visit demonstrated strong engagement with contractors regarding health, safety, security and environmental compliance.

In addition to systems to meet regulatory requirements, the promoter uses an integrated management system (IMS) whose requirements are based on, and conform to, ISO 14001 (Environment) and OHSAS 18001 (Occupational Health and Safety). The IMS is audited by external accredited auditors who have continued to certify the promoter to ISO14001 and OHSAS 18001.

The regulator Ofgem requires the promoter to report extensively on gas safety and environmental measures demonstrating improvement in (inter alia):

- Reducing energy consumption
- Reducing methane leakage
- Land remediation
- Bio methane enquiries and connections
- Encouraging the use of recycled aggregates
- Recycling/reusing our excavation spoil,
- Preventing ISO 14001 major non-conformities

The operation will provide environmental benefits through the reduction of methane leaks and through the substitution of more expensive and polluting fuel sources by gas. In addition to complying with legislation, the new regulatory framework has further incentivised the promoter to focus on reducing emissions from operations and internal activities (e.g. vehicular transport); and reducing impact on landfill, including recycling and minimising waste.