

EUSGNEM09

Determine the requirements for installation and construction of utility network assets



Overview

This national occupational standard defines the competence for interpreting the asset design requirements - to the installation and construction process - and specifying the quality criteria to be applied. It requires project planning and management skills which include using planning and quantitative evaluation techniques, as well as resource and financial planning. Contract information and client requirements need to be taken into account, alongside appropriate third party considerations, such as local authorities, access, and landowners. Environmental factors need to be considered. All regulations, guidelines and procedures must be taken into account and acted on.

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Performance criteria

You must be able to:

Interpret the network design

- P1 obtain accurate details of the network assets and the work to be carried out
- P2 review and interpret the design of the network to assess its characteristics
- P3 assess the personnel, plant, and materials resource requirements that will be needed for the work
- P4 determine the timescales required and include capacity for contingencies that could arise
- P5 assess the requirements, and impact, of access equipment, transport, and site support facilities
- P6 evaluate contractual issues likely to have an impact on the network asset installation and construction
- P7 take into account client, commissioning, and handover factors
- P8 clarify with colleagues, the client, and third parties, any aspects of work that are unclear

You must be able to:

Specify the engineering methods, quality criteria and action plans

- P9 specify the quality criteria to be applied to the work procedures and processes
- P10 develop contingency plans for handling delays, routing problems, interference with third party utilities, and environmental factors
- P11 confirm changes to the work which may be required to achieve the requirements
- P12 ensure that the requirements comply with industry regulations and guidelines
- P13 record the requirements in the information systems

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Knowledge and understanding

You need to know and understand:

General

- K1 network engineering principles and processes
- K2 installation principles and processes
- K3 health, safety and environmental issues
- K4 legislative and regulatory frameworks
- K5 organisational procedures and systems
- K6 resource management processes and methods

You need to know and understand:

Network asset installation and construction

- K7 the procedures for obtaining details of the network assets to be installed and constructed
- K8 the design details relating to route, special crossings, other utilities, and general environmental factors
- K9 the characteristics of the network assets to be installed and constructed which are particularly critical
- K10 how to incorporate client requirements and third party considerations
- K11 how to identify which aspects of the network requirements could be unclear, and the procedures to used to clarify them
- K12 the type of quality criteria to be specified
- K13 the types of change to the network that might occur
- K14 how to identify who can approve any changes to the network assets installation and its construction
- K15 the industry regulations and guidelines that apply and the procedures for obtaining information on them
- K16 the importance of using information systems, how to use them, and how to record data in them

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Behaviours

You work in a manner which:

1. is positive and creative to setbacks
2. develops an atmosphere of professionalism and mutual support

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Developed by Energy and Utility Skills

Version number 1

Date approved May 2009

Indicative review date May 2014

Validity Current

Status Original

Originating organisation Energy and Utility Skills

Original URN GNEM09

Relevant occupations Engineering; Building and construction; Functional Managers; Draughtspersons and Building Inspectors; Design Associate Professionals; Construction Trades; Building Trades

Suite Gas Networks Engineering Management

Key words Planning and quantitative evaluation; financial planning; network design; engineering methods; network engineering; resource management;