

EUSGNEM14

Determine the requirements for operations and maintenance of utility network assets



Overview

This national occupational standard defines the competence underpins the interpretation of the design of the network and specifying the quality criteria to be applied to the operations and maintenance process. It requires project planning and management skills which include quantitative evaluation techniques and planning, as well as resource and financial planning. Contract information and any 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
- 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 any 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 any changes to the work required to achieve the requirements
- P12 ensure that the requirements comply with all relevant regulations and guidelines
- P13 record the requirements in the information management 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 factors

You need to know and understand:

Network asset operations and maintenance

- K7 the procedures for obtaining details of the network and the operational maintenance to be carried out
- K8 the design details relating to route, special crossings, other utilities, and general environmental factors
- K9 the characteristics of the network which are particularly critical
- K10 how to identify which aspects of the operational maintenance requirements could be unclear, and the procedures used to clarify them
- K11 how to carry out scheduled, preventative and long term operational and maintenance requirements which include using statutory inspection and routine maintenance schedules, planned monitoring and condition monitoring
- K12 how to carry out unscheduled, corrective, and medium term maintenance to resolve defects, unplanned outages, and breakdowns
- K13 how to incorporate fault analysis, fault prevention, and performance improvement in unscheduled activities
- K14 how to deal with emergency and short term operational and maintenance requirements which affect safety, security of supply, and the environment
- K15 the type of quality criteria to be specified
- K16 the types of change to the network that might occur
- K17 how to identify who can approve any changes to the operational maintenance requirements
- K18 the legislation, Codes of Practice and industry procedures which need to be complied with, and the procedures for obtaining information on regulations and guidelines
- K19 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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