

EUSGNEM20

Establish the client's utility design requirements



Overview

This national occupational standard defines the competence when working with clients on network design. The client may be internal or external to the organization. It means being clear what their explicit design requirements are. It requires technical understanding of the proposed network and the features which the client requires, together with an understanding of the factors which could affect the feasibility of meeting these requirements. It involves analysing the detail and then presenting a design brief to the client. The design brief will summarise the outcome of the feasibility study and make clear the conclusions, recommendations, and proposed next steps.

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Performance criteria

You must be able to:

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- P1 set up and develop a relationship with the client to facilitate the design requirement process
- P2 consult with the client throughout the process using a range of communications methods which suit their purpose and time
- P3 formally agree with the client – before beginning work - on the exact product or process to be designed
- P4 establish the client's design objectives with regard to function, performance, materials and aesthetics
- P5 confirm with the client what their resources, delivery, usability, and budget requirements are for their proposed design

You must be able to:

Carry out a comprehensive feasibility study

- P6 determine any unique or specific features that need particular consideration
- P7 carry out analysis to determine the technical, legal and cost implications that need particular consideration
- P8 determine the feasibility of achieving the client's requirements by assessing the features required against the factors which could affect them
- P9 use complex technical data and information to inform the assessment process
- P10 use detailed analytical and modelling processes to inform decision-making

You must be able to:

Communicate the client's design requirements

- P11 produce a brief which confirms the client's objectives, shows the functionality of their requirements, and the feasibility of achieving the
- P12 incorporate a proposal of how the requirements can be implemented, including any special features
- P13 highlight details of specific issues to which the client needs to give particular consideration
- P14 provide a text copy of the brief to the client and support it verbally in line with normal organizational procedures
- P15 keep adequate records of the design brief so it can be used subsequently

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Knowledge and understanding

You need to know and understand:

General

- K1 network engineering design principles and processes
- K2 health, safety, and environmental issues
- K3 organisational procedures and systems
- K4 patents, copyright, and intellectual property issues
- K5 specifications, details, and formats
- K6 feasibility studies and their purpose

You need to know and understand:

Network design brief

- K7 the different types of internal and external clients that you normally work with and their role
- K8 how to determine who to contact in the client's organization and the procedures to be followed
- K9 the process for obtaining information from an internal and external client, and for assessing its accuracy
- K10 the process for confirming the requirements of a client and the importance of doing so accurately
- K11 the information to help establish requirements gained from the client's technical requirements, tenders and pre-qualifications, safety in hazardous area assessments, and environmental impact assessments
- K12 how to use information from conceptual design, detailed design, network pressure considerations, existing equipment, codes and specifications
- K13 how to ensure legislation and Health and Safety Executive requirements are adhered to
- K14 the types of feature to be considered unique or specific, and the importance of giving them particular consideration
- K15 the contractual, cost, timescale, availability, health and safety, environmental, quality, and optional factors affecting the feasibility of achieving the client's requirements
- K16 how to prepare a brief and the importance of choosing the most effective methods of presenting it
- K17 how to record data and information effectively and use information systems

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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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