

## Overview

This national occupational standard is about managing maintenance of the network. Maintenance can be planned as part of a maintenance routine or unplanned in response to identified or unforeseen problems.

It involves arranging for materials, tools and parts, briefing operatives, monitoring maintenance activity, making sure maintenance is completed to specification and making sure maintenance audit trails are maintained.

This Standard is for supervisors, first line managers or the competent person on site who are responsible for managing maintenance of utility network assets in their area of responsibility.

## Performance criteria

### *You must be able to:*

1. make sure operational maintenance activities are organised and carried out in line with network operating instructions
2. analyse the results of relevant tests, checks, past maintenance records and monitoring activity to identify any unforeseen malfunctions or other maintenance requirements
3. deal with malfunctions of network assets and equipment in line with organisational procedures, putting temporary arrangements in place to protect network operation until problems are resolved
4. arrange for materials, tools and parts specified for maintenance by manufacturers to be available and logged in line with organisational procedures
5. issue instructions about maintenance activities to designated operatives in line with organisational procedures
6. inform stakeholders in advance of planned maintenance in line with organisational procedures
7. monitor work practices throughout maintenance activities to make sure they comply with manufacturers' specifications and organisational safety procedures
8. communicate at regular intervals with maintenance operatives to ensure maintenance activities are proceeding according to plan
9. resolve situations where maintenance over-runs agreed timescales in line with organisational procedures
10. make sure work methods are used which maintain network operating conditions throughout maintenance activities
11. arrange for operational maintenance of equipment or instruments requiring isolation to be carried out at times appropriate for network use
12. deal with malfunctions and maintenance that require exceptional work to be carried out in line with organisational procedures
13. escalate to designated personnel when decisions outside your authority are required
14. make sure the condition of the network environment is restored to the asset owner's specification when malfunction or maintenance activities are finished
15. make sure waste materials and unwanted components are disposed of in accordance with organisational procedures and environmental standards
16. make sure data audit trails of maintenance records and reports are maintained

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in accordance with organisational procedures, providing access to designated people on request

17. inform stakeholders when maintenance work is complete in line with organisational procedures

## Knowledge and understanding

### *You need to know and understand:*

1. relevant health and safety regulations, procedures and guidelines relating to yourself and others including duty of care, hazardous substances, personal protective equipment (PPE), use of equipment and machinery, confined spaces, excavations, lifting machinery, manual handling and other relevant industry specific regulations
2. legislation, regulatory frameworks, codes of practice, compliance agency standards, associated permits, national quality standards, principles and processes relating to the utility network being worked on
3. relevant environmental legislation and environmentally responsible work practices and organisational policy and their importance, including waste disposal standards
4. maintenance and installation principles, processes and procedures, the importance of maintenance and the effects of inadequate maintenance on network efficiency, the environment and the local community
5. what information from past maintenance records for site and equipment can be used to assess condition and expected performance
6. potential faults and difficulties which can occur during maintenance situations and procedures for dealing with them including machinery, equipment and instrumentation breakdown
7. where to obtain and how to interpret network operating instructions, manufacturers' specifications and network operating parameters
8. how to carry out and interpret performance tests, operational checks, remote monitoring and sensory checks including observation, noise, heat, vibration
9. how to identify malfunction, operational and maintenance requirements in machinery, equipment, instrumentation and the network environment
10. procedures and the factors to be considered for isolation, diverting flows, operating temporary plant and shut down of plant and equipment, and how authority to carry this out is obtained
11. organisational procedures and systems
12. resource management principals, processes, methods and organisational procurement and logging systems for materials, tools, parts and specialist skilled personnel
13. people management principals, processes and methods

14. the importance of working safely and protecting people, how to create and interpret risk assessments, how to ensure safe working with machinery, tools and equipment and how to deal with emergency situations
15. safe working practices for dealing with assets, machinery, equipment and network environment which may have exceptional malfunctions and maintenance requirements
16. limits of responsibility and authority, lines of reporting and authorisation procedures
17. who needs to be updated about planned maintenance, progress and completion
18. how to keep abreast of best practice, emerging technologies and innovation in maintenance activities
19. communication skills and techniques
20. the role and purpose of data audit trails for quality assurance, statutory inspections and other regulatory requirements
21. organisational documentation and information storage systems and procedures and how to comply with data protection requirements

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