Monitor and review the performance of technical support systems and equipment



Overview

This unit covers monitoring and reviewing the performance of systems and equipment i.e. common and complex audio, video and communication equipment; checking the quality of the product; modifying, repairing and replacing equipment and introducing additional equipment in order to achieve good quality results.

There are two elements

- 1. Monitor technical systems and ancillary items
- 2. Review the performance of equipment

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Performance criteria

Monitor technical systems and ancillary items

You must be able to:

- P1 locate the technical systems and ancillary items to be monitored and establish safe means of access
- P2 confirm that technical systems and ancillary items are operating effectively
- P3 identify unexpected deviations and take appropriate actions in accordance with working practices and customer requirements
- P4 carry out monitoring safely and securely in accordance with customer's and organisational guidelines
- P5 complete relevant documentation accurately, comprehensively and legibly
- P6 consult relevant personnel to confirm the operational effectiveness of the technical systems and ancillary items

Review the performance of equipment

You must be able to:

- P7 check the quality of the product and identify deficiencies in quality required
- P8 discuss recommendations to improve the quality of the product with relevant personnel and agree possible solutions
- P9 implement agreed solutions safely and securely
- P10 check the environmental integrity, safety and security of equipment
- P11 record changes introduced to the equipment accurately, completely and legibly

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Knowledge and understanding

Legal and organisational requirements

You need to know and understand:

- K1 your responsibilities under current legislation and regulations and the implications of non-compliance
- K2 the approved ways of working
- K3 how to carry out risk assessments and why these are required
- K4 safe systems of working

Monitoring and reviewing the performance of equipment

You need to know and understand:

- K5 the capabilities of deployed equipment
- K6 the effect of the installation on other systems and ancillary items
- K7 what adjustments may be made to systems and ancillary items
- K8 how to use test equipment to assess performance and safety
- K9 how to establish the environmental integrity, safety and security of equipment
- K10 how to interpret and use technical specifications
- K11 why monitoring the effectiveness of the systems and ancillary items is important
- K12 how to monitor technical systems and ancillary items and how to analyse their efficiency and effectiveness
- K13 how to recognise imperfections in system results and how to improve the quality achieved
- K14 what other equipment is available to improve performance
- K15 how to carry out test and measurement procedures
- K16 what information to record and the importance of keeping accurate records

You need to know and understand:

Principles and theories

- K17 the principles of electricity
- K18 electronic theory and how it applies to the equipment being reviewed

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Scope/range related to performance criteria

Monitor technical systems and ancillary items

- 1 actions
 - 1.1 repair
 - 1.2 replace
 - 1.3 adjust

Review the performance of equipment

- 2 products
 - 2.1 audio
 - 2.2 stills photographs (images)
 - 2.3 video
 - 2.4 other data
- 3 solutions
 - 3.1 modify equipment
 - 3.2 repair
 - 3.3 replace
 - 3.4 introduce additional equipment

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