



Australian Government

Assessment Requirements for ICTRFN404 Undertake radio communications signals monitoring

Release: 1

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Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 2.0.

Performance Evidence

Evidence of the ability to:

- comply with site risk control, work health and safety (WHS), environmental, quality and communication requirements
- apply knowledge of appropriate procedures and techniques for conducting radio communications signals monitoring
- perform efficient and effective preparation and monitoring appropriate to a communications environment site
- calibrate, maintain and commission instruments and field equipment
- monitor communications under general direction in a range of different contexts
- respond effectively to different challenges and operational requirements for monitoring, including coping with difficulties, irregularities and breakdowns in routine.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify and summarise the legislation, codes of practice and other formal agreements that directly impact on monitoring of radio communications signals including:
 - specifics of what constitutes an offence
 - responses for non-compliance
 - environmental requirements
 - privacy issues
- outline specific WHS requirements that impact on monitoring in terms of safety of self and public safety including:
 - radio frequency (RF) personal protective equipment

- electromagnetic radiation (EMR) at RF transmission sites
- building site induction requirements
- environmental conditions
- explain specific monitoring procedures for radio communications and relevant organisational policies and procedures
- summarise characteristics of different environments and workplaces where monitoring takes place
- explain radio communications systems used in the relevant work context
- outline specific issues related to antenna performance including:
 - directivity
 - gain
 - height
- summarise the effects of cable attenuation and impedance mismatch
- outline the effects of ionosphere including:
 - high frequency (HF) propagation
 - warning, fadeout and solar flares
 - ionospheric prediction service (IPS)
- explain modulation methods, AM, FM and digital formats
- explain field strength surveys and EMR measurements
- outline the propagation properties of the terrain
- describe the legal process for prosecuting a complaint and undertaking attendance at court
- describe the process and use of direction finding equipment for HF, very high frequency (VHF), ultra high frequency (UHF) and microwave technologies.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances should be typical of those experienced in the telecommunications – radio frequency networks field of work and include access to:

- sites on which monitoring may be conducted
- monitoring and testing equipment currently used in industry
- relevant regulatory and equipment documentation that impacts on monitoring activities.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>