



Australian Government

**ICTTCR303 Protect against
electromagnetic radiation and systems
hazards when working on telecomms radio
sites**

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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.

Application

This unit describes the skills and knowledge required to protect personnel against electromagnetic radiation (EMR) and system hazards when working on standard telecommunications structures with radio sites.

This unit applies to technical staff who work on telecommunications radio sites and may make use of rigging plant and equipment, fall arrest, fall guarding and fall constraints on standard telecommunications structures.

Work functions in the occupational areas where this unit may be used are subject to regulatory requirements. Refer to the ICT Implementation Guide or the relevant regulator for details of licensing, legislative or certification requirements.

Unit Sector

Telecommunications – telecommunications rigging installation

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work at telecommunications site with potential EMR hazards	1.1 Prepare for given work using safe working practices and procedures according to WHS legislation, codes, regulations and standards 1.2 Assess potential sources of radio frequency (RF) EMR, allowing permissible public and occupational EMR exposure limits according to Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) 1.3 Verify methods for determining EMR levels, and strategies for

	eliminating, minimising or isolating on-site EMR hazards according to industry practice 1.4 Confirm work objectives and specifications of equipment to be installed, according to design drawings, installation plans and equipment manufacturer's specifications 1.5 Select equipment and personal protective equipment required to support the EMR hazard management plan according to company policy
2. Plan and carry out EMR hazard management plan in relation to on-site situation	2.1 Produce EMR hazard management plan according to company policy 2.2 Consult with client to confirm EMR hazard management plan and update if required 2.3 Communicate agreed EMR hazard management plan to all personnel on site
3. Monitor EMR hazard management plan	3.1 Maintain ongoing communication to all personnel regarding amendments to EMR hazard management plan according to company policy 3.2 Ensure that personal radiation monitor (Radman) is worn according to manufacturer's instructions and industry practice

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 1.4, 1.5, 3.2	Interprets textual information from relevant sources to plan, identify job requirements and adhere to procedures and standards
Writing	2.1, 2.2, 3.1	- Uses correct terminology, spelling and grammar when advising others of requirements - Produces and completes relevant reports and documentation using clear and technically specific language, and accurately records numerical data and diagrammatic information
Oral Communication	1.4, 2.2, 2.3, 3.1	- Uses listening and questioning skills to confirm understanding of requirements - Participates in a verbal exchange of ideas and solutions, and uses appropriate, detailed and clear

		language to address key personnel and client and to disseminate information
Numeracy	1.4	Interprets numerical information and applies to specifications
Navigate the world of work	1.1-1.5, 2.1, 3.1, 3.2	Takes personal responsibility for adherence to legal and regulatory requirements, standards, specifications, industry practice and company policy relevant to own work context, and draws attention to any issues that may affect self or others
Get the work done	1.1-1.5	- Uses systematic, analytical processes in relation to assessing potential hazards, setting goals, gathering relevant information, and identifying and evaluating options against agreed criteria - Applies formal problem solving processes when adapting rigging activities and requirements to particular sites and conditions, breaking complex issues into manageable parts and identifying and evaluating several options for action

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTTTCR303 Protect against electromagnetic radiation and system hazards when working on telecommunications radio sites	ICTTTCR3192A Protect against electromagnetic radiation and system hazards when working on telecommunications radio sites	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTTCR303 Protect against electromagnetic radiation and systems hazards when working on telecomms radio sites

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Performance Evidence

Evidence of the ability to:

- produce and maintain the electromagnetic radiation (EMR) hazard-management plan for an on-site situation
- carry out work according to the EMR hazard management plan, job specifications and all work health and safety (WHS) regulations and standards.

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:

- explain the principles of EMR propagation from antenna
- identify features and operating requirements of rigging equipment
- outline licensing and regulatory issues applying to rigging practices and systems on telecommunications radio structures
- describe remote area first aid
- describe rigging practices and systems to telecommunications radio structures
- summarise EMR including:
 - sources and types of radio frequency EMR
 - associated risks
 - risk assessment and mitigation strategies
 - methods of detecting and reporting EMR hazards
 - potential dangers of overexposure
 - safety practices and devices
- outline optical fibre cabling and equipment safety practices

- outline the relevant requirements of WHS legislation, relevant regulations, and applicable site and company WHS procedures
- describe working-at-heights safety practices.

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 must be typical of those experienced in the telecommunications – telecommunications rigging installation field of work and include access to special purpose tools, equipment and materials.

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

Links

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