



Australian Government

ICTTEN427 Conduct site surveys to identify carrier installation requirements

Release: 1

ICTTEN427 Conduct site surveys to identify carrier installation requirements

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 implement design processes, develop solutions, and merge technological development and product implementation in access, building and core networks.

It applies to individuals working as technical staff on projects within a carrier network for carrier, commercial or industrial installations.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Telecommunications – Telecommunications Networks Engineering

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Obtain access to work site	1.1 Notify appropriate personnel, if necessary, to arrange site access, discuss installation requirements and identify carrier network systems 1.2 Assess site-specific safety requirements and enterprise work health and safety (WHS) processes and procedures 1.3 Use network information systems to obtain planning data
2. Identify existing infrastructure	2.1 Confirm details of installation with stakeholders 2.2 Verify site conditions and building construction 2.3 Locate and record existing facilities and systems

ELEMENT	PERFORMANCE CRITERIA
	2.4 Confirm installation locations and identify barriers to planned network extension 2.5 Integrate existing network and floor plans into documentation where available
3. Integrate existing infrastructure into design brief	3.1 Review existing plans, drawings and databases against the design brief 3.2 Calculate capacity of existing facilities against proposed usage to ensure appropriate design decisions for new installation 3.3 Incorporate all data into new installation design 3.4 Mark up plans and prepare report on new installation design 3.5 Develop contingency plans for anticipated constraints
4. Review design for compliance with standards and legislation	4.1 Examine standards, practices and requirements for locating telecommunications infrastructure in the access network 4.2 Review installation design to ensure compliance with requirements of federal, state and local regulations, relevant legislation, codes and standards 4.3 Initiate any special studies or investigations necessary for completion of the project
5. Complete required reports and documentation	5.1 Complete required documents promptly and according to planning parameters 5.2 Obtain carrier confirmation from documented requirements 5.3 Distribute design documentation to stakeholders promptly 5.4 Obtain project plan sign-off from carrier

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	1.3, 2.2-2.5, 3.1, 3.5, 4.2, 5.2	Recognises and interprets a wide variety of technical and non-technical documentation
Writing	1.1, 2.1, 2.3, 3.3,	Uses clear, specific and industry-related terminology to document technical requirements and procedures

	3.4, 4.1, 4.3, 5.1, 5.2, 5.4	
Oral Communication	1.3, 2.1, 2.4, 4.3, 5.2	- Participates in verbal exchanges with customers and team members about technical and operational requirements using specific and relevant language - Uses listening and questioning techniques to confirm understanding
Numeracy	3.2	Analyses numerical information to interpret site-specific data
Navigate the world of work	1.2, 4.1, 4.2, 5.1	Takes personal responsibility for adherence to legal and regulatory responsibilities relevant to own work
Interact with others	2.1, 4.3, 5.2, 5.4	Selects and uses appropriate conventions and protocols when communicating with customers and co-workers in a range of work contexts
Get the work done	1.1-1.3, 2.2-2.5, 3.3, 3.5, 4.3, 5.2-5.4	- Determines job priorities and works logically and systematically to undertake clearly defined and familiar tasks and plan necessary resources - Implements actions according to a predetermined plan, making slight adjustments if necessary and addressing some unexpected issues - Takes responsibility for routine decision-making by selecting from a range of predetermined options in routine situations, identifying and taking some situational factors into account - Diagnoses and implements standard solutions to unexpected situations based on safety requirements and specified work outcomes - Recognises and initiates approaches to enhance work practices, taking present and future needs and barriers to plan completion into account - Reflects on ways digital systems and tools are used to achieve work goals, and recognises strategic and operational applications

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTTEN427 Conduct site surveys to identify carrier installation requirements	ICTTEN4242A Conduct site surveys to identify carrier installation requirements	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 ICTTEN427 Conduct site surveys to identify carrier installation requirements

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 ability to:

- evaluate existing infrastructure on an installation site
- integrate existing infrastructure into an installation design
- develop design specifications for an installation project
- engage stakeholders and carriers in design approval process.

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 explain the impact of relevant legislation, codes of practice and other formal agreements that impact communications work
- describe access networks in Australia and state how it influences development of projects
- identify costs associated with carrier installations and determine estimates and operating budgets for an installation
- identify network performance information required to produce a network design
- specify current, new and emerging technologies to be considered for a communications design, including barriers that may have an impact
- define project management and its purpose and explain associated databases and project management software programs used
- explain economic and political influences and trends that impact communications installations for public and commercial enterprises
- describe a network plan and its components
- explain the purpose of having authorities and delegations required when costing and estimating financials for projects

- explain the impact of local and international economic conditions on telecommunications installations and infrastructure, and typical challenges and limits facing technology today and on future needs
- describe the process and documentation required to collate and write project briefs, reports and project charters
- identify specific work health and safety requirements relating to site conditions and activities, including manufacturer's requirements for safe operation of equipment to be incorporated into project documentation.

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 networks engineering field of work and include access to:

- a network planning area, systems and deployment rules and standards
- relevant databases, licensing requirements and other site related procedures
- a location and scenario suitable to conduct a site survey.

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>