



**Australian Government**

# **ICTTEN210 Install underground telecommunications infrastructure**

**Release: 1**

# ICTTEN210 Install underground telecommunications infrastructure

## Modification History

| Release   | Comments                                                                                               |
|-----------|--------------------------------------------------------------------------------------------------------|
| Release 1 | This version released with ICT Information and Communications Technology Training Package Version 5.0. |

## Application

This unit describes the skills and knowledge required to install underground telecommunications infrastructure using civil construction skills.

It applies to cablers who install, replace or maintain large size pits, manholes, large conduits and ducts.

Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and industry sectors. Refer to the ICT Information and Communications Technology Companion Volume Implementation Guide or the relevant regulator for details of licensing, legislative or certification requirements.

## Unit Sector

Telecommunications – Telecommunications Network 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. Plan and prepare to install underground infrastructure | 1.1 Access, read, interpret and confirm work plans/specifications<br>1.2 Identify and confirm as required, relevant legislation, regulations, industry standards and enterprise requirements<br>1.3 Verify scope of work can be carried out without damaging any existing infrastructure such as underground services<br>1.4 Set-up worksite to ensure public and worker safety according to enterprise requirements<br>1.5 Select equipment/tools for work activities and ensure their |

| ELEMENT                               | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                       | <p>operational status</p> <p>1.6 Identify, confirm and apply enterprise environmental protection requirements</p> <p>1.7 Select and wear correct personal protective equipment (PPE) appropriate for work activities</p> <p>1.8 Identify potential hazards, assess risks, implement risk control measures</p> <p>1.9 Obtain and follow emergency procedures</p>                                                                                                                                      |
| 2. Set out and excavate               | <p>2.1 Prepare work area and materials</p> <p>2.2 Determine and apply dewatering requirements</p> <p>2.3 Determine location, alignment direction, level and grade of incoming infrastructure</p> <p>2.4 Set out works according to specifications</p> <p>2.5 Advise plant operator of excavation requirements and monitor levels</p> <p>2.5 Install trench support or batters as required</p> <p>2.6 Install bedding for underground structures</p>                                                  |
| 3. Install underground infrastructure | <p>3.1 Lower materials and place in position</p> <p>3.2 Join conduits, manhole and ducts</p> <p>3.3 Continually check alignment level and grade</p> <p>3.4 Position side support and/or overlay beside pipes</p> <p>3.5 Check pipeline system support structure</p> <p>3.6 Monitor backfill procedure and ensure work is completed according to enterprise requirements</p> <p>3.7 Construct underground infrastructure and follow test procedures to establish functionality and serviceability</p> |
| 4. Clean up                           | <p>4.1 Clear work area and dispose of or recycle materials according to enterprise requirements</p> <p>4.2 Clean, check, maintain and store plant, tools and equipment</p> <p>4.3 Record and report test results on plans as-built</p> <p>4.4 Update Dial Before You Dig database as required</p>                                                                                                                                                                                                    |

## Foundation Skills

*This section describes those language, literacy, numeracy and employment skills that are essential to performance, but not explicit in the performance criteria.*

| Skill                      | Description                                                                                                                                                                                                                                                                                                                                            |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reading                    | <ul style="list-style-type: none"><li>Interprets textual information from plans, specifications, standards and regulations to identify relevant and key information</li></ul>                                                                                                                                                                          |
| Writing                    | <ul style="list-style-type: none"><li>Documents outcomes and changes to plans using industry relevant terminology and recognised plan symbols</li><li>Prepares documentation and correspondence using clear language and correct spelling and terminology</li></ul>                                                                                    |
| Oral Communication         | <ul style="list-style-type: none"><li>Uses collaborative and inclusive techniques, including active listening and questioning, to convey and clarify information and to confirm understanding</li><li>Clearly explains detailed information using language, tone and pace appropriate to the audience</li></ul>                                        |
| Numeracy                   | <ul style="list-style-type: none"><li>Makes calculations appropriate for measuring site for excavation</li></ul>                                                                                                                                                                                                                                       |
| Navigate the world of work | <ul style="list-style-type: none"><li>Accepts responsibility and ownership for the task, and makes decisions on completion parameters and the need for coordination with others</li><li>Identifies and acts on issues that contravene relevant policies, procedures and legal requirements</li></ul>                                                   |
| Interact with others       | <ul style="list-style-type: none"><li>Uses a range of strategies and reads verbal and non-verbal signals, establishes a sense of connection and builds rapport with customers and co-workers</li></ul>                                                                                                                                                 |
| Get the work done          | <ul style="list-style-type: none"><li>Takes responsibility for planning, sequencing and prioritising tasks and own workload for efficiency and effective outcomes</li><li>Accepts responsibility for addressing less predictable problems and initiates procedures in response, applying problem solving processes in determining a solution</li></ul> |

## Unit Mapping Information

No equivalent unit. New unit.

## Links

Companion Volume Implementation Guides are available from VETNet -

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