



Australian Government

ICTTEN516 Produce technical solutions from business specifications

Release: 1

ICTTEN516 Produce technical solutions from business specifications

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 compile and evaluate business specifications from a client and produce viable business solutions.

It applies to individuals who carry out network design and implementation of practical technical solutions of information and communication technology (ICT) networks. They are employed by telecommunications and information technology networking provisioning companies specialising in integrating converging and emerging technologies of ICT networks.

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. Prepare to produce technical solutions from business specifications	1.1 Obtain business requirements and business specifications for the client from appropriate person 1.2 Research and identify the client's business model 1.3 Determine technical specifications for the business 1.4 Clarify and confirm the business problem and key stakeholders' requirements with stakeholders
2. Evaluate the impact of	2.1 Review and assess business problems, opportunities and

ELEMENT	PERFORMANCE CRITERIA
the technical requirements	objectives 2.2 Determine technical requirements in respect of input and output, interface, process flow or quality requirements 2.3 Analyse hardware, software and network requirements 2.4 Build business platform based on software solutions 2.5 Investigate processes to be changed by the business solution 2.6 Produce an evaluation document on the impact of the technical requirements on the business
3. Produce technical business solutions	3.1 Develop technical solutions in response to problems and business requirements 3.2 Determine costs involved to implement the technical business solution 3.3 Investigate a range of supplier products to determine which one best meets technical requirements 3.4 Produce a report on the technical solutions addressing the business specifications and recommendations against business requirements
4. Document and validate agreed solutions	4.1 Forward technical requirements and solution overview to appropriate person for feedback 4.2 Analyse feedback and incorporate change as required 4.3 Document changes and distribute to appropriate person 4.4 Obtain sign-off on final business solution

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	1.2, 2.1, 4.2	Organises, evaluates and critiques workplace documentation from a range of complex texts
Writing	1.5, 2.6, 3.4, 4.3	Prepares clear and concise workplace documentation including reports and design solutions incorporating technical language to communicate complex information clearly and effectively

Oral communication	1.4	Uses active listening, observational and questioning techniques to identify different perspectives and confirm, clarify or revise understanding
Numeracy	3.2	Uses mathematical formulas and calculations to interpret business costs and evaluate possible technical design solutions
Interact with others	1.1, 1.2, 1.4, 1.5, 4.1, 4.3, 4.4	- Recognises and applies protocols governing what to communicate, with whom and how in context of own work - Selects appropriate communication protocols and conventions in a broad range of work contexts
Get the work done	1.3, 2.1-2.5, 3.1, 3.3	- Uses a combination of formal, logical planning processes and an increasingly intuitive understanding of context for complex, high-impact activities with strategic implications - Demonstrates a sophisticated understanding of principles, concepts, language and practices associated with the digital world and uses these to understand uses and potential of technology - Implements actions according to a predetermined plan, making adjustments if necessary and addressing unexpected issues - Considers strategic and operational potential of digital trends to achieve work goals, enhance work processes and enhance solutions - Uses formal, analytical and lateral thinking techniques for identifying issues, generating and evaluating possible solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTTEN516 Produce technical solutions from business specifications	ICTTEN5204A Produce technical solutions from business specifications	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 ICTTEN516 Produce technical solutions from business specifications

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Performance Evidence

Evidence of ability to:

- adapt technologies for required technical solutions
- use site design software and hardware
- evaluate client specifications against accepted industry practices
- develop technical solutions from business specifications
- document information that can be shared between businesses
- apply design concepts to business solutions
- document technical reports
- make recommendations and offer optimum design solutions.

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 client business domain, business function and organisation
- explain compatibility issues and resolution procedures
- outline configuration of internet protocol (IP) networks
- describe common desktop applications and operating systems
- explain how to document technical specifications
- summarise security protocols, standards and data encryption
- explain the role of the following technologies in business systems:
 - network topologies
 - network protocols and operating systems
 - radio frequency (RF) networks
 - optical networks
 - mobile cellular networks

- core networks
- access networks
- radio frequency identification.

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 networks engineering field of work and include access to:

- client functional requirements
- business specifications
- database software
- simulation software
- organisational guidelines
- network and computer layouts
- site design software and hardware
- information on a range of ICT business solutions.

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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