



Australian Government

ICTTEN521 Integrate network systems and equipment

Release: 1

ICTTEN521 Integrate network systems and equipment

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 7.0.

Application

This unit describes the skills and knowledge required to integrate network systems and equipment by following predetermined procedures to confirm operability of the system while minimising impact on affected customers.

It applies to individuals working as field officers, technicians and technical supervisors, for network carriers, contractors and other service providers, who install new, additional and replacement equipment in networks. This includes providing support and administrative infrastructures for integration of new and emerging internet protocol (IP) based technologies.

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

Unit Sector

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. Plan to integrate network systems and equipment	1.1 Obtain work details and scope from relevant personnel and arrange for site access in compliance with required security arrangements, legislation, codes, regulations and standards 1.2 Prepare an integration management plan in agreement with relevant personnel 1.3 Obtain available change management plan and prepare a contingency plan according to organisational requirements 1.4 Identify systems, traffic and customers to be affected by integrating planned systems and equipment 1.5 Notify relevant personnel of planned actions and obtain authority

ELEMENT	PERFORMANCE CRITERIA
	to proceed
2. Test and integrate network system and equipment	2.1 Conduct activities over the set of integration phases documented in the integration management plan 2.2 Load operational software according to specification and confirm interoperability of new and existing system 2.3 Stimulate network traffic and confirm that test results are recorded and stored according to enterprise requirements 2.4 Analyse test results and confirm that established parameters have all been met 2.5 Evaluate problems during the testing phase and rectify and escalate required procedures 2.6 Analyse system monitoring alerts and alarms for fault conditions in conjunction with relevant personnel 2.7 Locate and detect faults within capability and escalate according to enterprise policy 2.8 Check that operations administrative maintenance systems and system monitoring alerts and alarms are connected according to the required instruction manual 2.9 Activate new system monitoring alerts and alarms and deactivate old system monitoring alerts and alarms
3. Complete administrative tasks	3.1 Complete integration records according to manufacturer specification and enterprise policy and make recommendations for future network improvement 3.2 Notify relevant personnel of project completion and obtain sign-off

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
Numeracy	• Uses mathematical formulae to calculate measurements, analyse results and make adjustments to equipment and settings
Oral communication	• Participates in verbal exchanges with personnel and customers to confirm requirements are properly understood • Employs listening and questioning techniques to confirm understanding
Reading	• Identifies, analyses and evaluates information to determine regulatory and technical requirements to assist with project

SKILL	DESCRIPTION
	planning
Writing	Identifies, analyses and evaluates information to determine regulatory and technical requirements to assist with project planning
Teamwork	Selects and uses communication conventions and protocols to suit purpose and audience
Planning and organising	Uses formal and logical planning processes to identify logistical requirements, test strategies and resources
Problem solving	- Makes decisions quickly in familiar situations requiring immediate attention, drawing on past experience to identify key variables and determine the best course of action - Uses analytical processes to decide on a course of action, establishing criteria for deciding between options, and seeking input and advice from others before taking action when necessary
Self-management	- Keeps up to date with required legislation and considers implications of this when planning work, with specific reference to safety - Adheres to organisational procedures and protocols in completing work tasks
Technology	Understands key principles and concepts underpinning design and operation of digital systems and tools, and applies these as required

Unit Mapping Information

Supersedes and is equivalent to ICTTEN506 Integrate new systems and equipment into the telecommunications network.

Links

Companion Volume Implementation Guide is found on VETNet -

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