



Australian Government

ICTSUS601 Integrate sustainability in ICT planning and design projects

Release: 1

ICTSUS601 Integrate sustainability in ICT planning and design projects

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 integrate sustainability concepts and policies into information and communications technology (ICT) planning and design projects. These projects typically involve upgrades of equipment hardware and software or new installations of next generation networks (NGN) using emerging technologies.

It applies to individuals who have high level specialist technical skills and knowledge in optical communications and IT networks using internet protocol (IP) systems.

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

Unit Sector

Telecommunications – sustainability

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 to integrate sustainability into planning and design stages of ICT project	1.1 Evaluate suitable ICT projects into which sustainability can be integrated 1.2 Negotiate with stakeholders to establish extent to which sustainability is to be integrated 1.3 Research and identify suitable technology solutions applicable to project

	1.4 Gather power consumption data on ICT equipment required for energy audit based on agreed standard
2. Devise strategies for incorporating sustainability into ICT project	2.1 Determine and oversee implementation of short term technology solutions to achieve reduction of power consumption 2.2 Initiate and progress sustainable management principles that result in reduced environmental impact 2.3 Establish, regularly review and improve key performance indicators (KPI) on sustainability performance 2.4 Incorporate innovative planning and design rules for ICT projects that foster sustainability and environmental best practice
3. Analyse energy audit data	3.1 Identify energy usage within scope of ICT project and provide detailed report 3.2 Estimate potential energy savings and payback periods for recommended actions 3.3 Estimate carbon dioxide (CO₂) emissions for nominated project 3.4 Evaluate estimated CO₂ emissions with comparable benchmarks 3.5 Make recommendations in order of priority and give estimates of implementation costs on integration of sustainability for other ICT projects

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	1.4, 2.3	Gathers, interprets and analyses a range of complex textual information from a range of sources and identifies relevant and key information
Writing	1.2, 3.1, 3.5	Records technical requirements and procedures for diverse audiences using precise language and specialised terminology to convey an understanding of outcomes and alternatives
Oral Communication	1.1, 1.2	Clearly articulates and validates policy and strategy benefits for project requirements using specific language suitable for different

		audiences to convey requirements • Uses listening and questioning techniques to confirm understanding • Effectively negotiates contracts with suppliers
Numeracy	2.3, 3.1-3.5	• Uses complex mathematical formulae to estimate CO₂ emissions, analyse and confirm capacity requirements and plan budgetary and workforce needs
Get the work done	1.1, 1.3, 1.4, 2.1, 2.3, 2.4, 3.1-3.3, 3.5	• Develops plans to manage relatively complex, non-routine tasks with an awareness of how they may contribute to longer term operational and strategic goals • Takes responsibility for own workload, negotiating some key aspects with others • Systematically gathers and analyses all relevant information and evaluates options to make informed decisions • Reflects on the ways in which digital systems and tools are used or could be used to achieve work goals, and recognises strategic and operational applications • Uses analytical processes to decide on a course of action, establishing criteria for deciding between options

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTSUS601 Integrate sustainability in ICT planning and design projects	ICTSUS6233A Integrate sustainability in ICT planning and design projects	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 ICTSUS601 Integrate sustainability in ICT planning and design projects

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Performance Evidence

Evidence of the ability to:

- plan and integrate sustainability into information and communications technology (ICT) projects by devising strategies to conserve resources
- analyse energy audit data on enterprise resource consumption
- develop and monitor policies for review and improvements, benchmarking against industry best practice and attempting new approaches continuously over time.

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:

- discuss best practice approaches relevant to own work area
- explain environmental or sustainability legislation, regulations and codes of practice applicable to the industry and organisation
- discuss and explain work health and safety (WHS) implications for new policy
- explain how to estimate CO₂ emissions
- summarise ICT power consumption calculations
- discuss policy development processes and practices
- summarise power consumption audit methodology
- identify principles, practices and available tools and techniques of sustainability management relevant to the telecommunications industry
- describe quality assurance systems relevant to own organisation
- summarise systems and procedures to aid in the achievement of workplace sustainability.

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 – sustainability field of work and include access to:

- sites on which planning, design and integration of sustainability may be carried out
- relevant legislation, standards, guidelines, reports and equipment specifications and drawings
- a range of workplace documentation, personnel, information and resources including:
 - compliance obligations
 - organisational plans.

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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