



Australian Government

ICTSUS805 Manage improvements in ICT sustainability

Release: 1

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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 improve energy conservation and energy efficiency in information and communications technology (ICT) operations and to encourage changing user behaviour.

It applies to individuals who work in a managerial capacity with a high degree of autonomy and high level of responsibility with excellent communication skills, high level technical management abilities and a broad knowledge of the design of system networks. In this role, individuals research and analyse network management databases, plan changes, diagnose and fix network problems, and report outcomes.

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. Critically analyse organisation's ICT assets energy footprint	1.1 Audit and assess level and type of use across range of ICT devices, infrastructure and software 1.2 Audit and establish baselines of ICT energy consumption and other elements contributing to organisation's carbon footprint 1.3 Assess ICT usage in relation to its contribution to organisation's business goals and priorities

	1.4 Determine critical issues for organisation relevant to ICT usage and carbon footprint 1.5 Assess current ICT usage in relation to sustainable asset management 1.6 Apply industry best practice where appropriate
2. Develop ICT sustainability strategies and policy	2.1 Include goals for reduction of sustainability impacts and equipment life cycle management approaches in organisational policy 2.2 Check policy scope is consistent with industry standards and benchmarks, and amend where necessary 2.3 Ensure policy reflects organisation's commitment to sustainability as integral part of business planning and business opportunity 2.4 Consult with stakeholders as integral part of policy development, implementation and review processes 2.5 Recommend policy options based on effectiveness, timeframes and cost 2.6 Develop and produce strategies for implementation, monitoring, review and audit as part of policy documentation
3. Formulate technical and behavioural solutions to improve ICT sustainability	3.1 Determine and document hardware, software, network and interface requirements of solutions 3.2 Develop strategies to improve sustainability outcomes, including energy efficiency and alternative energy sources 3.3 Develop guidelines for improving sustainability through asset management 3.4 Document requirements, resource allocations, training needs, hazard controls and implementation timelines for selected strategies, and obtain sign off from relevant stakeholders
4. Monitor and evaluate sustainability data	4.1 Develop criteria for measuring performance improvement 4.2 Identify trends that may indicate need for remedial action and use to promote continuous improvement of performance 4.3 Modify policy and technical solutions in response to data analysis, to ensure improvements are made 4.4 Determine scope, frequency and method of monitoring and reporting in consultation with stakeholders 4.5 Review data to ensure compliance with management of sustainability and legislative requirements 4.6 Document findings and present to stakeholders

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	1.1-1.4, 2.2, 2.3, 2.6, 3.2, 4.2, 4.3, 4.5	Identifies, analyses and evaluates complex textual information from a range of sources and identifies relevant and key information
Writing	1.2, 2.1, 2.4-2.6, 3.1-3.4, 4.1, 4.3, 4.4, 4.6	Produces detailed well-structured reports and related documentation, and develops recommendations using precise language and specialised terminology to convey an understanding of outcomes
Oral Communication	2.4, 3.4, 4.4, 4.6	- Articulates clearly using specific language suitable for clients and stakeholder audiences to convey requirements - Uses listening and questioning techniques to confirm understanding
Numeracy	2.5, 3.4	Uses mathematical formulae to determine resource requirements and evaluate workable timelines
Navigate the world of work	2.1-2.3, 4.5	Recognises and responds to both explicit and implicit organisational procedures and protocols, and legislative and regulatory requirements
Interact with others	4.6	Demonstrates sophisticated control over oral, visual and/or written formats, drawing on a diverse range of communication practices to achieve goals
Get the work done	1.1-1.6, 2.1, 2.6, 3.1-3.4, 4.1-4.3	- Develops flexible plans for complex, high impact activities, with strategic implications that involve a diverse range of stakeholders with potentially competing demands - Takes responsibility for defining key aspects of own workload, balancing own needs and priorities with those of the work group - Systematically gathers and analyses all relevant information and evaluates options to make high-impact and informed decisions - Considers the strategic and operational potential of digital trends to achieve work goals, enhance work processes, create opportunities and reduce risks - Uses formal analytical and lateral thinking techniques for identifying issues, and generating and evaluating possible solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTSUS805 Manage improvements in ICT sustainability	ICTSUS7236A Manage improvements in ICT sustainability	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 ICTSUS805 Manage improvements in ICT sustainability

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Performance Evidence

Evidence of the ability to:

- analyse patterns of information and communications technology (ICT) use
- develop policy that complies with regulatory requirements
- develop a workable implementation strategy
- formulate solutions to reduce ICT based emissions
- develop measurable criteria for reviewing improvement.

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 energy efficiency and alternative energy sources
- assess the risks, hazards and controls associated with sustainable improvements in ICT
- outline industry standards
- explain the following aspects of IT:
 - hardware
 - interfacing
 - networking
 - software
- describe the legislative framework underpinning sustainability
- explain policy development processes and practices
- summarise principles, practices and available tools and techniques of sustainability management in the ICT industry
- outline relevant International Organization for Standardization (ISO) standards
- discuss sustainability from a local, national and international perspective

- summarise sustainability including ecological, economic and social issues.

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:

- relevant government and scientific reports
- conference papers
- vendor white papers
- resources, tools and networking equipment
- suitable hardware and software
- suitable bandwidth for internet connections
- relevant legislation and regulations
- manufacturers' technical specifications
- relevant ISO standards.

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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