



Australian Government

MSS014018 Apply circularity design thinking to all work streams

Release: 1

MSS014018 Apply circularity design thinking to all work streams

Modification History

Release 1. New unit.

Application

This unit describes the skills and knowledge required to apply a design thinking for circularity approach to 'non-design' work activities and decisions.

This unit applies to operational personnel, team leaders, managers and other individuals in an organisation. It includes the skills and knowledge to identify their customers, investigate customer perspectives, generate innovative ideas for meeting customer needs, determine which options are likely to improve circularity and decide on action to be taken to support the opportunity for improvement.

For the purposes of this unit, circularity refers to the application of decisions and activities designed to move the organisation towards a non-waste scenario that is in equilibrium and which supports regeneration of natural systems. Circularity improvements will typically align to one or more aspects of the currently accepted frameworks of 3 Circular Economy principles and 5 Circular Economy business models.

This unit applies to any organisation.

No licensing or certification requirements exist at the time of publication. Relevant legislation, industry standards and codes of practice within Australia must be applied.

Competency Field

Sustainable Operations

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Determine scope for change	1.1 Review own work activities and decision points to identify areas of potential for circularity improvement 1.2 Identify system of processes and interactions relevant to each area of potential 1.3 Liaise with others to determine supports and constraints within the current context likely to affect changes in areas of potential
2. Identify customer perspectives	2.1 Identify internal and/or external customers for the areas of potential for circularity improvements

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	2.2 Source and analyse information to determine stated customer needs, desired outcomes and perspectives in relation to areas of potential 2.3 Investigate unarticulated needs, wants and perspectives of customer 2.4 Apply questions or processes to elicit detailed understanding of customer needs, wants and perspectives
3. Generate ideas on circularity improvements	3.1 Consult with stakeholders and, where appropriate, specialists to generate ideas and alternatives 3.2 Generate ideas on how to meet some or all aspects of customer perspectives using existing processes and/or equipment 3.3 Generate ideas on how to meet some or all aspects of customer perspectives based on different processes and/or equipment 3.4 Challenge assumptions about customer needs and wants to generate alternative versions of customer perspective 3.5 Generate ideas on how to meet alternative customer perspectives 3.6 Generate ideas for incremental changes and radical changes
4. Determine improvement options	4.1 Select ideas with potential to improve circularity within current context and within own sphere of decision making 4.2 Evaluate selected ideas in terms of risks and intended and unintended impacts, outcomes and costs to determine options likely to deliver overall system benefits 4.3 Identify where beneficial options do not clearly align to customer stated needs and plan to inform, influence and negotiate with customer 4.4 Facilitate communications with customer to resolve problems and agree on option/s to be implemented
5. Plan actions to effect change	5.1 Prepare action plan for agreed option/s, detailing key stakeholders, approvals, resources and information needed and steps to be taken 5.2 Examine ideas outside own sphere of decision making to determine potential improvements in circularity 5.3 Identify personnel with responsibility and/or influence relevant to potential improvements outside own sphere of decision-making 5.4 Prepare information to promote understanding of and engagement with potential improvements in circularity using style and format suitable for responsible personnel

Foundation Skills

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

- Reading skills to interpret workplace documentation
- Writing skills to document options and action plans
- Oral communication skills to facilitate engagement and agreement
- Numeracy skills to quantify direct, indirect and intangible aspects of sustainability impact
- Learning skills to identify information needs and sources of information.

Other foundation skills essential to performance are explicit in the performance criteria of this unit

Unit Mapping Information

Release 1. No equivalent unit.

Links

Companion Volume Implementation Guides are found in VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS014018 Apply circularity design thinking to all work streams

Modification History

Release 1. New unit.

Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and demonstrated the ability to:

- determine and plan at least one improvement to circularity within own sphere of decision making, with agreement from customer
- develop information to promote understanding of and engagement with at least one circularity improvement outside own sphere of decision-making.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- frameworks for determining customer perspectives
- current and emerging circular approaches to reducing negative impact throughout the life of a process, product or service including:
 - human-centred and iterative design
 - designing out waste and pollution
 - choice of lower impact and/or renewable materials, resources and energy
 - reduction of material, resources and energy usage, including through digitalisation, dematerialisation, shared resources and service-based ‘products’
 - extended product life and retaining and/or managing residual resources including modularity, repairability, stewardship, remanufacturing
 - design for natural regeneration
- application of systems thinking to:
 - identifying and solving problems
 - evaluating sustainability risks, impacts, costs and benefits of process, product or service within own area of responsibility
 - identifying likely impact of change
- legislation, regulations, standards and voluntary codes relevant to the organisation and its circularity approach
- influence, persuasion and negotiation techniques
- techniques to facilitate communications and agreement with a range of stakeholders
- techniques to generate ideas, including at least 2 of the following:
 - brainstorming
 - reverse brainstorming

- ‘what if?’
- trigger storming
- mindmapping
- SCAMPER.

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources
- modelling of industry operating conditions.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

Companion Volume Implementation Guides are found in VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>