



**Australian Government**

# **RIIARO404 Improve outcomes within a distributed value chain network**

**Release: 1**

# RIIARO404 Improve outcomes within a distributed value chain network

## Modification History

|           |                                                                                                                                 |
|-----------|---------------------------------------------------------------------------------------------------------------------------------|
| Release 1 | This version first released with RII Resources and Infrastructure Industry Training Package Version 9.0.<br>Newly created unit. |
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## Application

This unit describes skills and knowledge required to improve value chain outcomes within a dynamic, multi-faceted environment, where value is distributed across a network of contributing sites, systems and components that must work together to optimise outcomes for the organisation. It includes determining the status of the value chain, identifying possible areas for improvement, and communicating value chain improvements.

The unit applies to those whose purpose is to optimise operational outcomes by controlling value-adding processes and the interfaces between them.

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

## Unit Sector

Coal mining

Metalliferous mining

## Elements and Performance Criteria

| ELEMENT                                        | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Elements describe the essential outcomes       | Performance criteria describe the performance needed to demonstrate achievement of the element                                                                                                                                                                                                                                                                                        |
| 1. Determine current status of the value chain | 1.1 Identify and report extent and limits of value chain components and interfaces between them in the network<br>1.2 Identify and report dependencies between the different processes and estimate impact of varying 1 part of the value chain on other parts of the distributed system<br>1.3 Use available data and collaborative input to determine current status of value chain |
| 2. Identify possible areas                     | 2.1 Analyse events, trends, and conditions and identify and                                                                                                                                                                                                                                                                                                                           |

| ELEMENT                                 | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| for improvement                         | <p>record factors that impact value chain productivity</p> <p>2.2 Prioritise and confirm areas for improvement based on data analysis and in collaboration with required stakeholders</p> <p>2.3 Identify objectives of proposed improvements and assess the risk of them impacting other parts of the system in accordance with organisational risk process</p>                                                                          |
| 3. Communicate value chain improvements | <p>3.1 Communicate proposed improvements in accordance with organisational requirements and integrate feedback</p> <p>3.2 Identify leading indicators to measure proposed improvements in the value chain</p> <p>3.3 Evaluate estimated impact of proposed improvements on the value chain</p> <p>3.4 Communicate estimated impact and leading indicators of the proposed improvements in accordance with organisational requirements</p> |

## 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                  | <ul style="list-style-type: none"> <li>Uses a range of mathematical information embedded in a range of familiar and less familiar documents</li> </ul>    |
| Initiative and enterprise | <ul style="list-style-type: none"> <li>Identifies the implications of factors impacting the value chain on potential productivity improvements</li> </ul> |

## Unit Mapping Information

No equivalent unit. Newly created unit.

## Links

Companion Volume Implementation Guide is found on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>

# Assessment Requirements for RIIARO404 Improve outcomes within a distributed value chain network

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## Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- identify a proposed improvement for at least 1 process within a value chain network.

During the above, the candidate must:

- evaluate and report on the estimated impact and leading indicator of the proposed improvement in accordance with organisational requirements.

## Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- key features and components of value chains within an organisation's distributed value chain network, and the interfaces between them
- performance measures for value chain outputs
- factors that impact quality, quantity, and productivity in the value chain
- techniques for value chain mapping and analysis
- key features and components of schematics as they relate to value chains
- data analytic techniques for delay and trend analysis of value chain productivity
- data sources relating to planning, inputs, activities, outputs, metrics and current versus required performance
- key features and functions of process improvement tools
- systems thinking techniques for considering the holistic impact of decisions on other system parts within organisation's value chain
- methods and technology for predicting effects of value chain improvements prior to implementation, including leading and lagging indicators
- organisational risk-assessment processes for assessing the impacts of making value chain improvements within a value chain network.

## Assessment Conditions

Mandatory conditions for assessment of this unit are stipulated below. The assessment must:

- include access to:
  - personal protective equipment
  - organisational policies and planning priorities
  - process improvement tools and methods
- be conducted in a safe environment; and,
- be assessed in the context of this sector's work environment; and,
- be assessed in compliance with legislative and regulatory requirements and using policies, procedures and processes directly related to the industry sector for which the unit is being assessed; and,
- confirm consistent performance can be applied in a range of relevant workplace circumstances.

Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated work environment\* provided it is realistic and sufficiently rigorous to cover all aspects of this sector's workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.

### Assessor requirements

Assessors must be able to clearly demonstrate current and relevant industry knowledge and experience to satisfy the mandatory regulatory standards as set out in the Standards for Registered Training Organisations 2015/Australian Quality Training Framework mandatory requirements for assessors current at the time of assessment and any relevant licensing and certification requirements.

This includes:

- the minimum years of current\*\* work experience after competency has been obtained as specified below in an industry sector relevant to the outcomes of the unit.

It is also acceptable for the appropriately qualified assessor to work with an industry expert to conduct assessment together and for the industry expert to be involved in the assessment judgement. The industry expert must have current industry skills directly relevant to the training and assessment being provided. This means the industry subject matter expert must demonstrate skills and knowledge from the minimum years of current work experience after competency has been obtained as specified below, including time spent in roles related to the unit being assessed:

| Industry sector/Unit sector                  | AQF indicator level | Required assessor or industry subject matter expert experience |
|----------------------------------------------|---------------------|----------------------------------------------------------------|
| Drilling, Metalliferous Mining, Coal Mining, | 1                   | 1 year                                                         |

| Industry sector/Unit sector                                                                     | AQF indicator level                                                                                                                                                                                                                                                                                                            | Required assessor or industry subject matter expert experience |
|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| Extractive (Quarrying) and Civil Infrastructure***                                              | 2                                                                                                                                                                                                                                                                                                                              | 2 years                                                        |
| Drilling, Coal Mining, Extractive (Quarrying), Metalliferous Mining and Civil Infrastructure*** | 3-6                                                                                                                                                                                                                                                                                                                            | 3 years                                                        |
| Units coded 'RIIARO' (Autonomous and Remote Operations)                                         | Given that this is an emerging industry area, assessors are required to demonstrate vocational competencies at least to the level being assessed, and current industry skills directly relevant to the assessment being provided.                                                                                              |                                                                |
| Other sectors                                                                                   | Where this unit is being assessed outside of the resources and infrastructure sectors assessor and/or industry subject matter expert experience should be in line with industry standards for the sector in which it is being assessed and where no industry standard is specified should comply with any relevant regulation. |                                                                |

\*Guidance on simulated environments has been stipulated in the Companion Volume Implementation Guide located on VETNet.

\*\*Assessors can demonstrate current work experience through employment within industry in a role relevant to the outcomes of the unit; or, for external assessors this can be demonstrated through exposure to industry by conducting a minimum number of site assessments as determined by the relevant industry sector, across various locations.

\*\*\*Excluding units coded 'RIIARO' (Autonomous and Remote Operations).

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