



Australian Government

PMC557001 Manage trials

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to PMC557001A Manage trials

Application

This unit of competency covers the skills and knowledge required to manage trialling of new/modified materials, process, methods, equipment and/or plant. Trialling is typically used to determine suitability or check performance. Examples include:

- the scale-up and other development steps required to take a new product or process from its design/laboratory trials to full commercial operation on a plant
- direct trialling of a proposed new material, method, process, plant or equipment
- large scale pilot plant, demonstration plant or full scale plant trials.

This unit of competency applies to operators who are required to define the purpose, processes and metrics of the trial, coordinate the work, critically evaluate the trial outcomes and recommend action to be taken.

This unit of competency applies to senior technicians or those in similar roles who are required to analyse and synthesise advanced theoretical and technical knowledge and apply independent judgement to high-level technical issues and complex problems. The individual may be the sole manager of the trial or a co-manager with a defined scope of responsibility.

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

Pre-requisite Unit

Nil

Competency Field

Technical

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

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|---|-----------------------------------|-----|---|
| 1 | Determine purpose of trial | 1.1 | Analyse documentation available on trial |
| | | 1.2 | Consult with trial proponent and other stakeholders |
| | | 1.3 | Define purposes of trial |
| | | 1.4 | Confirm trial purpose with all stakeholders |
| | | 1.5 | Identify health, safety and environment (HSE) and other risks from the trial |
| | | 1.6 | Negotiate conflicts in trial purpose |
| | | 1.7 | Promulgate agreed trial purpose |
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| 2 | Determine trial metrics | 2.1 | Determine information required from trial |
| | | 2.2 | Identify relevant data which is available or which could be made available |
| | | 2.3 | Identify gaps in data and negotiate suitable proxies for data |
| | | 2.4 | Arrange for data to be collected |
| | | 2.5 | Ensure there is appropriate capability for required data manipulation |
| | | 2.6 | Ensure the availability of appropriate procedures/protocols for collection and manipulation of data |
| | | | |
| 3 | Coordinate trial | 3.1 | Develop procedures required for trial |
| | | 3.2 | Check procedures to ensure appropriate risk management is included |
| | | 3.3 | Draft trial plans |
| | | 3.4 | Confirm trial plans with all relevant personnel |
| | | 3.5 | Negotiate conflicts as required |

- 3.6 Promulgate agreed trial plans
 - 3.7 Arrange for the required resources to be available when required by plan
 - 3.8 Coordinate the implementation of the trial plan
 - 3.9 Recognise indications of developing problems and take appropriate action
 - 3.10 Monitor the progress to plan and take appropriate action to achieve required outcomes
 - 3.11 Conclude trial when appropriate
- 4 **Interpret trial results**
- 4.1 Ensure all data is collated and manipulated as required
 - 4.2 Interpret data in terms of trial purpose
 - 4.3 Analyse data for unexpected outcomes
 - 4.4 Determine trial outcomes
 - 4.5 Draft trial report, including recommendations
 - 4.6 Discuss report with relevant stakeholders as appropriate
 - 4.7 Publish final report and recommendations as required

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Regulatory framework The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used.

Applicable legislation, regulations, standards and codes of practice include:

- HSE legislation, regulations and codes of practice relevant to the workplace, equipment and production processes and hazardous materials
- Australian/international standards relevant to the materials being used and products being made
- any relevant licence and certification requirements.

All operations to which this unit applies are subject to stringent HSE requirements, which may be imposed through state/territory or federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and such requirements the legislative requirements take precedence.

HSE and other risks Identification of HSE and other risks includes consideration of:

- health and safety risks
- sustainability risks
- regulatory risks
- business risks.

Procedures All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, and include one or any combination of:

- job cards
- emergency procedures
- work instructions
- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- formulas/recipes
- batch sheets

- temporary instructions
- any similar instructions provided for the smooth running of the plant.

Unit Mapping Information

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Links

MSA Training Package Implementation Guides - <http://mskills.org.au/training-packages/info/>