



Australian Government

DEFCM311A Implement and manage technical risk management

Release: 2

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Modification History

Release	TP Version	Comments
2	DEF12V2	Layout adjusted. No changes to content.
1	DEF12V1	Primary release.

Unit Descriptor

This unit covers the competency required to manage risk within the organisation's environment in order to avoid adverse effects on the technical integrity of the organisation's materiel.

It covers determining, monitoring and controlling risks, and assessing technical risk management outcomes.

Application of the Unit

This unit was developed for technical regulatory framework specialists working within the materiel logistics area of Defence but is applicable to any individual in this field of work. Typically these individuals work independently or as part of a team under direct and/or indirect supervision, use discretion and judgement, and take responsibility for the quality of their outputs. All activities are carried out in accordance with relevant organisational policies and procedures

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a Unit of Competency.

Performance Criteria describe the required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the Required Skills and Knowledge and/or the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Determine risks	1.1 Technical risks are identified, documented and analyse, in consultation with stakeholders and a higher technical/engineering authority, as a basis for risk planning. 1.2 Within delegated technical/engineering authority, established risk management techniques and tools are used to analyse risks and assess options, and preferred risk approaches are recommended to a higher technical/engineering authority. 1.3 Plans are developed, agreed with stakeholders, and communicated to ensure clarity of understanding and ongoing management of technical risk factors. 1.4 Designated risk management processes and procedures are established to enable effective management and communication of risk events, responses and results.
2. Monitor and control risk	2.1 Activities are managed in accordance with the organisation's Engineering Management Plan to ensure a common approach to the achievement of objectives. 2.2 Progress is monitored against the organisation's Engineering Management Plan and Risk Management Plan to identify variances and recommended responses to a higher technical authority for remedial action. 2.3 Agreed risk responses are implemented and plans are modified to reflect changing project objectives in an environment of uncertainty.
3. Assess risk management outcomes	3.1 Outcomes of technical/engineering risk management activities are reviewed to determine effectiveness of risk management processes and procedures. 3.2 Risk issues and recommended improvements are identified, documented and passed on to a higher authority for application.

Required Skills and Knowledge

This describes the essential skills and knowledge and their level, required for this unit.

Required Skills

- apply safety, legislative and statutory requirements relevant to technical risk management
- apply technical risk management knowledge relevant to work being performed
- interpret organisational role relevant to technical risk management
- operate equipment and systems relevant to technical risk management activities
- use appropriate information technology and software

Required Knowledge

- appropriate risk management methodologies, their capabilities, limitations, applicability and outcomes
- personal attitudes to uncertainty and risk, and how they might affect approaches to management of technical risk
- place of risk management in the context of the materiel life cycle
- technical regulatory framework, organisation's Engineering Management Plan and Risk Management Plan
- technical risk management including application in the technical/engineering context of principles, tools, techniques, standards, and processes
- uncertainty and the means of its measurement

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Assessment must confirm the ability to:

- adhere to relevant data collection, storage and retrieval requirements
- apply knowledge of technical risk management to assist in work and to guide problem solving
- identify critical indicators of technical risk and assess the risk management system's performance appropriate to the organisational context by determining, monitoring and controlling risks; and assessing technical risk management outcomes
- work and communicate effectively and positively with others involved in the work
- apply, within authority, the requirements of the job or work role in relation to implementing, monitoring, and successfully completing risk management activities; contributing to reports of results; completing work area housekeeping requirements including documenting risk management activity and process outcomes
- modify activities to cater for variations in workplace context and environment

Consistency in performance

Competency should be demonstrated over time and should be observed in a range of actual or simulated work contexts

Context of and specific resources for assessment

Context of assessment

Competency should be assessed in the workplace or simulated workplace environment.

Specific resources for assessment

Access is required to:

- computer and relevant software
- relevant legislation, guidelines, procedures and protocols
- plans
- workplace documentation

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Range Statement

The Range Statement relates to the Unit of Competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording in the Performance Criteria is detailed below.

<i>Technical risks</i> may include:	• Actual • Likely/probable • Mention in documents associated with: • design change • Engineering Management Plan • Risk Management Plan • appropriate standards • Potential • Perceived
<i>Delegated technical/engineering authority</i> may be:	• Appointed in accordance with the relevant technical regulatory framework and refers to planning and activities that may: • be done independently within broad guidance or by taking the lead of a team • involve consultation with other team members, teams and internal stakeholders • involve the selection, use and supervision of appropriate technical risk management methods, tools and techniques • be conducted routinely or as changing circumstances dictate
<i>Risk management techniques and tools</i> may include:	• Calling upon personal experience and/or subject matter experts • Conducting or supervising qualitative and/or quantitative risk analysis, such as schedule simulation, decision analysis, contingency planning and alternative strategy development • Using specialist risk analysis tools to assist in the decision making process
<i>Risk management processes and procedures</i> may include:	• Communicating with stakeholders • Dispute resolution and modification procedures • Implementing risk control trigger mechanisms • Measuring actual progress against plans • Recording and reporting major variance
<i>Recommended responses</i> may include:	• In consultation with team members, section heads, managers and stakeholders • Independently or with higher authority endorsement

	if necessary • Regularly throughout the materiel life cycle • Taking into account internal organisational change and external environmental change
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Unit Sector(s)

Not applicable.