Australian Government

Department of Education, Employment and Workplace Relations

PUADEFCM310A Establish technical risk management systems

Revision Number: 1

ISC INDUSTRY SKILLS COUNCILS
Creating Australia's Future

PUADEFCM310A Establish technical risk management systems

Modification History

Not applicable.

Unit Descriptor

Unit Descriptor	This unit covers the competency required to manage the factors that might adversely affect the technical integrity of the organisation's materiel, program and organisational outcomes.
	It covers directing the planning and management of technical risks, managing risks to the Risk Management Plan requirements, and assessing technical risk management outcomes associated with materiel. It also covers the development and establishment of the technical risk management strategy.

Application of the Unit

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

Employability Skills   This unit contains employability skills.

Pre-requisite Unit/s   Nil

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. **Direct planning of technical risk management**	1.1 Potential, perceived and actual technical risks are directed for identification, documentation and analysis, in consultation with managers and appropriate stakeholders, as the basis for *technical risk management planning*
	1.2 *Risk management methods*, *techniques and tools* are selected and modified for managers to analyse information, evaluate options and determine preferred risk approaches within the overall organisational environment
	1.3 *Risk management plans* and strategies are directed for development, communication and implementing to ensure clarity of understanding and achievement of business objectives in accordance with technical regulatory framework requirements
	1.4 Technical risk management system is identified, developed and maintained to enable effective management and communication of technical risk activities and outcomes, responses and results to stakeholders
2. **Direct management of technical risk and manage technical risk**	2.1 Technical risk is managed in accordance with agreed risk management plans
	2.2 Progress is reviewed, variance is analysed and risk responses are initiated to achieve objectives in changing environments
	2.3 Risks to planned technical outcomes are directed for monitoring and remedial actions are authorised
3. **Assess technical risk management systems**	3.1 Technical risk management outcomes are reviewed and analysed to assess the effectiveness of the Risk Management Plan in maintaining the integrity of materiel
	3.2 Lessons learned are aggregated, and structured for feedback to managers and senior management for strategic review and planning

Required Skills and Knowledge

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
- apply technical risk management knowledge relevant to work being performed
- consult with and negotiate with relevant groups and individuals to gain understanding and support for the plan
- interpret organisational role relevant to technical risk management plans
- manage projects
- relate to people from a range of backgrounds with a range of abilities
- think strategically to identify and assess potential alliances and effective strategies

Required Knowledge

- appropriate risk management methodologies, capabilities, limitations, applicability and outcomes
- difference in work content, risk, processes, tools and techniques that apply in the various phases of the materiel life cycle and of the program cycle and how these relate to business cycles, particularly financial
- implementation processes
- monitoring processes
- organisational policies, guidance and attitudes to technical risk management
- personal attitudes to uncertainty and risk, and how they might impact on the organisation's approach to risk management
- place of technical risk management in the context of the materiel life cycle and other risk management functions
- role of the technical regulatory framework and the organisation's Engineering Management Plan and Risk Management Plan
- uncertainty and the means of its measurement

Evidence Guide

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:
	- apply, monitor and report on relevant implementation processes - analyse data and information - apple knowledge to plan and establish in technical risk management plans to assist in work and to guide problem solving - take responsibility for technical risk management and manage the work of others including managers and a range of stakeholders and contributing agencies both internal and external to the organisation - 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.

EVIDENCE GUIDE

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 • relevant information on technical risk requirements • information on options for technical risk management systems • relevant internal and external personnel • appropriate computer resources for online searching, data processing and analysis, and report preparation and editing.
Method of assessment	In a public safety environment assessment is usually conducted via direct observation in a training environment or in the workplace via subject matter supervision and/or mentoring, which is typically recorded in a competency workbook. Assessment is completed using appropriately qualified assessors who select the most appropriate method of assessment. Assessment may occur in an operational environment or in an industry-approved simulated work environment. Forms of assessment that are typically used include: • direct observation • interviewing the candidate • journals and workplace documentation • third party reports from supervisors • written or oral questions.

Range Statement

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.

Technical risk management planning may	Be conducted substantially non-routinely to meet complex and changing circumstances
	Be done independently or by taking the lead team in an organisation's materiel environment
	Involve consultation with managers and with selective involvement of stakeholders internal and external to the organisation
	Involve the selection, modification and direction of the use of appropriate risk management method processes, procedures, tools and techniques
	Mention in documents associated with:
	• design change • Engineering Management Plan • Risk Management Plan • appropriate standards
	Take into account the impact of organisational and environmental change on the program and vice versa
Risk management methods, techniques and tools may involve	Assessing and reporting the potential impact of multiple project risks on the organisation
	Calling upon personal experience and/or subject matter experts
	Collating and using the products of specialist risk analysis to make technical risk management decisions
	Conducting or directing qualitative and/or quantitative risk analysis, such as schedule simulation, decision analysis, contingency planning and alternative strategy development
Risk management plans may include	Assigned risk responsibilities
	Contingency plans
	Formal arrangements
	Occupational health and safety (OH&S) risks
	Preferred and alternative risk management strategies and

RANGE STATEMENT

actions

Responsibility assignment

Technical risk events

Unit Sector(s)

Not applicable.