41350 Carry out a risk assessment for an asset management activity

Kaupae | Level	6
Whiwhinga | Credit	15
Whāinga | Purpose	This skill standard is for people intending to work in the asset management industry. People with this skill standard will have the skills to collate and record risk information, carry out a risk assessment, and identify an intervention option to treat risk for an asset management activity. This skill standard aligns with the New Zealand Diploma in Infrastructure Asset Management (Level 6) [Ref: 3180].

Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

Hua o te ako | Learning outcomes	**Paearu aromatawai |** Assessment criteria
1. Collate and record risk information for an asset management activity.	a. Organisational risk policies, strategies, and methodologies are identified and contextualised for the activity.
	b. Stakeholder feedback on risk and resilience including risk data that impacts on the activity are collated and presented to senior management.
	c. Underlying assumptions on risk are recorded in the risk register.
	d. Risk information that references specific elements of the asset management plan is recorded and potential solutions for updating the risk register are collated.

Hua o te ako | Learning outcomes	**Paearu aromatawai |** Assessment criteria
2. Carry out a risk assessment for an asset management activity.	a. The likelihood of an event occurring, and the magnitude of the potential consequences, are assessed in the context of the defined existing controls.
	b. The likelihood and consequences are submitted for updating the risk register.
	c. Sensitivity analysis is completed and identifies the extent of the potential risk under uncertainty in line with industry best practice.
	d. Criticality methodology is used to prioritise an asset for a risk intervention.
3. Identify an intervention option to treat risk for an asset management activity.	a. An intervention option to treat risks is identified including ways to avoid, retain, manage, share, transfer, and reduce the likelihood or consequences of the risk.
	b. Asset manager's role and responsibilities, schedules, performance criteria, and provision for the monitoring and review of risk are defined in the intervention option.
	c. Updating and review of the asset management plan and activities is completed and includes recording the intervention option and additional risk information.
	d. Risk is integrated into the decision drivers and documented in the asset management plan.

Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria

Assessment specifications:

Assessment against this skill standard must acknowledge and respect Te Tiriti o Waitangi – The Treaty of Waitangi, Te Ao Māori mātāpono principles, and cultural variations in communication within this context. This includes differences in reo, dialect, mātauranga, tikanga among different iwi, hapū, rohe.

Evidence provided for assessment against this skill standard must be collected in line with legislative requirements and industry standards.

Definitions:

Asset management activities refer to both strategic, tactical, and operational activities including risk management.

Asset management plan is derived from the strategic asset management plan and a written representation of intended asset management programmes for management of infrastructure assets based on the organisation's understanding of service level requirements and the capability to meet those requirements.

Criticality refers to a methodology used to determine the importance of an asset in achieving an organisation's objectives and meeting stakeholder expectations.

Organisational requirements refer to strategies, policies, procedures, and requirements of the organisation.

Risk activities refer to stakeholder engagement and reporting on risk, alignment with organisational objectives, implementing risk strategies and methodologies, monitoring risk, risk assessment, risk analysis, and reporting on the risk impact on assets. Risk is integrated into all funding decisions and resilience planning.

Risk data is used to analyse an asset's failure and determine the risk to organisations if the asset were to fail. Data may include information about asset resilience, contingency and continuity planning and risk-based approach to decision-making based on clear, accurate data about asset condition, criticality, and risk, supporting transparent, justifiable choices. Risk is integrated throughout an asset management plan and asset management activities.

Risk register refers to a document used as an overview of the assets of a company and serves as an input for risk analysis. Each asset can be described and assigned vulnerabilities and threats. The data points are used to initiate the identification of trigger points and preapproved rapid response actions plans.

Sensitivity analysis in asset management refers to a "what-if" risk management technique that measures how variations in key input assumptions impact the output.

Stakeholders refer to communities, peoples or entities (internal and external) that can affect, be affected by, or perceive themselves to be affected by a decision or activity, regulators, communities, iwi.

***Ngā momo whiwhinga* |** *Grades available*

Achieved.

Ihirangi waitohu | Indicative content

Collate and record risk information

- Risk contextualisation including strategic and political context, organisational context, service delivery functions.
- Feedback sources, stakeholder communication and consultation on risk.
- Recording risk on the risk register including underlying assumptions, costs and benefits, methods, data sources, and results.

Risk assessment

- Assessment of risk using risk matrices, reducing the likelihood of an event occurring and the consequences. Risk matrices, risk = likelihood × severity and numerical values.
- Updating the risk register and profile.
- Sensitivity analysis and testing, linking critical assumptions to estimates.
- Criticality and prioritising the most urgent and critical risk first for attention and corrective action.

Identify intervention options

- Risk treatment plans, the treatment of risk, intervention options, reducing the consequences of risk, and risk mitigation.
- Roles and responsibilities, investment needs and drivers and options for projects and programmes.
- Risk review, updating, monitoring methods and actions.

Rauemi | Resources

- Asset Management Programme Guidance, available from qualifications@energyinfra-skill.nz.

Pārongo Whakaū Kounga | Quality assurance information

Ngā rōpū whakatau-paerewa | Standard Setting Body	Energy and Infrastructure Industry Skills Board
Whakaritenga Rārangi Paetae Aromatawai | DASS classification	Engineering and Technology > Infrastructure Civil Engineering > Infrastructure Asset Management
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga | CMR	0120

Hātepe | Process	**Putanga |** Version	**Rā whakaputa |** Review Date	**Rā whakamutunga mō te aromatawai |** Last date for assessment
Rēhitatanga | Registration	1	30 July 2026	N/A
Kōrero whakakapinga | Replacement information	N/A		
Rā arotake | Planned review date	31 December 2031		

Please contact Energy and Infrastructure Industry Skills Board at qualifications@energyinfra-skill.nz to suggest changes to the content of this skill standard.