



GMR RISK MANAGEMENT

Brief Description

Requirements for the assessment, control, monitoring and reporting of material risks that could impact our purpose and business plans.

1. Risk management reporting

Identify and report all *material risks* that have the potential to impact the delivery of business plans.

- > *Businesses* to assign risk management resources and document responsibilities in position descriptions.
- > Maintain a Risk Register for each *Business* and *Group Function* and incorporate a review of material risks into the regular management agenda.
- > Review, update and authorise the material risk profile and tolerability biannually, identifying new *material risks* or changes to existing *material risks*. Report the material risk profile to the Audit, Risk and Compliance Committee biannually.
- > Comply with the Group Internal Audit & Risk (GIAR) timetable to report material risks biannually (using the Group Risk Data Capture template).

2. Risk assessment

Conduct a risk assessment on all *material risks* to understand their potential causes and impacts and to determine the tolerance of the *material risks* in the context of business plans.

- > Conduct risk assessments for all *material risks* and record outcomes in a Risk Register.

Material Risk Identification

- > Identify material risks using the following materiality criteria: *Maximum Foreseeable Loss* (MFL) is \geq level 5 impact; or *Residual Risk Rating* (RRR) is \geq 90 (Appendix 1).

Material Risk Analysis

- > Analyse *material risks* to determine: causes, existing preventative *controls*, impacts, existing mitigating *controls*, and *control* design improvement tasks.
- > Assess the MFL for all possible impact types in the severity table and determine which has the highest RRR.
- > Record outcome of risk analysis in a 'bow tie'.

Material Risk Evaluation

- > Evaluate *material risks* by comparing the RRR with the results of the material risk control assessment (Appendix 2).
- > Determine if *material risks* are tolerable using the following tolerability criteria: $RRR \leq 90$ and material risk control assessment is 'well controlled'.
- > Implement and monitor a management plan to reduce the residual risk or improve the controls if $RRR \geq 90$ and material risk control assessment is not 'well controlled'.

3. Risk control

Critical controls must be implemented and managed so that material risks are 'well-controlled'.

- > Identify and document *critical controls* for each *material risk*, which include the following elements:
 - title and objective (description of the intent to address causes or impacts of the *material risk*),
 - performance standard comprising:
 - (i) design description which shows that the *critical control* meets its *control* objective;
 - (ii) operating and verification activities which show the *critical control* is implemented and operates as designed;
 - manual test plan.
- > For material risks that could interrupt Cardno Group, develop a business continuity plan as a *critical control*.
- > Implement, operate and verify *critical controls*.
- > Assess *critical controls* (Appendix 2) and conduct a material risk control assessment (Appendix 2) annually and record in the Risk Register. The material risk owner is accountable for the completion of the material risk control assessment.

Appendix 1 - Severity and Likelihood tables

SEVERITY TABLE

IMPACT TYPES							
Severity Level	Health & safety	Environment	Community	Reputation	Legal	Financial	Severity Factor
7	>5 fatalities Permanent impairment >30% of body to more than 20 persons.	Permanent severe impact/s to land, biodiversity, ecosystem services, water resources or air.	Severe, widespread community health, safety or security impacts (>500 households) or human rights violations; complete destruction of >500 houses or community infrastructure; complete irreversible desecration of multiple structures/objects/places of global significance.	Crisis event or publication of highly confidential material information resulting in international media, government, regulator, NGO campaigning and employee condemnation of the company (>6 months). Long term damage to company reputation.	Bankruptcy, closure / nationalisation of operations on multiple sites. Litigation ≥ AUD20M	≥ AUD20 million (Cardno share)	1000
6	2-5 fatalities Permanent impairment >30% of body to more than 6-20 persons.	Severe impact/s (>10years) to land, biodiversity, ecosystem services, water resources or air.	Extensive community health, safety or security impacts (>200 households) or human rights violations; extended serious disruption to people's lives (>500 households); extensive damage to >500 houses or community infrastructure or structures/ objects/places of global cultural significance.	Crisis event or publication of confidential material information resulting in international media, government, regulator, NGO campaigning and employee condemnation of the company (< 6 months). Ongoing condemnation results in damage of the reputation of the company.	Forced closure of an operation, competition, anti-corruption or tax breach. Major personal injury class actions. Nationalisation of Operation by host government. Litigation AUD10M - AUD20M	≥ AUD10 million to <AUD20 million (Cardno share)	300
5	Single fatality Permanent impairment >30% of body to more than 1-5 persons.	Serious or extensive impact/s (<10 years) to land, biodiversity, ecosystem services, water resources or air.	Serious community health, safety or security impacts (>50 households) or human rights violations; extended disruption to people's lives (>100 households), extensive damage to >100 houses or structures/ objects/places of national cultural significance.	Serious national and international negative media attention. General public and NGO adverse reaction with interest from regulators (< 3 months). Structured campaigning from employees, NGOs or communities having a major impact on the <i>Business</i> reputation.	Prosecutions for criminal breaches resulting in jail terms for <i>employees</i> or agents or defendant to major civil litigation. Litigation AUD1M to AUD10M	≥ AUD5 million to <AUD10 million (Cardno share)	100

IMPACT TYPES							
Severity Level	Health & safety	Environment	Community	Reputation	Legal	Financial	Severity Factor
4	Permanent impairment >30% of body 1 person.	Major impact/s (<5 years) to land, biodiversity, ecosystem services, water resources or air.	Serious community health, safety or security impacts (<50 households). Multiple allegations of human rights violations; extended disruption to people's lives (>50 households); extensive damage to >50 houses; moderate irreversible damage to structures/objects/places of national cultural significance.	Adverse national media attention. General public and NGO adverse reaction with interest from regulators with no material outcome. Structured campaigning from employees, NGOs or communities having a major impact on the <i>Business</i> reputation.	Significant civil litigation. Litigation AUD500K to AUD1M	≥ AUD1.25 million to <AUD5 Million (Cardno share)	30
3	Permanent impairment >30% of body to 1 or more persons. Restricted or lost days due to injury or illness.	Moderate impact/s (<1 year) to land, biodiversity, ecosystem services, water resources or air.	Serious community health, safety or security impacts (<50 households). Multiple allegations of human rights violations; extended disruption to people's lives (>50 households); extensive damage to >50 houses; moderate irreversible damage to structures/objects/places of national cultural significance.	Attention from regional media and/or heightened concern by local community. Criticism by community, NGOs or activists. <i>Business</i> reputation adversely affected.	Breach of regulation. Litigation ≤AUD500K	≥AUD250,000 million to < AUD1.25 million (Cardno share)	10
2	Medical treatment injury or illness.	Minor impact/s (<3 months) to land, biodiversity, ecosystem services, water resources or air.	Minor community health, safety or security impacts (<25 households) or human rights infringements; inconvenience to livelihoods <6 months; moderate damage to <25 houses or community infrastructure; minor, reversible damage to structures/objects/places of regional cultural significance.	Adverse local public or media attention and complaints. Heightened scrutiny from regulator. Business reputation is adversely affected with a small number of people.	Minor legal issues and non-compliances with commitments.	≥AUD25,000 to <AUD250,000 million (Cardno share)	3
1	No injury / illness or low level, short-term injury / illness treated by first aid	Low-level impact/s to land, biodiversity, ecosystem services, water resources or air.	Single low level community health, safety or security impact; low-level inconvenience <2 weeks; minor, reversible, low-level disturbance or minor damage to a single house or structure/object/place of regional cultural significance.	Public concern restricted to local complaints. Low-level interest from local media and/or regulator.	Low-level legal issue.	<AUD25,000 (Cardno share)	1

LIKELIHOOD TABLE

- > Use this table to measure the chance of the impact at the severity, which is being used in the calculation of the *Residual Risk Rating*.

	BUSINESS	PROJECTS	
Uncertainty	Based on Cardno and industry experience and expected future conditions, the risk event:	Based on Cardno and industry experience and expected future conditions, with similar studies or projects, the risk event:	Likelihood Factor
Almost certain	Could be incurred more than once in a year	Could be expected to occur more than once during the project delivery	10
Likely	Could be incurred over a 1 - 2 year budget period.	Could easily be incurred and has generally occurred in similar projects	3
Possible	Could be incurred within a 5 year strategic planning period.	Incurred in a minority of similar studies or projects.	1
Unlikely	Could be incurred in a 5 - 20 year timeframe	Known to happen, but only rarely	0.3
Rare	Could be incurred in a 20 - 50 year timeframe.	Has not occurred in similar studies or projects, but could	0.1
Very rare	For a system failure: > This consequence has not happened in the industry in the last 50 years For a natural hazard: > The predicted return period for a risk of this strength/ magnitude is one in 100 years or longer	Conceivable, but only in extreme circumstances.	0.03

Appendix 2 - Critical control and material risk control assessment

Critical control assessment

A critical control design assessment must check that the design meets the *control* objective (Risk Management Control Design Assessment). A critical control operating assessment must consider verification results, actual or similar *control* failures, internal audit findings, external audit findings and management reviews if they are relevant (Risk Management Control Effectiveness Test documented in the Manual Test Plan).

RATING	EXPLANATION
Adequate	No open issues and the design, operation and verification of the <i>critical control</i> are appropriate, effective and achieves the <i>control</i> objective.
Deficient	The design or operation or verification of the <i>critical control</i> is not appropriate, effective or only partially achieves the <i>control</i> objective. Any open issues are treated as low or medium.
Significantly Deficient	The design or operation or verification of the <i>critical control</i> is not appropriate, effective or does not achieve the <i>control</i> objective. Any open issues are rated as high.

Issues identified in critical control design or operating assessments must be classified as below and remediated

ISSUE RATING	EXPLANATION
Low	The deficiency is unlikely to compromise the achievement of the <i>control</i> objective.
Medium	The deficiency is likely to compromise the achievement of the <i>control</i> objective.
High	The deficiency will compromise the achievement of the <i>control</i> objective.

Material risk control assessment

Each *material risk* must be assessed according to the categories below. The material risk control assessment must use *critical control* design and operating assessment results, actual *control* failure or a *control* failure that resulted in a similar *material risk*, internal audit findings, external audit findings, management reviews.

RATING	EXPLANATION
Well controlled	<i>Controls</i> , processes and performance requirements evaluated are adequate, appropriate and effective to provide reasonable assurance that risks are being managed and business and functional effectiveness objectives should be met.
Requires some improvement	A few specific <i>control</i> or performance requirement weaknesses were noted; generally however, <i>controls</i> and performance requirements evaluated are adequate, appropriate and effective to provide reasonable assurance that risks are being managed and objectives should be met. Certain <i>controls</i> may require improvement to ensure that the overall environment will continue to operate effectively.
Requires significant improvement	Numerous specific <i>controls</i> or performance requirement weaknesses were noted. <i>Controls</i> or performance requirements evaluated are unlikely to provide reasonable assurance that risks are being managed and business and functional objectives could be met. The <i>control</i> framework needs improvement to achieve a tolerable level of <i>risk mitigation</i> .
Uncontrolled	<i>Controls</i> and performance requirements evaluated are not adequate, appropriate or effective to provide reasonable assurance that risks are being managed and objectives are unlikely to be met. There is an urgent need for management to improve the <i>control</i> framework to achieve a satisfactory level of <i>risk mitigation</i> .