

Fundamentals of risk management for insurance purposes



A guide for engineering sole
traders and small business
engineering enterprises

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Important notice:

The material in this guide is in the nature of general comment and is not advice on any particular matter. No one should act on the basis of anything contained in these notes without taking appropriate professional advice upon the particular circumstances. Engineers Australia and Consult Australia do not accept responsibility for the consequences of any action taken or omitted to be taken by any person, whether a subscriber to this guide or not, as a consequence of anything contained in or omitted from this guide.

At the end of this guide you will know what to do from an insurance perspective

- Provide a statement of your business' objectives to demonstrate the nature of the work you do and the work that needs to be insured.
- Provide your insurer with evidence of the business' risk management system. Confirm the system is in place and that it is being used. Explain how risk procedures are integrated into your business processes at different levels.
 - Provide a comprehensive risk register/list, especially one that deals with the priority areas of focus identified by the insurance industry (see page 4).
 - Explain to your insurers what procedures your business has in place and show evidence of the integration of these procedures into your business processes at different levels. This can include how you limit your liability through negotiations with your clients or how lessons learned from previous projects are integrated into planning for future projects.
 - You can provide a certificate of currency if you have a third party audited risk management or quality assurance framework.



Some insurers may consider an ad hoc system which isn't audited in any way as being less effective than a third party audited risk management system.

In that case, you will need to provide a more detailed explanation of your risk management system and how it is used.

- Let your insurer know of training and credentials you and your staff have undertaken/hold.
 - List key staff that have credentials such as NER/Chartered/EngExec of Engineers Australia.
 - Note if your business is a member of Consult Australia.
 - Note what training your staff have had on risk issues, for example Consult Australia's Contracts for Consultants or Role of the Superintendent courses.
 - Note what experience your company has performing work that you do.
- Provide your insurer with a copy of your business' latest risk management review report/checklist. Provide evidence of professional development your engineers have completed for the calendar year on commercial risk management.
- If accessibility or affordability of PII is still an issue, extract related information from your work procedures and ask your insurers how they can help you to address focus areas and properly allocate risks on your typical projects.

This list should be used in conjunction with [Engineers Australia's PII checklist](#) to facilitate best outcomes for your insurance.

Who is this guide for?

This guide has been developed by Engineers Australia and Consult Australia in consultation with the insurance industry. This guide has been designed to assist engineering practitioners, particularly sole traders, and small business engineering enterprises, in the development of a risk management system for insurance purposes.

Engineers Australia is the peak member-based professional association for engineers, while Consult Australia represents the represents consulting businesses providing engineering, design and advisory. Together Engineers Australia and Consult Australia understand the pressure engineers face in accessing professional indemnity insurance.

This guide is primarily for engineering businesses as the Australian construction industry has high levels of disputation resulting in significant loss ratios for insurers offering professional indemnity insurance. Engineers are well practiced in dealing with technical risks but any engineering business operation (even as a sole trader) requires engineers to also deal with commercial risk, regulatory risk and reputational risk. Demonstrating an ability to manage these risks is important to improve the accessibility and affordability of professional indemnity insurance. It is important to be mindful there are other factors and market forces which impact the ability to obtain insurance.

This guide sets out some of the possible strategies you can use to demonstrate to your insurer that your business understands and has strategies in place to manage the full range of risks of your practice.

Demonstrating your capability to manage risks

Risk management is an area of knowledge with which all engineers should be familiar. When assessed by independent bodies for risk management, engineers can rely upon their credentialing to demonstrate their capability in managing risks. For example, one of the 16 independent practice competencies in Engineers Australia's Australian Engineering Competency Standards for the Chartered Engineer credential, and one of the five competencies which pertain to the statutory registration standard, is 'identify, assess and manage risks'.



Fundamentals of risk management for insurance purposes

The following elements form the basis of a risk management system for insurance purposes:

- Planning and risk identification
- Risk assessment and documentation – avoid, transfer or mitigate
- Developing a positive risk culture
- Communicating on risk
- Monitoring and auditing

These five elements should form the basis of your risk management system.

A **risk management system** sets out the foundation for risk management within a business and identifies, to the extent that is reasonably practicable, the risks (technical, regulatory, commercial, and reputational) that an organisation faces in the conduct of its business. The risk management system developed for any business will need to be tailored to the particular risk characteristics of the business.

Demonstrating that a robust risk management system is in place and is being used by all relevant practitioners in the business is seen favourably by insurers. This can positively influence both the accessibility and affordability of Professional Indemnity Insurance (PII) and how a claim is treated in the future. The absence or lack of consistent execution of a robust risk management system may make the process of a claim difficult, it can also make it difficult to defend against a claim.

This guide can be used in conjunction with other Engineers Australia and Consult Australia guidelines and documents on risk mitigation and risk management. These can be found on the [Engineers Australia](#) and [Consult Australia](#) websites.

Formal third party audited risk management systems

Some engineering businesses have in place and use a formal third party audited risk management system compliant with AS/NZS ISO 31000:2018 Risk management—Principles and guidelines; or AS/ISO9001 2016 Quality management systems (or similar). If so, the essential elements presented in this guide should already be addressed.

Other engineering businesses that rely on informal or ad hoc risk management systems may find this guide useful to develop a more robust risk management system, especially effective for insurance purposes.

Planning and risk identification

Diving straight into listing risks can lead to overlooking some risks or not considering the connection between risks. It is therefore suggested before diving deep on risk, to develop a clear statement of your business objectives in the short and medium-term. This statement is important to demonstrate the nature of the work you do and therefore the work that needs to be insured. A good objective communicates specific, measurable, actionable, realistic activities for execution. If you can clearly describe the objectives of your business this should help identify risks and link them back to your work.

Once you have developed your statement, move on to identifying and documenting all the potential risks your business could face. Having identified each of the risk activities relevant to your business, you will need to list them in order of severity and frequency. You might find risks can have multiple outcomes, for example the risk of internal fraud can be categorised as a compliance risk and an operational risk. When ordering the risks, adding a little context, such as how the risk could impact the business if realised, will help when reviewing the risk list or register.

The areas of focus listed below have been identified by the insurance industry as priority areas where the engineering profession could improve and better manage risk.

 Contract control	<ul style="list-style-type: none">– Scope of works– Terms of engagement– Contract liability and risk allocation– Procedures for variations
 Communications	<ul style="list-style-type: none">– Communications protocols– Roles and responsibilities
 Work procedures	<ul style="list-style-type: none">– Documentation and record keeping– Design complexity and technical innovation
 Competence	<ul style="list-style-type: none">– Having the right people undertaking the right role



Why this matters to your insurer...

Your statement of business objectives is important to demonstrate the nature of the work you do and therefore the work that needs to be insured. Your experience and qualifications in dealing with this work is also highly important.

A comprehensive risk register or list, especially one that deals with the priority areas of focus identified by the insurance industry and shows lessons learned from previous similar work, demonstrates your business understands risk.

This should assist the insurer to price the risk of your business more accurately.

Risk assessment and documentation – avoid, transfer or mitigate

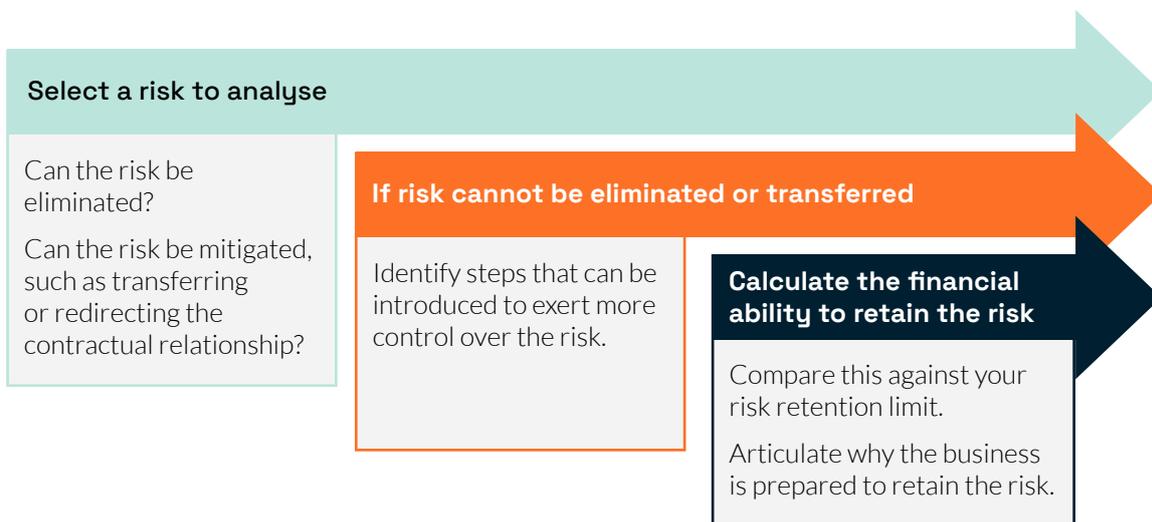
When all risks have been identified, it's time to think about how you will address those risks, including what severity and frequency of the risks the business is willing and able to accept.

You should be clear on:

- The unacceptable risks and how to avoid them
- Which risks can be eliminated or transferred and how to eliminate or transfer them
- What the manageable risks are and how to manage them

This will form the basis of your risk procedures. These procedures will ensure for every project you are considering the full range of risks and if they can be avoided, transferred or mitigated in the context of each project. Having procedures in place helps embed risk management and makes it a systemic practice.

Your risk procedure could include the following steps to be undertaken for every project:



Possible strategies to consider when preparing a risk management plan for each of these areas of focus can be found on the [Engineers Australia website](#). The strategies and documentation outlined are not exhaustive and should be tailored to individual engineering practices.

EXAMPLE: a key risk to your business when contracting with a private building or construction company is insolvency of that business. A good risk procedure for this could include checking the substance and reputation of all potential clients (possibly through ASIC/other information brokers) before signing a contract, including determining the internal capability and capacity of that client for the project. Check if there are any limits on size of job, financial security, coverage of insurance policy, how the company deals with conflicts of interest etc. These checks should be noted.



Why this matters to your insurer...

Your risk policies and procedures demonstrate you have embedded risk management into your business operations. It also shows your business understands risk and that you assess and manage risk.

This should assist the insurer to price the risk of your business more accurately.

Developing a positive risk culture

Risk management is an active task for your entire business and you need to develop a positive culture to encourage staff participation at various levels. If you are a sole trader, you will be the one responsible for managing all the risks.

For any issue to become a culture within the business you need everyone to buy into the issue. When it comes to risk it is important small businesses make the identification and communication of risk the responsibility of every team member. This means educating everyone on risk, making them aware of the types of risks they should be looking out for and talking about. Risk accountability and risk ownership are also important to a positive risk culture in any business. Non-compliance or disregard for a risk management system by employees can bring your business into disrepute, potentially causing you significant liability. It is the business' responsibility to ensure all staff are aware of the risk management system, the operational and business risks that apply to their role and that staff are adequately trained to perform their allocated functions.

All professional engineers also have an obligation to the engineering profession to maintain ongoing professional development. Ongoing development helps mitigate liability risk as you learn updated methods and engage with new ideas. Demonstration of competence in the identification and management of risk, within an appropriate framework in the professional practice setting, is required for Chartered membership of Engineers Australia.

While every team member is responsible for identifying and communicating risk, successful risk management requires specific people within the business to accept responsibility for and work together to assess, manage and monitor risk. In a single director or sole practitioner business, a single person may be accountable for ensuring risk is managed appropriately, along with all other management responsibilities. In a larger consultancy there may be multiple personnel who have direct responsibility or oversight of activities to manage risks.

It is important to establish a culture where people feel comfortable and confident in raising risks with their managers. Any risk management system should incentivise proactive identification and management of risk.



EXAMPLE: one of the ways to cultivate a positive risk culture is to have the right work procedures in place to cover all the aspects of your work e.g., design, project management, superintendence, feasibility study and more. For example, if your company designs complex building structures, ensure your work procedures for checking and verification are fully developed for the risks involved. Another example is, when one of your engineers is on site and is asked by the client to provide advice on an issue that may not be in the project scope, your engineers should know what procedure to follow (e.g., check the scope first and internally escalate the issue if necessary before providing any advice).



Why this matters to your insurer...

Having a positive risk culture demonstrates that risk is not an afterthought for your business.

Precedence exists in some areas of engineering and in other professions whereby Chartered status or Chartered equivalent and/or membership of an association like Consult Australia is viewed favourably by insurers as a risk mitigation strategy.

This should assist the insurer to price the risk of your business more accurately.

Communicating risk

Communicating risk information is important to the effective management of risk within a business and with external parties including clients. Strategies for risk communication are important to ensure your business' risk management processes are implemented at all levels and that the risks are shared appropriately.

Shared risks are those risks which require high levels of co-operation between stakeholders. Shared risks are particularly important when it comes to issues of client dependency and the influence or size of a client. For example, in the instance where an engineer has a significant dependency upon a single client there is the risk of undue influence being exerted by that client to determine favourable outcomes from the engineer's work.

EXAMPLE: managing variations is a common risk for both your business and your client (as well as other relevant parties) and can be challenging. The scope of works should be clearly defined and agreed with your clients, as well as establishing clear procedures for variations that need to be followed. When your client changes their construction program and requires an engineer to provide new design for temporary works, no matter the size of change required, the engineer should keep written records of the request and follow the agreed variation process. When the site situation is unclear for the variation to proceed, you need to communicate the risk clearly with your client and help them manage the shared risk.



Why this matters to your insurer...

Communicating risk both internally and externally demonstrates your business understands, plans and mitigates risk, but also that you proactively seek to manage shared risk with clients and other relevant parties.

This should assist the insurer to price the risk of your business more accurately.

Monitoring and auditing

Like any management system, risk management requires constant monitoring and review. To be effective, a system of periodic and annual audit should be introduced for your risk management plan and procedures. Develop a timetable for ongoing review of the risk management system and capability within the business.

EXAMPLE: as a part of the AS ISO 9001 accreditation, your business is required to have an annual surveillance audit by a third party auditor.



Why this matters to your insurer...

Monitoring and auditing your risk management system demonstrates your commitment to improving the risk management by your business.

This should assist the insurer to price the risk of your business more accurately.

