

Enterprise Risk Management (ERM)

In today's increasingly interconnected and volatile global landscape, businesses are facing an unprecedented array of risks. The environment is shaped by uncertainties and challenges ranging from United States-imposed tariffs and retaliatory measures, geopolitics, wars and tensions, evolving trade partnerships, policy uncertainty, competition for resources, cyber threats, climate-related disruptions, rising protectionist measures, as well as complex and dynamic regulatory environments. These factors are putting significant strain on globally integrated businesses. In response, countries are actively working to safeguard and diversify their supply chains, particularly in critical sectors such as energy, semiconductors, food and minerals.

Amid this global slowdown, India stands out as one of the fastest-growing emerging economies, supported by stable and business-friendly government policies. Many countries are strengthening their trade partnerships with India, recognising the nation as a key hub in Asia with immense potential for growth, investment and opportunity.

Even though the global market environment is expected to be volatile, it is also expected to present numerous opportunities. The level of risks and complexity may be high due to increased costs and global uncertainties. The need of the hour is to assess and select opportunities that align with the organisation's strategy and risk appetite, ensuring that growth is sustainable in the long term. Organisations that embed risk thinking into their core strategy are better equipped to pivot quickly, maintain stakeholder trust and capture opportunities even in turbulent times. As global uncertainties continue to evolve, robust and agile risk management is no longer merely a protective measure but a competitive differentiator.

To reduce or mitigate the impact of potential risks, both internal and external, on the company's performance, the company has developed an Enterprise Risk Management framework and process aligned with the business value chain and best practice recommendations such as ISO 31000 and the COSO framework. The company's risk management procedure captures and evaluates risks throughout the entire lifecycle of a project, from the bid stage through to project closure.

The risk management system at both bid and execution stages captures and shares risk data for bids and projects through various dashboards and reports. These tools support risk reviews, mitigation, monitoring, and reporting. Key parameters tracked include risk scores, high-risk bids or projects, and corresponding mitigation plans.

Measures and initiatives to deal with key risks include the following:

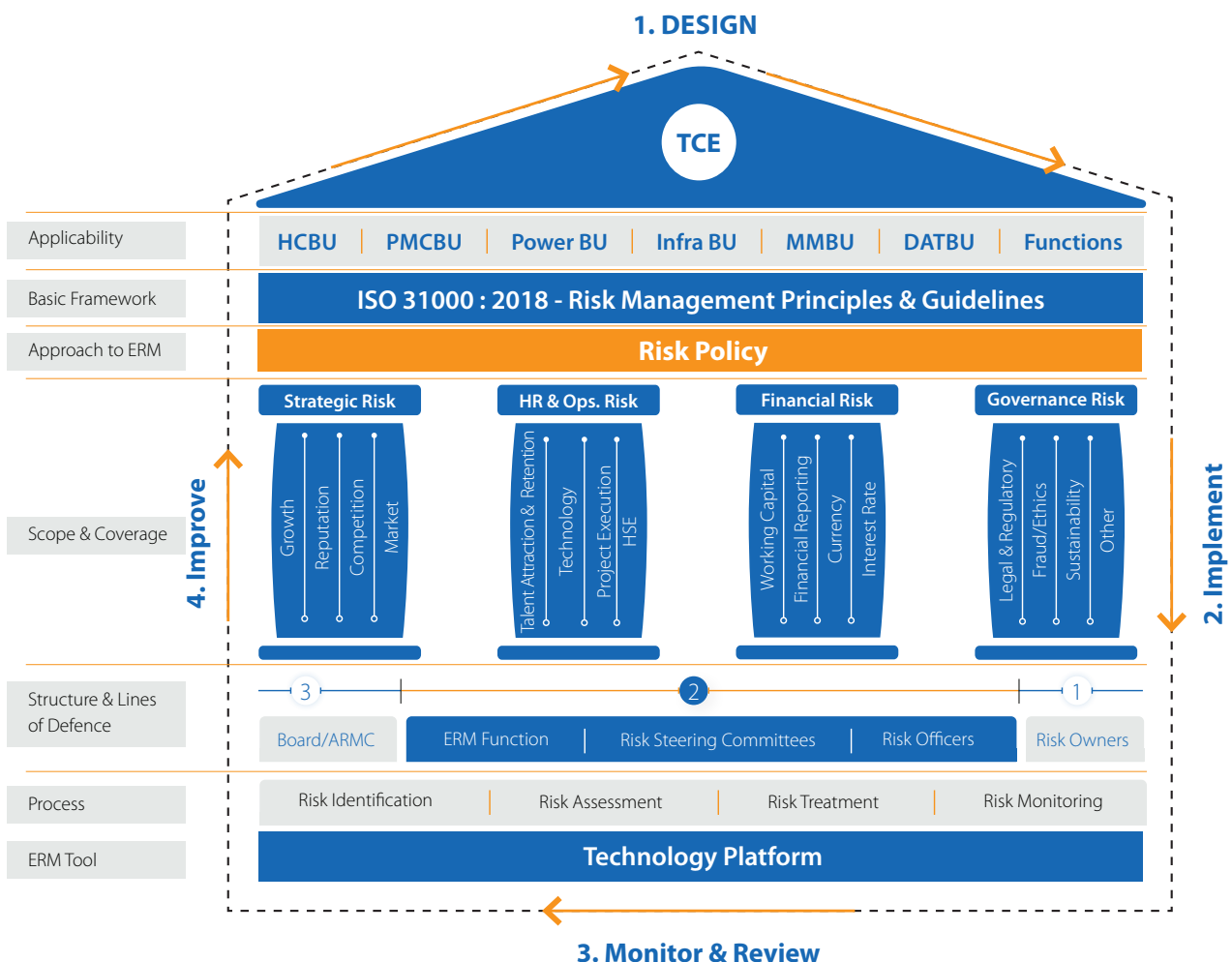
- A detailed review of bids based on threshold values at the bid stage and regular project reviews of key projects from each Business Unit
- Providing risk inputs to strategy, covering business and sector-wise updates in terms of risks and opportunities
- A risk challenge to the Annual Business Plan, taking into account potential risks that may impact the plan and estimating likely effects in terms of optimistic, pessimistic and base-case scenarios
- Portfolio analysis of sectors within a Business Unit to understand the balance between risk and return potential
- Preparation and sharing of country profiles with Business Units and the International Sales and Marketing Group, covering both risks and opportunities for informed decision-making
- Revision and update of Business Unit and functional risk registers

- Analysis of competition to gain insights into key strategic initiatives, financials and common areas of focus. This outside-in perspective helps the Business Units identify strategic focus areas and opportunities that provide a competitive advantage in line with the overall strategy of the organisation
- A Joint Venture partnership risk management framework has been developed to ensure that risks related to partnerships are identified and addressed throughout the lifecycle of a project
- Greater emphasis on strengthening the risk culture within the organisation by training key stakeholders, including Business Unit Risk Officers, Business Development teams and Project Management teams
- The Risk Management team at TCE also offers its services to external clients as a value-added differentiator, helping to build client confidence

TCE has also implemented a robust internal compliance process monitoring framework that identifies key process and system-related parameters. Each month, Business Units are assessed and rated against these parameters to evaluate their adherence to established processes and systems. This regular evaluation not only reflects the extent of compliance but also identifies areas for future improvement, thereby providing assurance over the integrity of the company's business operations.

These structured efforts have significantly strengthened the company's governance and risk processes, enabling better-informed decision-making. The ERM team periodically presents its findings and updates to the CMC and the Audit and Risk Management Committee of the Board. These presentations include risk assessments and the mitigation procedures adopted, enhancing the overall effectiveness of the risk management framework.

TCE Enterprise Risk Management Framework



Risk Management Organisation

The risk function is led by the Chief Risk Officer (CRO), under the guidance of the Managing Director, Chief Operating Officer, and the Board. The CRO is supported by a Corporate Risk team and Business Unit Risk Officers (BUROs) across the organisation. This collaborative structure ensures consistent deployment of risk frameworks and facilitates alignment of risk management practices across Business Units. These procedures also extend to functional and organisational levels, ensuring that risks are assessed not only at the project level but across Business Units and supporting functions. The organisation's Risk Management Framework is structured to provide a comprehensive, proactive and integrated approach to risk identification, analysis, mitigation and monitoring throughout the company's operations.

Risk Outlook and Resilience Planning

TCE operates on a global scale and faces a broad spectrum of risks across its business landscape. In the current environment marked by uncertainty and global disruption, the risk outlook for engineering consultancies has expanded significantly. It now includes not only traditional project and operational risks but also encompasses geopolitical instability, regulatory uncertainty, cyber security threats, and challenges related to environmental, social, and governance (ESG) factors.

As TCE continues to grow and diversify across sectors such as infrastructure, oil and gas, metals and mining, power, and digital services, the business is increasingly exposed to evolving risks driven by changing government policies, rapid technological advancements, and pressing climate related imperatives.

Resilience planning has therefore become a strategic priority. It is no longer viewed merely as a compliance requirement but rather as a proactive approach to ensure long-term business continuity and value creation. Building resilience involves the development of adaptive systems, flexible delivery models, diversified supply chains, and agile governance structures that enable the organisation to respond effectively to sudden shocks and long-term disruptions. By integrating risk management into all strategic and operational decision-making processes, TCE aims to strengthen its ability to anticipate emerging threats, respond to challenges swiftly, and protect stakeholder interests. This approach not only helps ensure continuity of service but also positions the company to take advantage of new opportunities in an ever-changing global landscape.

The key areas of risk and corresponding mitigation strategies have been outlined in the table below. These provide a comprehensive view of the risk landscape and the structured approach TCE has adopted to manage and reduce the impact of such risks across its operations.

Risk Categories and Mitigation Strategies

Risk Category	Key Risk Areas	Areas Impacted	Mitigation Strategies
Economic Risk	<ul style="list-style-type: none"> Demand for the company's services is mainly based on capital expenditure. Economic downturns, reduced public or private investment, and political and economic uncertainty may impact sectors in which clients operate. Rising inflation, geopolitical tensions, tariffs, supply chain disruptions, and energy price hikes may affect project feasibility or timely payments. 	<ul style="list-style-type: none"> Ability to secure new business and achieve revenue targets. Cash flow from ongoing projects may be impacted due to delays or cost increases. 	<ul style="list-style-type: none"> TCE operates across multiple Business Units, which reduces reliance on any one sector. Conduct thorough due diligence to ensure project feasibility and funding.

Risk Category	Key Risk Areas	Areas Impacted	Mitigation Strategies
Business Acquisition and Revenue Flow	<ul style="list-style-type: none"> External factors such as geopolitical tensions, economic fluctuations, wars, political changes, policy shifts, market volatility, and pandemics can influence business acquisition. Delays or reductions in new orders may hinder the achievement of revenue targets. Revenue generation might also be adversely affected by internal challenges such as the inability to deploy suitable manpower or inadequate planning. 	<ul style="list-style-type: none"> Decrease in available projects or order backlog. Adverse effects on revenues, cash flows, and profitability. 	<ul style="list-style-type: none"> Identify potential sectors, geographies, and business models for expansion. Develop new key accounts and customers, and explore entry into new areas through strategic partnerships. Strengthen customer engagement to build long-term relationships and repeat business.
Human Resources	<ul style="list-style-type: none"> Shortage of essential resources due to high attrition in specific Business Units (BUs). Challenges in attracting the right talent in a competitive market. Unforeseen events such as wars, pandemics, and climate-related disruptions affecting deployment of personnel to global sites. 	<ul style="list-style-type: none"> Delays in project deliverables. Reduced revenues and profits. Increased manpower expenses when urgent hiring is necessary. Employee health and safety concerns. 	<ul style="list-style-type: none"> Strengthening employee engagement initiatives. Implementing targeted learning and re-skilling programmes with adequate training. Adopting proactive recruitment strategies to attract suitable talent from varied sources. Creating a safe and secure working environment and ensuring employee well-being.
Locked Working Capital and Cash Flow	<ul style="list-style-type: none"> Many of the company's contracts follow milestone-based payment terms, which means that significant costs may be incurred before billing and collection actually take place. Cash flows from projects may vary considerably during the execution period, depending on factors such as delays and unforeseen events. 	<ul style="list-style-type: none"> Working capital may be affected, leading to increased financing costs. There could be periods of negative cash flow. 	<ul style="list-style-type: none"> Placing greater emphasis on contract and claims management to ensure project delivery remains profitable. Conducting thorough due diligence and accounting for locked capital or potential cash flow issues at the bid stage. Negotiating contracts with improved payment terms, particularly with private clients or where tender conditions allow changes.
Cost Overrun	<ul style="list-style-type: none"> Costs may increase in projects due to various reasons such as: <ul style="list-style-type: none"> Higher number of resources required. Delays in project schedule. Resources being underutilised while assigned to a project. 	<ul style="list-style-type: none"> Reduction in overall profitability. Potential disputes with clients. 	<ul style="list-style-type: none"> Conduct thorough reviews during the bidding stage and examine both primary and secondary data to identify risks, quantify them, and factor them into pricing. Adopt best practices in project and contract management to prevent cost overruns.

Risk Category	Key Risk Areas	Areas Impacted	Mitigation Strategies
International Operations	<ul style="list-style-type: none"> TCE's international operations are subject to additional risks and uncertainties, including unfavourable political developments and weak economic conditions. These may include unexpected changes in government or policies, geopolitical tensions, potential non-compliance with evolving regulations and industry standards, renegotiation or cancellation of existing contracts, social, political, and economic instability, and currency fluctuations. The acquisition of CDI Engineering Solutions may not deliver the expected business benefits in the United States as intended. 	<ul style="list-style-type: none"> Loss of business. Risks to the safety and security of personnel. Adverse impact on revenue and profitability. Effect on the company's global footprint. Financial performance of the consolidated entity. Delays or failures in expanding into key geographies or sectors. Challenges in integration of systems, processes, and culture. Regulatory hurdles due to changes in regulations, particularly relating to foreign investments or repatriation. 	<ul style="list-style-type: none"> Conducting and updating country risk analyses regularly to identify suitable geographies for expansion based on a Go or No-go assessment. Undertaking proper due diligence during the bidding stage with respect to country or location-specific risks. Avoiding engagement in countries or regions that are excessively risky, unsafe, economically unstable, or weak. Establishing systems and processes to ensure compliance with all key regulatory, governmental, and contractual requirements, standards, and laws. Maintaining proactive and frequent communication with the CDI team to ensure integration is carried out in the true spirit of partnership. Setting up a dedicated integration team to address and resolve any challenges that may arise.
Loss of Confidential Information / Data Violation / Breach	<ul style="list-style-type: none"> Although processes are in place to correctly identify and safeguard confidential information belonging to the company and its stakeholders, there is still a potential risk of loss or breach of such sensitive data. 	<ul style="list-style-type: none"> Exposure or loss of sensitive information. Negative consequences on brand reputation and credibility. Potential loss of ongoing or future business opportunities. 	<ul style="list-style-type: none"> Conduct regular training and awareness programmes to sensitise employees on the importance of information security. Ensure appropriate Non-Disclosure Agreements (NDAs) and confidentiality undertakings are signed by employees and business partners. Strengthen IT infrastructure and continuously monitor for potential breaches or vulnerabilities in security systems.

Risk Category	Key Risk Areas	Areas Impacted	Mitigation Strategies
Safety Risk	<ul style="list-style-type: none"> The company may be exposed to safety-related issues if quality standards are not followed or if processes are not properly adhered to during the design and review of safety mechanisms in the construction phase, as per contractual terms. Employees deployed at challenging or high-risk locations may face safety concerns due to geography-specific or geopolitical conditions such as conflicts or unsafe environments. 	<ul style="list-style-type: none"> Reputational damage. Risk of injuries or loss of life. Threats to employee safety. 	<ul style="list-style-type: none"> Internal process checks are conducted rigorously by an independent team to ensure that all quality standards and safety parameters are met. Relevant employees receive proper training on safety processes and protocols to maintain safety at every stage. A clear demobilisation strategy is in place to safeguard employees when situations require withdrawal. Before entering a new geography, detailed country profiles are prepared, including assessments of economic, political, security, legal factors and diplomatic relations with India. These profiles also include an evaluation of risks and opportunities to ensure that projects undertaken in international locations are both safe and aligned with the company's strategic direction.
Joint Ventures (JVs) / Partnerships	<ul style="list-style-type: none"> TCE undertakes certain contracts as a member of joint ventures, partnerships, and similar collaborative arrangements. There is a risk that partners may be unable to meet their contractual obligations to TCE or to clients. The company may have limited control over the actions of JV partners, including non-performance, defaults, bankruptcy, or breaches of legal compliance. 	<ul style="list-style-type: none"> Delays and compromises in the time and quality of project delivery. Loss of revenue and profitability. Increase in legal disputes, leading to reputational damage. 	<ul style="list-style-type: none"> Conducting thorough due diligence of JV partners during the pre-bid and bid stages, especially to assess financial capability, relevant experience, and track record. Establishing strong back-to-back contractual arrangements to ensure that liabilities and penalties are shared proportionately with the JV partner. Implementing a JV partnership framework and training staff to effectively manage JV-related risks throughout the life cycle of the project.

Risk Category	Key Risk Areas	Areas Impacted	Mitigation Strategies
Concentration Risk	<ul style="list-style-type: none"> Dependency on a few key clients, specific business models, geographies, or sectors could negatively affect revenue. Even with strong relationships and consistent performance by TCE, such clients might be forced to reduce, delay, or cancel contracts due to changes in their business environment. 	<ul style="list-style-type: none"> Business performance may become volatile or experience fluctuations. Over-reliance on any single factor could hinder the achievement of acquisition, revenue, and expected profitability or operational targets. 	<ul style="list-style-type: none"> Make conscious efforts to reduce dependency or concentration on any single client, geography, or sector. Develop new key or large client accounts. Strengthen business relationships with clients at various levels.
Liabilities	<ul style="list-style-type: none"> The company's project execution activities may result in liabilities as per the contract conditions. Force Majeure conditions may be activated. The company could be exposed to monetary damages, claims, or reputational risks due to deficiencies in service or any catastrophic event at the company's project sites. 	<ul style="list-style-type: none"> Unexpected costs to correct deficiencies may lead to an increase in overall project costs. Negative impact on profitability. Increased litigations and legal disputes. 	<ul style="list-style-type: none"> Adequate professional liability insurance is maintained at the organisation level. Proper due diligence is conducted during the bid stage to avoid taking on large liabilities, while strictly adhering to contract requirements and following professional best practices to prevent the imposition of penalties or liabilities. Project-specific insurance is arranged wherever there are particular requirements.
Intellectual Property (IP)	<ul style="list-style-type: none"> Although the company safeguards its intellectual property through contractual arrangements, formal registrations, licensing, and non-disclosure agreements, it may not be able to fully prevent infringement of its intellectual property. There is a risk that employees, either inadvertently or intentionally, may cause infringement of a client's or third party's intellectual property rights. Legal proceedings to determine the scope or enforcement of IP rights, even if successful, can be time-consuming and expensive. 	<ul style="list-style-type: none"> Unexpected and substantial financial costs. Significant use of senior management's time and attention. Negative effect on the company's reputation and brand value. 	<ul style="list-style-type: none"> Strengthening internal processes, contracts, and other mechanisms to protect the company's intellectual property, confidential information, and trade secrets. Providing regular training to employees on the importance of respecting both the company's IP and that of other stakeholders, and on the serious consequences the company could face in the event of any infringement.