Operational risk management has been part of the Australian coal mining industry for more than a decade. Over this period the industry has made major progress on the management of risks, including the prevention of catastrophic incidents. However, opportunities exist for proactively improving risk management, particularly around the need to more carefully consider the existence and effectiveness of controls for major incidents. To address these issues, the coal industry is making a step change in risk management by focusing on control effectiveness using bow-tie analysis. The development of the online RISKGATE body of knowledge is an integral part of this process.

Industry target

- Better assessment and management of high-consequence risks on individual mine sites
- Development of a site-specific approach to identifying the right controls for high consequence risks
- Collect, store and provide access to the industry's best practice risk management knowledge.

Industry investment

ACARP: \$3.87 million plus funding from individual member companies and MISHC.



Results

- An interactive online risk management system that helps mine personnel:
 - o Understand and control major occupational health and safety incidents and connect them to information about event-specific controls
 - Assess gaps in their own controls based on systematic consideration of incidents, including their causes and consequences
 - Conduct or develop risk assessments, audits, incident investigations and management systems via downloadable tools and checklists
- The system currently contains information on high-consequence risk areas in the Australian coal industry such as fires; strata control; ground control; tyres; isolation; collisions; explosions and explosives; manual tasks; trips, slips and falls (more in development)
- Establishment of a repository of the coal industry's best practice, risk management knowledge
- The identification of more than 16,000 individual preventive and mitigating controls for occupational health and safety initiating events.

Return on investment

 Reduction in the number of injuries, fatalities, equipment damage and environmental impacts, and the subsequent loss in production and reputation, by better managing high-consequence risks on site.

