Downer manages safety in rail business with holistic risk approach

Downer is a leading provider of services to customers in markets including Transportation, Utilities, Communications, Mining, Rail and Engineering, Construction and Maintenance. Downer employs over 19,000 people, primarily in Australia and New Zealand.

At Downer, they support customers through the life of their assets - from initial feasibility and design through construction, production and operations and eventual decommissioning.

Downer’s Rail division has over 100 years’ experience delivering total rail asset solutions for passenger and freight customers and has an extensive national footprint in approximately 20 key rail locations across Australia.

With partnerships with the world’s leading technology companies, Downer offers a complete range of rail solutions in rolling stock and infrastructure, helping customers to ensure they get the most out of their investment in rail assets. The company has delivered more than 1,150 passenger cars to Australian customers, including 624 Waratah passenger cars to Sydney Trains, Australia’s largest ever rolling stock project.

Downer also has strategic partnerships, including the Downer Bombardier joint venture, which supplies passenger trains for Queensland Rail and the Public Transport Authority (PTA) of Western Australia and provides maintenance services for all of PTA’s metropolitan fleet. Downer’s partnership with CNR, CRC and Hyundai Rotem includes the supply of electric multiple units and electric and diesel tilt trains.

We have developed the first Australian ‘live’ risk register that operates across disciplines, is enterprise-wide and national. Our framework is underpinned by our use of Active Risk Manager and the roll out of our SHREQ initiative has transformed our approach to safety and other areas of risk management. Business exposure is minimised, activities are targeted where they are most needed and, most importantly, safety is improving on an enterprise-wide basis. The potential benefits for the Australia rail industry are enormous.

Jason Breton, General Manager, Risk & Regulatory Affairs at Downer
An award-winning, innovative safety approach

Downer provides technical support, fleet planning and asset management services for its key rail customers through its Fleet Control Centre, a 24 hour one-stop-shop. As well as delivering effective through-life-support, the company is committed to using technology to reliably and safely extend maintenance cycles and increase the times trains spend in service.

The company has won safety awards for its unique holistic cross discipline and enterprise-wide approach to managing safety in its rail business. Downer’s approach, termed SHREQ (Safety, Health, Risk, Environment and Quality) applies contemporary risk management strategies to the identification of safety risks connected to key business operations and functions.

This covers all disciplines including health and safety, rail safety, environmental management (including stakeholder management) supply chain and procurement and quality. Active Risk Manager (ARM) from Sword Active Risk underpins the approach, providing real-time data to support all project and business operations, including the National Rail Safety Risk Registers.

The success of the framework and its implementation is clearly measurable in the results. Downer has seen more than 50% improvements on its Safety Interface Agreement (SIA) programme. Aligning processes with the latest regulatory requirements and monitoring performance with potential risks identified, has enabled the company to support facilities and projects to meet its customer requirements and statutory audits.

The Challenge - Identifying the need for an enterprise approach to risk

Historically Downer’s risk registers held information about workplace safety hazards in isolation from other environments and workplaces, which meant that risks were segregated from the wider enterprise and other projects. Head office compiled a report on high or critical risks only, which meant that low risks with enterprise wide implications, were lost.

The Risk team identified this situation and that safety risks were being treated as individual, discreet risks, with no benchmarking of controls or actions, understanding of the risk drivers, or how these might be connected to other parts of the enterprise.

This formed the basis for creating the Downer SHREQ framework, recognising and valuing that local knowledge was key to developing the framework across the business.

The Solution - Tracking and managing risk across the business

The company’s new approach moved from site-based paper documentation to a system that could develop local expertise to be shared nationally. Active Risk Manager enables the management of all risk across all business areas.

Traditional areas of work health and safety are identified, assessed, recorded and monitored. Strategic risk and opportunities; quality, including product safety, internal audit and resolution of issues and supply chain and procurement are all managed using ARM. Project risks are also identified and recorded, both during the tender phase and during negotiations of new contracts.

“The SHREQ framework allows for both risks within individual projects, as well as risks across the business, to be identified and mitigated. We achieve this using ARM which provides real-time data and transparency to our internal and external stakeholders,” said Breton.
Results - Eliminating risk across the enterprise

With the new approach, safety risks once held in ‘silos’ across Downer’s national rail facilities, are exposed via ARM. Risks are registered for each project and site in the usual way and ARM enables a comparison of all risks within a site to be filtered with only the highest risks identified.

Lower level project risks not rated as significant can still be identified and tracked at an enterprise level. This means that while considered low risk at the project or site level, their repetition may have the potential to risk harm to employees, the community or stakeholders if left unmitigated. Using the SHREQ framework helps to mitigate such risks.

Brett King, Downer’s Rail Safety Assurance Manager said; “ARM allows me to review rail events to proactively manage the risk associated with a failed control or newly identified cause. ARM also allows the business to review the links between root cause and systemic failures across multiple sites. This provides a proactive approach to controlling risks and implementing mitigation plans at other locations.”

Embracing a risk culture

As well as the deployment of ARM throughout the organisation, the success of the holistic approach in Downer can be attributed to its management team and the risk culture that the company has embraced.

Downer has appointed a team of SHREQ auditors for each project and each site, as well as a management team that is focused on continuous improvement. Risk rating the quality audits means that rail safety critical risks (called A risks) can be identified, as well as triggers for a potential risk event. Changes and corrective action can be made across the traditional ‘silied’ areas of system, supplier, product, work health and safety.

“Due to the connected nature of rail operations, we now have national visibility of the root causes underpinning key risks. They were not visible in the past, and, as a result, there was no opportunity for an enterprise-wide solution to be implemented. This is because risks were previously ‘hidden’ within their own discipline silo,” explained Breton.

Efficiencies have also been achieved through the new auditing processes, with less people required to conduct the audits as a result of the ‘joined up data’ provided using the cross-discipline approach.

Training and development is provided for all newly appointed SHREQ Auditors and the approach is communicated across the organisation, with regular updates on SHREQ activities and outcomes. Feedback from users across the organisation is that ARM’s ease of use has meant that more people are using the system across the business.

“This complementing the SHREQ framework other initiatives, including training and adoption by the management team at the strategic level are central to its success,” commented Breton. “It has positively impacted our organisational culture - demonstrated by the changes in behaviour, systems and attitudes.”

Improving safety and meeting legislation

Downer Rail recently reached 12 months’ LTI free - which means that there has not been an employee injured at work resulting in a day off, since January 2014, at any sites or depots.

“While safety risk management is fundamentally improved - we had a reduction of injury rates over the last 18 months since using the SHREQ framework - importantly risk management is also greatly increased across the business. The safety of Downer people, the community and the environment are at the core of our activities and operations, and ARM plays an important role in this,” concluded Breton.