DATASHEET Fatigue Risk Management Solutions

Our Risk-Based Approach to Managing Fatigue

About InterDynamics

InterDynamics is a leading provider of decision support and risk management methodologies and software. Servicing an international market, our extensive client base spans the spectrum of shiftwork and safety-critical industries, including transportation, mining, logistics, healthcare and manufacturing.

Fatigue Risk Management Solutions: Helping businesses identify, assess and manage the risks associated with work-related fatigue at both operational and management levels.

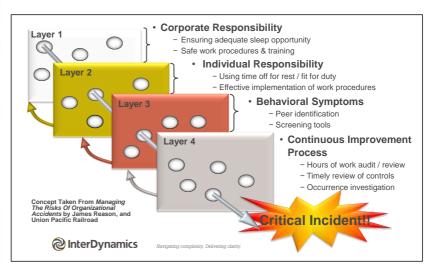
Decision Support Solutions: Helping organisations plan and schedule their business operations more effectively.

Our collaborative approach to customer service also helps us stand out from the crowd. Our experienced team can call on a wealth of problem-solving expertise to offer advice that is both practical and implementable.

Please contact us to find out more on this or our other offerings

Tel: +61 7 3229 8300 enquire@interdynamics.com Many organisations faced with the challenge of managing fatigue can easily become daunted by the prospect. Impairment associated with fatigue can be difficult to detect, and harder still, is judging the level of impairment that could present a danger. Added to the complexity of individual differences in experiencing fatigue is the context for individuals (e.g. job type, activities, environment, time of day, etc.) and the degree to which this is vulnerable to fatigue.

Given the diverse factors needing to be taken into account in managing workrelated fatigue, a risk-based approach that gives consideration to models like James Reason's 'Swiss Cheese' model is often recommended.



The Defences-in-Depth model (Dawson & McCulloch, Sleep Med. Rev. 2005) applies James Reason's model to the fatigue context, targeting prevention through a series of barriers, safeguards, and defences. InterDynamics has included these concepts and ideas in its <u>Risk-Based Approach</u> to managing fatigue, summarised in the following diagram.



Managing Work-Related Fatigue Risks	Scope	Implementation	Supporting InterDynamics Services & Products
1. Determine: Fatigue Risk Profile	Risk Profile of Hours of Work planned, unplanned / overtime, actual hours, standby	Diagnostics of planned & actual Hours of Work	FAID® Quantum Diagnostic Reports, Implementation of FAID Tools, Data Analysis
	Risk Profile of Individual commuting to/from work, sleep disorders, lifestyle	Review individual experience and self reports of fatigue	Staff Surveys, Sleep Studies, Discussion group facilitation, Fatigue assessment / monitoring
	Risk Profile of Job Type / Role time on task, environment, demand of task	Risk Assessment of day-to-day activities in the context of fatigue	Fatigue Hazard Analysis (FHA) Risk Assessment Workshops & Reports
2. Protect: Against Fatigue Risk	Adequate treatments / controls Prepare for emergencies & unplanned work Fatigue risk assess changes	Fatigue Management Policy, Plans Procedures & operational work instructions Supporting supervisory, team & individual management strategies	Transition planning & support, Managing Fatigue education, Review Fatigue Management Policies, Plans & Procedure development, FAID Quantum Roster Tool / Shared Object Library
3. Review: System & Occurences	Fagitue occurences, Causal & risk factors, Work plans and procedures, New information	Review / investigate fatigue reports, existing controls, business process & changes	FRMS Review & Graiding (GRAID FRMS), A&I Investigation (GRAID IT), FAID Quantum Hours of Work Audits
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InterDynamics' approach recognises the development of an appropriately informed plan to manage fatigue (a Fatigue Management Plan) as foundational to the effective implementation and on-going improvement of a Fatigue Risk Management System (FRMS). Staff engagement and consultation is key to a smooth FRMS implementation, as cultural change is often required for the organisation to transition its perception and management of fatigue in line with the organisation's fatigue policy commitment.

Our experience assisting clients of all sizes across various industries and circumstances has brought insights into the most effective organisational team structures and project plans for successful implementation.

The aim of the Risk-Based Approach is to provide our clients with the best possible tools and resources to manage fatigue risks. It is founded on four pillars: consultation, staff engagement, shared responsibility and effective risk management.

This comprehensive methodology includes three key steps:

- 1. Determining the fatigue risk profile of the organisation
- 2. Protecting against unacceptable fatigue-related risks
- 3. Reviewing systems to ensure protection measures remain adequate

Suggested FRMS Scope and Implementation activities are outlined in the second and third columns of the diagram, respectively. The last column presents supporting InterDynamics services and products that facilitate the FRMS journey. Deliverables and findings from each implementation activity give additional insight into the organisation's specific requirements for managing fatigue effectively, as well as providing valuable input into the Fatigue Management Plan and supporting Work Procedures.

InterDynamics' Risk-Based Approach to managing fatigue targets improved safety and performance as key outcomes of the FRMS.

InterDynamics and Zurich Risk Engineering have developed an organisational fatigue risk grading system (GRAID[™]) to provide senior and operational managers with a systematic methodology to ascertain the quality of their organisational risks associated with fatigue. In conducting FRMS reviews, InterDynamics can provide a valuable third-party perspective on the depth, breadth and relevance of your Fatigue Risk Management System.

