



## Welcome to the April 2010 edition of the R2A Newsletter

The 2010 R2A Think Tank was held on Friday 5 February at Radisson on Flagstaff in Melbourne. R2A Director Gaye Francis was in the chair. The primary purpose of the gathering was to provide a forum to optimise the collective IP of R2A and our Associates and also strengthen and broaden mutual relationships.

After an individual activity round up, the bulk of day discussed particular 'hot topics' of interest. These included: the rise of the precautionary due diligence over the hazard based risk paradigm and especially the formal support from Energy Safe Victoria to scotch the use of target levels of risk (magic numbers) approach to risk management; offshore oil and gas and mining safety cases and the transition to the due diligence approach in WA; sustainability management plans for greenfield sites; and differing state interpretations of very toxic and toxic major hazard schedules and how this means that an identical business could be a MHF site in one state and not in another.



*Dr Frank Stoks, Ren Mahant, Richard Robinson, Mike Dean, Janelle Adrain, Gaye Francis, Warren Elmslie and Michael Hall.*

There was general agreement that the term Engineering Due Diligence (used by R2A as a high level descriptor) could be misinterpreted although even the lunchtime discussion was unable to reveal a better one. The idea that due diligence needs to be engineered into material infrastructure was undoubted. The idea that the concept of due diligence will be re-engineered as the concept rolls into the safety case regime was also considered.

## International Women's Day Breakfast



### International Women's Day

Over 200 professional women attended the inaugural Women in Engineering International Women's Day breakfast at Zinc Federation Square on Tuesday 9 March 2010.

The theme for the breakfast was professional women working together to make it so. Panel members (L-R) Ellen Williamson, Partner DLA Phillip Fox; Professor Jayne, President Academic Board Monash University; Melanie Pollack, Engineering Group Manager Holden; and Meredith Rogers, Director Partnership Solutions, provided a very interested audience with their personal views on leadership, women in professions that are primarily dominated by males and their interactions. They also provided an insight into how we can all have successful, fulfilling careers and home lives. Gaye Francis, R2A Director, facilitated the session.

The event supported the White Ribbon Foundation which works towards the elimination of violence against women. Board member Dr Leigh Gassner former Assistant Commissioner for the Victorian Police provided the audience with an informative presentation on the work of the Foundation.

## Risk Management - 2 day Public Course

Richard Robinson continues to present the Risk & Liability Management (Engineering Due Diligence) two-day public short course on behalf of Engineering Education Australia. Scheduled dates for 2010 are as follows:

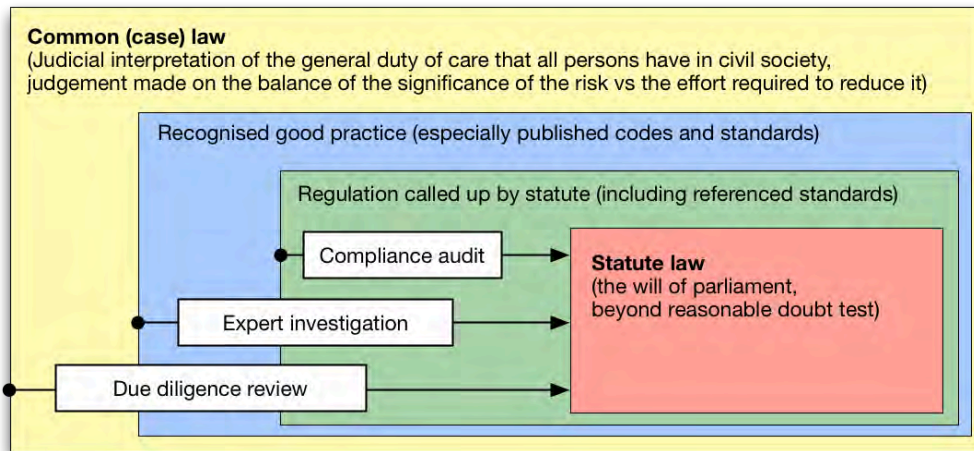
Adelaide: 4-5 August  
Brisbane: 26-27 May, 20-21 October  
Canberra: 16-17 June  
Gladstone: 21-22 July  
Hobart: 7-8 July  
Melbourne: 5-6 May, 3-4 November  
Perth: 23-24 June, 17-18 November  
Sydney: 23-24 March, 25-26 August

See the EEA website [www.eeaust.com.au](http://www.eeaust.com.au) for further details and registration.



## What is Due Diligence?

Industry appears to be quickly adopting the term due diligence, however there are various interpretations of what this constitutes. It appears that there are currently three primary approaches to risk studies: compliance audits, expert investigations and due diligence reviews. Conceptually, the three are shown in the diagram below.



Compliance audits focus on meeting statutory and regulatory requirements. It is a minimum necessary condition to obtain, for example, a license to trade. Major hazard facilities, pipelines, power utilities, ports etc are all required to achieve this standard. Whether the law makes particular sense is not relevant. If parliament (and the regulator empowered by parliament) requires that it be done then that's how it will be.

Expert investigations rely on particular domain expertise. A specialist tries to ensure that good practice, especially those ideas contained in recognised published codes or standards, is in place. It can include compliance audits, particularly if the relevant standard has been called up by statute. But the process readily generates special languages and terms as the process relies on experts talking to other experts. Concepts like ALARP emerge, the meaning of which can change as the experts wrestle with the issues (for example, disproportionality).

Due diligence reviews commence with the common law duty of care and includes a review of recognised good practice and regulations. It interprets the experts' language in legal terms and uses legal counsel to confirm that the statutory obligations have been met. The proposition to counsel is actually quite simple: If we have an arguable case at common law (tested on the balance of the significance of the risk vs the effort required to reduce it) then will we have met our obligations under statute law (tested on a beyond reasonable doubt basis?).

Retrospectively extending studies to include a broader scope once a review has started it is very difficult if not impossible. Stakeholder expectations vary depending on the type of review and this ultimately impacts the overall outcome.

## Availability Profiling

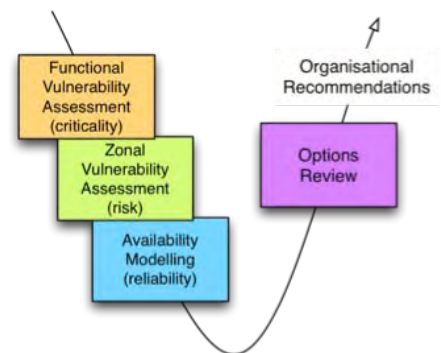
Senior decision makers and managers are always seeking improvements to plant efficiency and productivity. Staff are encouraged to present them. But the value of the proposed upgrades is not always transparently presented in a way that senior staff can readily understand and so determine the best course of action.

Availability profiling combines criticality, risk and reliability analyses to optimise the effectiveness of the whole system by using a top-down approach that is readily understood by primary decision makers. It defines the critical issues and identifies and evaluates appropriate corrective actions.

R2A has successfully conducted availability profiling for coal mines, water treatment plants upgrades, freeway tolling systems, boiler and power station upgrade options analysis, water authority supply networks, bank and broker computer centres and network black start requirements, amongst others. This has been achieved by facilitating a process in which your people (assisted by external experts, if required) develop an understanding of the issues and come to a well-documented set of conclusions with broad stakeholder involvement and understanding.

Typical studies range between \$15k - \$25k (plus GST and disbursements at cost) and are generally completed during a week on site and a week to prepare a draft report.

If you think such a study will benefit your organisation, contact Richard Robinson on 03 8631 3402 to discuss further. R2A also offers a 1-day workshop on Availability Profiling. Upcoming dates are 13 April in Brisbane and 10 August in Perth.



Top down approach to required depth