

R2A REVIEW

A WRAP UP OF ENGINEERING DUE DILIGENCE



R2A PRACTICE UPDATE - OCTOBER 2016

As the end of the year approaches, we are completing a number of projects investigating the roles of critical infrastructure and essential services, the effects of their disruption, and the responsibilities of their operators and regulators. We are also undertaking a safety assessment of inflatable offshore waterparks, a very interesting project leading into summer.

OUR PRACTICE

R2A is an independent firm of Consulting Engineers specialising in Due Diligence Engineering.

Read the R2A white papers on our primary areas of practice:

[PROJECT DUE DILIGENCE](#)
[OPERATIONS DUE DILIGENCE](#)
[SAFETY DUE DILIGENCE](#)

Or read our [corporate profile](#).

Richard will present this week at the [Dust Explosions Summit 2016](#), discussing dust explosions and the (model) WHS Act, and the implications and requirements of duty holders. Richard will also present the EEA Engineering Due Diligence workshop in Melbourne this month, and the dates are listed below.

Tim presented at the Asset Management Council's Melbourne industry event on 11 October, speaking about the role of due diligence in asset management. Tim has also become a member of the Victorian Committee of EA's College of Leadership and Management, and is looking forward to promoting the College's focus on non - technical Engineering.

If you have a project you would like to discuss, please do not hesitate to call us on 1300 777 333.

WORKSHOP DATES

R2A is partnering with Engineering Education Australia to deliver a two day Due Diligence workshop.

2016

MELBOURNE 26-27 OCT

2017

BRISBANE 08-09 MAR

SYDNEY 04-05 APR

MELBOURNE 03-04 MAY

WELLINGTON 24-25 MAY

PERTH 21-22 JUN

BRISBANE 23-24 AUG

MELBOURNE 25-26 OCT

Workshop objectives and testimonials can be found [here](#).



LAW AS ENGINEERING EVENT - BOOK NOW

R2A has the pleasure of hosting English legal academic and former MP Professor David Howarth of Cambridge University.

Professor Howarth will be presenting on the subject of his recent book: [Law as Engineering](#).

His essential point in his book is that these days most lawyers don't litigate. Rather, they design social constructs such as contracts, companies, treaties and wills to facilitate their clients' needs. This is similar to how engineers design physical constructs to satisfy their clients.

Engineers Australia, Victorian Division is hosting the presentation at the Innovation Hub, on Tuesday, 7th February, 2017. 11.00 for 11.30am start.

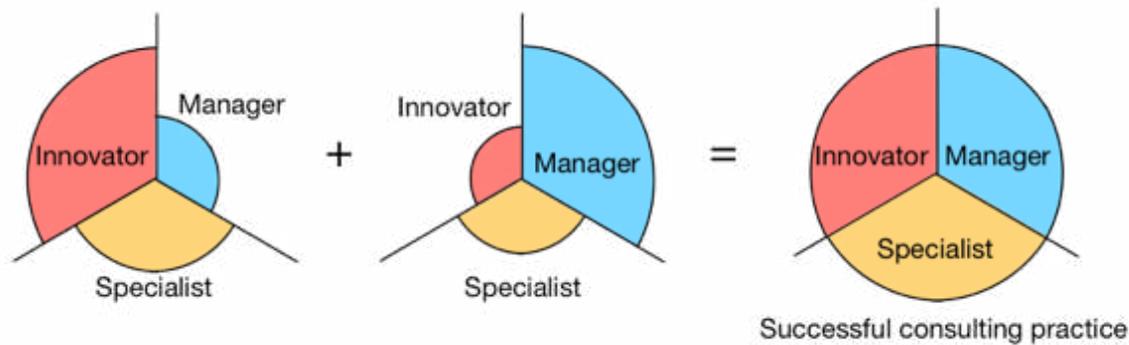
[Find further details and book tickets here.](#)

R2A DUE DILIGENCE 10TH EDITION UPDATED TEXT

The [10th Edition Updated](#) text represents our transition from a text on risk and reliability to a complete engineering due diligence approach.

The need for a 2016 update is based on the volume of new legislation in Australia in the past 18 months and recent case law.

Purchase or find more information on our new website [here](#).



SPECIALIST, MANAGER OR INNOVATOR

Engineers just may have more in common with artists than they realise.

Young engineers are often stymied by the many career paths available to them. One way to select the best path is to know your strengths.

Engineers can excel as specialists (like the first violinist for the MSO), as managers (like the conductor of the MSO) or as a creator or innovator of new goods or services, like a composer.

They can also be good at any two sometimes all three, although this is actually comparatively rare.

Read more [here](#).

APTO PPE

R2A is proud to be involved with [Apto PPE](#), a new entrant in the PPE market, supplying fit for purpose female workwear, including a maternity range.



PARTNERSHIP

R2A is a proud supporter of the [Aboriginal Literacy Foundation](#).





EEA R2A DUE DILIGENCE WORKSHOP

We have one remaining date for the Engineering Due Diligence workshop held in conjunction with Engineering Education Australia.

The final 2016 date is -

* Melbourne - 26 & 27 October

The 2017 dates are -

- * Brisbane - 8 & 9 March
- * Sydney - 4 & 5 April
- * Melbourne - 3 & 4 May
- * Wellington, NZ - 24 & 25 May
- * Perth - 21 & 22 June
- * Brisbane - 23 & 24 August
- * Melbourne - 25 & 26 October

This workshop provides decision-makers with the tools to implement due-diligence processes ensuring the laws of nature are managed to the satisfaction of the laws of man. This includes project, safety, environmental and financial outcomes.

Book [now](#).

CONNECT



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TIMELINE OF KEY AUSTRALIAN RISK CONCEPTS AND EVENTS

R2A's recent work on dam safety led us to develop a timeline of key risk and due diligence concepts and events as they have appeared and influenced Australia. This goes some way to explaining the current divergence between the AS/ISO 31000 hazard-based risk management approach, and the common law and WHS Act precaution-based due diligence approach.

In essence, both approaches attempt to demonstrate risk equity, that is, that no one is unreasonably exposed to risk. The key difference between the approaches is that the due diligence approach focuses on ensuring a minimum acceptable level of protection is in place, in the form of precautions. This is an inherently objective test - either the precautions are in place or they are not.

In contrast, the hazard-based approach aims to show that a maximum tolerable level of risk is not exceeded, an inherently subjective approach which requires (amongst other things) accurate predictions of the probability of complex potential future events.

Both of these approaches have the primary aim. risk equity. However only precaution-based due diligence approach was developed and has continued to be accepted by the courts and parliaments of Australia, as clearly shown in the timeline.

Read more [here](#).