ENGINEERS AUSTRALIA

OPPORTUNITY

QUARTERLY NEWSLETTER - August 2019

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President's Welcome

Hello, colleagues in RISK and welcome to OPPORTUNITY Issue 2 vol. 4. Thank you again to those who have contributed to this and past Newsletters and also to those that are still working on items for future newsletters.

The REBOK Project Steering Committee has met several times this year under the new leadership of Gaye Francis. A big thank you to Gaye for taking on this responsibility and providing the energy to get the REBOK ready for a formal release.

If you have recently visited the Website, you will have noticed that the REBOK has been released from the "Under Construction" phase.

REBOK will continue to evolve with comments and/or contributions of RE knowledge from those members visiting the REBOK. Here is the link

Each RES Chapter is contributing to the REBOK through locally hosted CPD events many of which have a webinar option so that they can be viewed nationally. This edition of OPPORTUNITY has an overview of the upcoming national CPD program.

*The Risk Engineering Society is a Technical Society of Engineers Australia.
For Engineers Australia members, please remember to nominate your membership of RES when you renew your membership.

Please be understanding with us while we deal with the "uncertainty" of our expertise in delivering these national online and locally hosted events.

The RISK/PCC2019 Sydney conference was held in May and is acclaimed as an amazing International RISK event. Congratulations to the RISK/PCC2019 Project Team lead by Pedram Danesh-Mand.

We look forward to continuing to receive Risk Engineering news of interest from our wider membership for publication in remaining 2019 editions of OPPORTUNITY. Please visit or post discussions on the RES LinkedIn Group. If you are not connected to the RES Group here is the link to the discussion page link

Regards

Geoff Hurst (President)

100 CELEBRATING OUR CENTENARY

RISK ENGINEERING SOCIETY

WEC 2019 20-22 NOVEMBER, MELBOURNE

Reflections on Safety

Good risk management can make an invaluable contribution to the success of construction & engineering projects. Geoff Hurst outlines some good practices in project risk management.

Following on from the April 2019 edition of 'OPPORTUNITY' Part 6 will cover:

Dealing with Complexity

The Safety Leader should move on from the status quo and choose to deal boldly with the contemporary understanding of safety in in all aspects including those that contribute to making this a complex area to work in.

Fad programs, buzz words and campaigns are initiatives of the past and have had their day. For Safety to be of real benefit to society and organisations and further, to manage the issues, the Safety leader needs to understand the challenges of the present and the future, rather than of the past.

The Safety leader and for that matter the profession as whole needs to look at what models can be created that are capable of analysis, and meet the requirements of the specific context in which they operate.

We should continue to explore alternate areas of thought, have an inquisitive mind and seek to better understand the science of safety. The first and best step for the leaders in the area is to become deeply involved in the science of safety, its teaching methods, and its learning outcomes for practitioners

REBOK - Risk Engineering Body Of Knowledge

The Risk Engineering Body Of Knowledge (REBOK) will help explain the essence and boundaries of risk engineering by capturing and updating the concepts, skills and practices that are generally accepted and known within the field. Membership of this online community is free and open to the public.

Our wiki is a gateway to REBOK, and incorporates links to existing bodies of knowledge and resources for risk engineering and related fields and professions. We also maintain a list of key definitions and frequently asked questions, as well as a collection of case studies and practice notes. This will be complemented by webinars to explore topics of interest and encourage discussion and knowledge sharing through a LinkedIn group.

REBOK is a living and continuously developing project. We invite you to help drive its success and value by contributing your expertise and experience through posts, comments and discussion topics. Please email rebok@engineersaustralia.org.au if you would like to suggest topics or become a contributor.

Click here to join the community

REBOK Schedule of Events for 2019

State	Proposed Event Title	Event Type	Proposed Location	Proposed Date	Event Notes
QLD	What's happening in risk engineering research?	Seminar	EA - Hawken Auditorium	August	Short presentations by higher degree research candidates on their work in risk management and its potential applications.
NSW	RES Contingency Guideline Edition 2	Learning Session		24 September, 2019	Pedram is delivering.
WA	Autonomous Systems: What are the risks			September/October	
VIC	Unchecked & Not Scrutinised Equipment in the Market: What are the Risks?	Co-hosted with the Joint Victorian chemical Engineering Committee and Mechanical College.		16 October, 2019	In this connected world, equipment and materials are available from across the globe for use in projects. What is being done and can be done further to ensure control of the risks associated with scrutinising these products?
NSW	Decision Trees and its Applications in Risk Engineering Based Decision Making			27 November, 2019	Gareth ? Will deliver
VIC	Risk and the Engineer Entrepreneur	Co-hosted with the Engineers Without Boarders. Joint Victorian Chemical Engineering Committee and Young Engineers Australia	Engineers Australia office	11 December, 2019	The age of the "Start-Up" enterprise is resulting in a growing number of engineering entrepreneurs. This event will use a panel discussion to present some of the associated risks and how these are being engineered by selected entrepreneurs.

Risk Engineering & Project Controls Conference May 2019 Wrap Up Report

By Pedram Danesh-Mand, RES NSW President

The 2019 Risk Engineering and Project Controls Conference (jointly held by Risk Engineering Society (RES) and Australian Cost Engineering Society (ACES), 15-17 May at Sydney International Convention Centre) impressively included 5 technical workshops and more than 50 international and local keynote and invited speakers as well as a number of interactive panel discussions through 4 streams of 'Risk Engineering & Culture', 'Planning & Scheduling', 'Project Controls' and 'Contract & Commercial'. The event was well attended by about 300 delegates from across Australia and globally, including USA, UK, Canada, France, Singapore, China, Spain and Middle East.

Most of the presentations focused on different aspects of effective and efficient risk engineering and management, risk-based decision making, cultural and soft skills, integrated project controls and contract and commercial management across a wide range of projects and sectors.

Despite decades of international studies and efforts to predict or reduce project cost overruns or schedule delays, including research as far back as Merewitz's 1973 study of 66 road and rail projects in USA or Castle's 1985 study of 17 mining projects, major infrastructure projects around the world continue to be significantly affected. Project owners, top contractors and the wider community all benefit when infrastructure projects are delivered on time, within the budget, safely and with the required quality and risk exposure.

Here in Australia, recent challenges faced by many infrastructure projects within the Transport and Energy Natural Resources (ENR) sectors are compounded by the collapse of a number of major construction firms. We see similar cases around the world. Together, these events are placing enormous pressure on the industry to reassure the public that the profession and market can deliver these projects successfully.

By gathering more than 300 delegates from about 100 different organisations, a number of recent case studies were reviewed including Cross-rail in UK and Light Rail in Sydney as well as many interactive panel discussions over two days. The conference could successfully shared and highlighted the importance of risk engineering and the risk-based project controls profession as a central part of the solution. Encompassing all the competencies for control of the cost and time, estimating, budgeting, planning, scheduling, trend analysis, risk management, change control, forecasting and effective and transparent communication within the PMO and the wider organisation .

Risk Engineering & Project Controls Conference May 2019 Wrap Up Report (Continued)

Topics included:

-Artificial Intelligence (AI) in Planning & Scheduling of Major Projects;
-Digital Engineering and BIM in Transport Projects;
-Contingency Determination, Allocation and Control;
-Metrics and Data Visualisation on Major Projects;
-Technology and Data-driven Decisions on Planning & Delivering Infrastructure Projects;
-Emotional Intelligence (EQ) in Effective Risk Management;
Complex Project Risk Management;
-Infrastructure Insurance Cover Options; and many more.

The 2nd Edition of Contingency Guideline

To help organizations more fully quantify the possible time and cost consequences and recognize their overall risk exposure in delivering major infrastructure projects, the Risk Engineering Society (RES) has also published its 2nd Edition of Contingency Guideline. The Guideline defines commonly-bandied terms such as 'cost overrun' and 'schedule delay' and details their impacts. If you would like a complimentary copy For EA & RES members, please send an email to:

PDaneshMand@kpmg.com.au

The conference was not just all talks and workshops: On the Thursday we had a social networking event in the SPONSOR ZONE followed by the ALA DINNER where we were treated to entertainment from the STRING SIRENS and an inspirational presentation from **Dominic Slow EQ** Strategist concluding with interesting PROJECT TRIVIA with lots of prizes and laughs.

With a number of announcements including World Engineers Convention (WEC) 20-22 Nov 2019 in Melbourne, possible future RISK-PC **2020** in Sydney and RISK-PC **2021** in Brisbane, the conference was successfully concluded on 17/May/2019 after more than 30 sessions of planning!

Cleopatra, ENGENEOHS, Hexagon PPM, ICCPM, InEight, KPMG, Metropolis, Palisade, PMO Solutions, PMWeb, Prescience, Project OnTrack, Risk Decisions, Safran, Scenario, ScheduleReader, Sebenico, Sword, TBH, UNSW, UTS

A big thank you note from both RES, ACES and AACEi committees to our members, all attendees, government agencies, speakers, EA officers, venue managers and everyone who helped us to have such a great time together. Special thank you note to all our sponsors, exhibitors and supporters too. Well done everyone and see you at the next RISK & Project Controls Conference. Meanwhile risk wisely for opportunities and have enough contingencies! If you want to know more about what RES does or you would like to join us and support your profession, please contact us on: *res@engineersaustralia.org.au*

PEWG - Project Leadership and Management Working Group

The Risk Engineering Society is teaming up with the College of Leadership and Management (CLM), SESA, AMC and ACES to take the lead for the profession in Project Leadership and Management..

The CLM has supported the Societies in the formation of a Project Engineering Working Group (PEWG) to provide advice to Engineers Australia as the trusted voice on the practice of engineering leadership and management in complex projects. knowledge, professional practice, case studies with lessons learned and academic research for the betterment of understanding and successful practice of the project engineering disciplines.

RES is looking for an appropriately qualified member to represent the views and interests of RES on the PEWG. Please contact Geoff Hurst via an email to receive a copy of the Draft Terms of reference for this Working Group. res@engineersaustralia.org.au

RES COMMITTEE

Geoff Hurst (President)

Brian Truman (Immediate Past President)

David Cox (Treasurer)

Pedram Daneshmand (Sydney)

Subhash Dang (Canberra)

Timothy Rigby (Victoria)

Praneet Mehra (Weston Australia)

Email: res@engineersaustralia.org.au

Website: https://www.engineersaustralia.org.au/risk-engineering-society

CELEBRATING OUR CENTENARY

WEC 2019
20-22 NOVEMBER, MELBOURNE

Risk Engineering Society

Email:res@engineersaustralia.org.au

www.engineersaustralia.org.au/risk-engineering-society/