



Research Briefs

From the CEO

Happy 2009! I hope that everyone had a great break and is refreshed and ready for the New Year.

Having just returned from a trip to the UK, France and North America, it has become strikingly clear to me that the CRC for Rail Innovation is not alone in facing the challenges related to issues such as transport emission reductions, rail operations and safety, rail capacity, urban mobility, and technologies and capabilities required for the future railways.

Since the privatisation of the rail industry in Australia and elsewhere, there has been a general diminution in the public availability of information and research knowledge. In addition, a large amount of institutional and research knowledge is languishing in paper files or disparate information repositories. There is no simple way to "google" international rail research or industry knowledge and the results of research literature reviews can, therefore, be patchy.

There is an emerging international consensus of the need for a clearing house for the identification and retention of world rail research that is open to the world's carriers, research groups and infrastructure owners. This coincides with an Australasian demand for an up to date 'Research Portal' (Knowledge Bank) providing access to Australian and international research publications and other rail information.

The CRC for Rail Innovation is planning to progress the concept of a 'Knowledge Bank' which will pull together as much existing Australian research as possible in an electronic format that will be easily accessible and searchable. Positive discussions have already been held with interested parties such as the RTSA, Rail Track Association Australia and the IRSE.

The benefit will be easy access to rail research and industry information leading to a reduction in duplication of research effort and greater

confidence in originality of research, reduced cost and time of literature reviews and reduced reliance by the Rail Industry on their own ad hoc libraries and knowledge/literature collections. Obviously, many paper-based records will need to be digitised.

This project aims to open up access to a wide range of information services, including research, libraries and industry information. The CRC for Rail Innovation will also work internationally to seamlessly link this knowledge bank with those of other international rail research organisations. The objective is to create an international one-stop-shop to provide simple access to search the world's rail research and technical knowledge. This may, on occasions, avoid the need for research if it becomes clear that it is more appropriate to leverage or adapt existing international knowledge to an Australian context. It will also give the CRC for Rail Innovation a high level of confidence that its \$100m research program is maximizing its potential and extending existing knowledge to provide major benefits to the Australian rail industry.

We are happy to discuss this issue further with you. So, should you have any comments or suggestions please do not hesitate to contact us.

We at the CRC for Rail Innovation are very excited about this project and are hoping that 2009 will be a great year for all!



David George
Chief Executive Officer

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Innovative Approach to Level Crossing Research

The CRC for Rail Innovation recently commissioned the Understanding and Preventing Railway Level Crossing Incidents Workshop to address issues around level crossing safety. The Workshop was held in Brisbane on 5 and 6 February 2009.

A key objective of the Workshop was to provide a recommended list of possible research projects to the CRC and other interested agencies including Governments to reduce crashes and injuries at level crossings.

Thirty participants from rail operators, infrastructure owners, rail academics, road safety officials, police and road engineers attended the Workshop. The participants were tasked to identify and assess research project ideas.

Key research priorities include establishing a National Incident and Crash Database, trialling of road vehicle driver response to a range of in-vehicle warning systems to warn of approaching level crossings, trialling of technology in vehicles to advise drivers of an approaching train (in-vehicle ITS) and trialling of cameras on locomotives to collect information for both crash and incident databases.

These research ideas are under consideration by the CRC for Rail Innovation.

For more information about the Workshop and the CRC's work on level crossing safety please visit the CRC website on www.railcrc.net.au



Postgraduate Students

The CRC for Rail Innovation is investing nearly \$900,000 over the next three and a half years to support postgraduate students. These students will be undertaking cutting edge research at the universities participating in the CRC for Rail Innovation in topics of great interest to the rail industry, including environmental, engineering and human impacts areas.

The students will be working with the researchers of the CRC for Rail Innovation and their research outcomes will assist in understanding how the rail industry can become more effective and efficient. In addition, the CRC for Rail Innovation will provide extra training for these students so that they are industry-ready at the end of their study, able to provide additional human capital to the rail industry.

Published Reports

- Emission Trading - Developing Rail Industry Foresight.
- Bridging the Gap - Target Cohort Belief Systems Report.
- Environmental Regulations Pertaining to Rail Towards a Case for Change.
- An inventory of: Environmental Regulation Pertaining to Rail in Australia.
- Rail & Climate Change Scoping Paper.
- Level Crossings Research Database.