

## **Technical Committee: C.3 Managing Operational Risk in National and International Road Operations**

**Roly Frost, Transit New Zealand  
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### **Executive Summary:**

Technical Committee C.3 Managing Operational Risk in National and International Road Operations held its inaugural meeting in Paris on 26 and 27 March 2008. The technical committee is considerably increased in size over the previous cycle and there are a large percentage of new members. The organisation of the technical committee was finalised, endorsing a Chair and Secretarial Officers. The draft work programme was developed with organisational responsibilities, and initial preparation of the first international seminar was discussed in terms of place, time, content and a project manager appointed.

The Corresponding Member was appointed to the Technology Committee and an Administrator of the extra network also designated. The organisation at the next four year cycle was drafted and work allocated between now and the next meeting.

The Technical Committee confirmed three projects for inclusion in the programme of the current work cycle, culminating in the World Congress in Mexico in 2011. These projects align with the PIARC Strategic Plan framework and are attached as Attachment 1.

### **Background:**

The Technical Committee C.3 was created from a review of the work undertaken in the previous work cycle by TC 3.2 Risk Management for Roads. The purpose of the first meeting was:

- to check the details of the technical committee members
- to develop the work programme and organisational responsibilities
- to discuss the preparation of the 1<sup>st</sup> International Seminar
- appoint Corresponding Member to the Technology Committee
- designate Administrator of the extra network
- arrange time and place for the next meeting
- develop a plan for outputs between now and the next meeting.

I attended the first meeting in Paris on 26/27 March as the member representing Australia and New Zealand. Mr Maurice Cammack is also a full member but was not present at the meeting. C.3 has approximately 47 members with about 22 members attending this meeting. Membership is attached in Attachment 2. Membership is strong from Europe, UK and Japan but limited both in attendance and in membership from Africa and Asia. This is particularly disappointing given that the proposed first seminar will be in China and that the strategic direction of PIARC is to focus on developing or countries in transition.

I had been nominated as English Speaking Secretary for the sub-committee and this was confirmed at the meeting.

I was further nominated as Leader of the sub-committee heading up the issue C3.1 "Introduce Risk Management Techniques in the Road Sector", and was able to provide to the sub-committee a background of the work that had been done in the previous cycle and briefly describe the examples of projects that had exemplified the benefits of using risk management in the road sector in New Zealand.

## **Work Program:**

### **Appointments**

Chair	Dr Michio Okahara
English Speaking Secretary and C3.1 Leader	Roly Frost, New Zealand
Spanish Speaking Secretary	Clemente Poon Hung, Mexico
French Speaking Secretary	Line Tremblay, Canada

C.3 has agreed on three issues to investigate that align with PIARC Strategic Plan. They are:

### **C 3.1 Introduce Risk Management Techniques in the Road Sector**

Several practical examples of risk management were collected from various countries during the previous cycle or the former TC 3.2 and included in its committee report. It was recommended to collect more examples of risk management and guidelines used in the road sector to produce a guide to assist road authorities and evaluate merits using risk management.

### **Item C 3.2 – Risks associated with National Disasters, Climate Change and Security Threats**

Many parts of the world with significant risk of natural and technological man-made disasters, modern and industrial practices, dependencies on critical infrastructures, make countries further vulnerable to not only a wide range of natural disasters, but also serious technological disasters. Furthermore, the recent climate change has increased those disasters including sea level rise. It has become more and more important to manage the risk of climate change especially for coastal roads. This group proposed to identify approaches being used to assess the risks associated with natural disasters, climate changes and security threats. Also proposed to identify strategies that have been applied to reduce or mitigate the risk associated with these circumstances.

### **Item C 3.3 Social Acceptance of Risks and Their Perception**

This is a completely new topic added into this particular cycle.

Social acceptance of risks and their perception depend on countries which have different cultures, religions, economic situations and backgrounds. Social acceptance of risks and their perception will be evaluated quantitatively based on data collected with international surveys. This outcome will contribute towards establishing guidelines to measure the public's perception of risks.

### **Meeting outputs:**

Achievements of the first meeting:

- Introduction to PIARC, aims of the strategic themes and operation of technical committees.
- Finalisation of the organisation of the technical committee, endorsement of the administrator arrangements.
- Discussion of strategic plan issues, finalisation of the three working groups with the appointed leaders of the groups being C 3.1 Roly Frost, C3.2 Graham Vowles, United Kingdom, C3.3 Roberto Arditi, Italy.
- International seminar proposed for China in September to November 2009.
- Technology committee corresponding member Michelle Cloutier, Canada.
- The appointment of the extranet is Alaine Choinard – Note – this is to be confirmed if unwilling Maarten Bloome (Belgium) will take up the role.
- The next meeting will be in Spain in the second week in November in 2008 hosted by Enrique.
- The third meeting will be in Vancouver, Canada in April/May 2009 hosted by Michelle Cloutier.

Each committee presented a proposed work plan with the third committee, in particular, much further behind in its thinking around the outputs.

### **Emerging issues:**

The main issues identified by the committee at the first meeting include:

- Climate change – including climate change in the natural disasters work group was considered appropriate.
- Man-made threats – there was general discussion by the committee that these are still significant in terms of the orientation work that this committee is doing and should be included under C 3.2.
- Perception of risk – the perception of risk created the most discussion. It was generally agreed it was not practicable to try and measure public perception and in the end the key output is to provide guidelines that the road authorities can use. On this basis, it is proposed to slightly amend the Terms of Reference giving guidelines how to measure public perception.

### **Learnings for Australia and/or New Zealand:**

Primary objective for this technical committee is to contribute to the capture of leading edge research and practices in the field of risk management in the road sector. There are some aspects of risk management such as security threats that is of little benefit to New Zealand and probably Australia at the moment. However, there is no doubt that security breaches in the form of terrorism are growing around the country and is a significant issue in Europe, the United States and Canada.

The approach is being used to assess risks with natural disasters and climate change has direct relevance to Austroads members. It is my view that Australia/New Zealand is amongst the world leaders in terms of the approach of risk management and will probably give out more than learn through this committee, particularly given the focus by PIARC on developing and countries in transition.

### **Dissemination:**

All reports from C.3 will be circulated to Austroads Council member, observers, programme managers and assistants, member contacts and other PIARC technical committee representatives and be placed on the Austroads website. Completed work from C.3 will be presented at the 2011 World Congress. In addition the two seminars that have been preliminarily planned over the four-year cycle and interim reports will be published as available on websites and in the Routes Road magazine.

### **Benefits from other associated activities:**

The primary benefit for me was the day session after the committee meetings where I was able to meet with the other secretary's and chairs of the Strategic Theme C *Safety of the Road System*.

I found this particularly effective in exchange of ideas in terms of operational risk, safe road infrastructure and safe road operation together with the tunnel group. New Zealand and presumably Australia are increasing the number of road tunnels and improved safety and fire mitigation as a result of European disasters is impacting on designs and operations here in New Zealand.

The committee does include more engineers working in the areas of risk management than previously and working closely with such engineers will be valuable in exploring, in particular European approach to risk management.

**Conclusions and recommendations:**

The proposed C.3 work plan is topical and highly relevant to member activities and complementary to the work of Austroads. By supporting continued Australian/New Zealand involvement in the PIARC technical committee Austroads will be able to attain the benefits of PIARC research together with being able to provide our experience to other countries.