

World Road Association (PIARC)
TC E.3: Disaster Management Workshop
Santiago, Chile, 10-12 June 2018



Executive Summary

The 5th meeting of the PIARC Technical Committee E.3 (Disaster Management) was held in Santiago, Chile, from the Wednesday 13th June to Friday 15th June 2018. The meeting was chaired by Mr Keiichi Tamura from Japan and hosted by Chilean Road Authority.

Seventeen people attended the Committee workshops held on the first two days with delegates from Japan, Australia, USA, Czech Republic, Mexico, and Chile. On the third day, the Committee delegates were joined by approximately 70 Chilean representatives for a seminar on Lessons Learned from Management of Recent Disasters.

Background

The goal of TC E.3 is to maintain and disseminate information related to a road administration's response strategies for natural disasters. The committee has shared interests with and works closely with TC A.1 (Risk Management) and TC E.1 (Adaption Strategies and Resilience).

The key outputs of the committee are to report on case studies and recommendations, update the Disaster Management Manual, and prepare the manual to be published as an online manual.

The committee has two working groups. Working Group 1 is investigating how disaster information is collected and shared, including the role of social media. Working Group 2 is investigating how to detect, forecast and monitor vulnerability in the road system and strategies for emergency operations and short-term recovery.

Technical Committee E.3 Disaster Management – Work Program

The work program for the committee is to:

- Progress development of the Disaster Management Manual (draft due Oct 2018)
- Review outcomes of an International Survey on Disaster Management priorities
- Provide input into the next Strategic Plan, noting priorities for future research
- Plan towards the next meeting in Hanoi with the Risk Management Committee
- Finalize the Committee report by October 2018 for translation into English, French and Spanish

The next meeting of the committee is planned to be held in Hanoi Vietnam in 5-9 November 2018, in conjunction with the Risk Management Committee.

Program Status

The committee is working on the following:

- Collecting and assessing case studies
- Updating the Disaster Management Manual (including preparing it for on line publication)
- Finalizing the committee report

Meeting Outputs

The meeting outputs included:

Development of the Disaster Management Manual (draft due Oct 2018)

- The former Risk Management Manual is being developed into a Risk and Disaster Management manual and will be published as an online manual with search engines
- The Risk and Disaster Management manual consists of the main body describing the concepts followed by a toolbox of case studies to assist road administrators in the recovery phase
- Topics in the main body include:
 - Monitoring and detecting infrastructure vulnerability to disasters
 - Education of road users (traffic safety and behaviour) in disasters
 - Coordination and Cooperation between agencies
 - Emergency operations and Short-term recovery
 - Continuity of operations within the Road Administration

Review outcomes of an International Survey on Disaster Management priorities

A review of the responses to an International Disaster Management Survey indicated that:

- All road authorities have a similar communication structure, but the detailed communication plan is not well described in their manual
- Reliable information is essential, especially to face major disasters
- Information required for road users and roads agencies are different
- Users information may be very fast but less reliable than roads agency information
- Preliminary technical information is useful to establish frameworks for resourcing the response and recovery and identifying initial budgets
- Gathering information methods relies on technology but noted the importance of backup systems for complex communication scenarios or where the telecommunications networks are impacted by the disaster

Input into the next Strategic Plan

- Priority topics for the next strategic plan included future research for:
 - Sharing emergency information between countries e.g. tsunami warnings and emerging weather events
 - Considerations for Disaster Free Roads

Plan towards the next meeting in Hanoi with the Risk Management Committee

- The next meeting will be held in Hanoi on the 05 Nov – 09 Nov and hosted by Directorate of Roads, Vietnam, in cooperation with the World Bank
- This meeting will be a joint meeting with TC A.3, TC E.3 and include a Committee Meeting, International Seminar, and a Site Visit
- The committee noted the value of sharing with other committees and partner organizations and proposed to hold joint meeting with the Risk Management and Climate Change Committees and with the Roads Engineering Association of Asia and Australasia (REAAA)

Finalize the Committee report by October 2018 for translation into English, French and Spanish

- A schedule was developed outlining the key actions and contributions needed to finalize the Committee's report

Seminar Summary

On the third day, the Committee delegates were joined by approximately 70 Chilean representatives for a seminar on Lessons Learned from Management of Recent Disasters.

The seminar was opened by the Chilean host, Mr Walter Bruning Maldonado (Director, National Roads, Chile), who noted the relevance of the seminar for Chile that has experienced many natural disasters and highlighted that the capacity to act during a disaster is critical to timely restoration of transportation and the economy. Others spoke of reducing loss of life, improving resilience, and recovering the value of the infrastructure investment.

Presentations were given on the following topics:

- Hazard Mapping and Resilience – USA
- Managing Flooding Disasters - Australia
- Managing the impacts of Tsunami on the road system – Japan
- Infrastructure design considerations for coastal communities – Chile
- Prefabricated temporary bridges – Czech Republic
- Considerations for a Disaster Management Policy – Chile
- Emergency Information management – Chile
- Unpredicted infrastructure failure – Japan
- The role of roads in Tsunami Disaster Management – Japan

The seminar concluded with a Panel Discussion that canvassed topics such as:

- Drivers of community behaviours during a disaster
- The role of government for Community education about the risks of disasters
- The importance of alternative communications systems to the mobile phone network during a disaster

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