

Earthquake Codes in the Real World



Proceedings of a conference held by the

Australian Earthquake Engineering Society

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FOREWORD

Welcome to the 10th AEES Conference and the second in Canberra. Compare the damage and loss of life in large earthquakes near cities since our formation.; the 1989 Santa Cruz and 1994 Northridge US earthquake, the 1995 Kobe Japan earthquake, the 1995 Izmit Turkey earthquake and the 2001 Bhuj India earthquake. What is clear is that the US are doing something right. Japan, Turkey and India have an equally long history of code development and like Australia have made extensive use of the US codes in writing and regularly upgrading their own national earthquake or loading codes.

The greatest loss of life in these recent earthquakes occurred in intraplate Peninsula India near Bhuj where earthquakes are infrequent but history records a number of scattered large earthquakes, as does the history of intraplate Australia. The majority of the collapsed and damaged buildings there were URM as are the majority of buildings in Australian cities. Their codes were not implemented and neither are ours. Can we in Australia learn from these disasters? And will we?

Why bother writing the codes if they are not implemented, if there are no experienced earthquake engineers regulating their implementation? Most Australians probably think that a Newcastle sized earthquake or larger could never happen near their city, but seismologists accept this possibility.

Are the Australian Federal, State and Territory Governments exercising their *Duty of Care* responsibilities towards their citizens?

The 1989 Newcastle earthquake provided the impetus for the establishment of the AEES and hastened into publication AS1170.4 - 1993. Some of the earthquakes mentioned above will no doubt contribute information and data for improvements to the current code, and many AEES members have participated in the writing of the code. But who will regulate their implementation? Perhaps it is time for the Society to change its goals.

We hope you bring your experience and knowledge to the conference, renew your contacts and take away with you ideas and plans for change.

Our thanks go to Barbara Butler again for her excellent work in organising the conference, chasing the authors for their contributions and designing and publishing the Proceedings. We, the organising committee, had many meetings, protracted negotiations with potential sponsors and attendees, traced the excursion route and even checked out the food and wine and look forward to sharing the end product with you

Enjoy the conference

Kevin McCue, Charles Bubb, Gerhard Horoschun and Doug Finlayson
Organising Committee

With thanks to our Major Sponsors:



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