Australian Geomechanics Society

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Productivity Commission
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Submission per email: disaster.funding@pc.gov.au

RE: NATURAL DISASTER FUNDING ARRANGEMENTS

The Australian Geomechanics Society wishes to raise with the Commission an issue relating to improved protection of the Australian community in regard to the likelihood of landslides, and their consequences to life and property throughout the nation.

We believe that every local government area in Australia has landslide risks of some form which can present an issue of risk to life and property, and hence the issue of landslide hazard has a potential impact nationwide.

AGS has recognised this hazard to the Australian populace, and has developed guidelines to assist regulators, geotechnical practitioners and the general public for Landslide Risk Management (LRM). Landmark publications on LRM, with international recognition, have been developed and progressively updated, particularly in 1985, 2000 and 2007. We can provide details should the Commission wish. Our work has attracted international recognition, and awards from the Attorney General's Safer Community awards and Resilient Australia awards, and through Engineer's Australia – which I mention by way of noting the pedigree of the work.

Our guidelines are purposefully readily available to regulators, geotechnical practitioners (throughout the planet) and the Australian public through our website [with links from our homepage: australiangeomechanics.org]. AGS has received support from the Sydney Coastal Councils Group (SCCG) for well over a decade in this undertaking, and jointly (with funding assistance from the NDMP) we have presented "Risky Roadshows" throughout the country (2002 and 2011) explaining LRM, and last year we launched a LRM Education Empowerment website, available through linkage from the AGS website, which is thereby available to all three groups – regulators, geotechnical practitioners and the general public.

The Issue

The issue that AGS wishes to raise relates to the assistance to this process that can be provided by government, at either Commonwealth or State level. Landslide risk management relies on a number of inputs, and particularly the early stage works relating to the development of:

- Landslide inventories, which lead to
- Susceptibility mapping

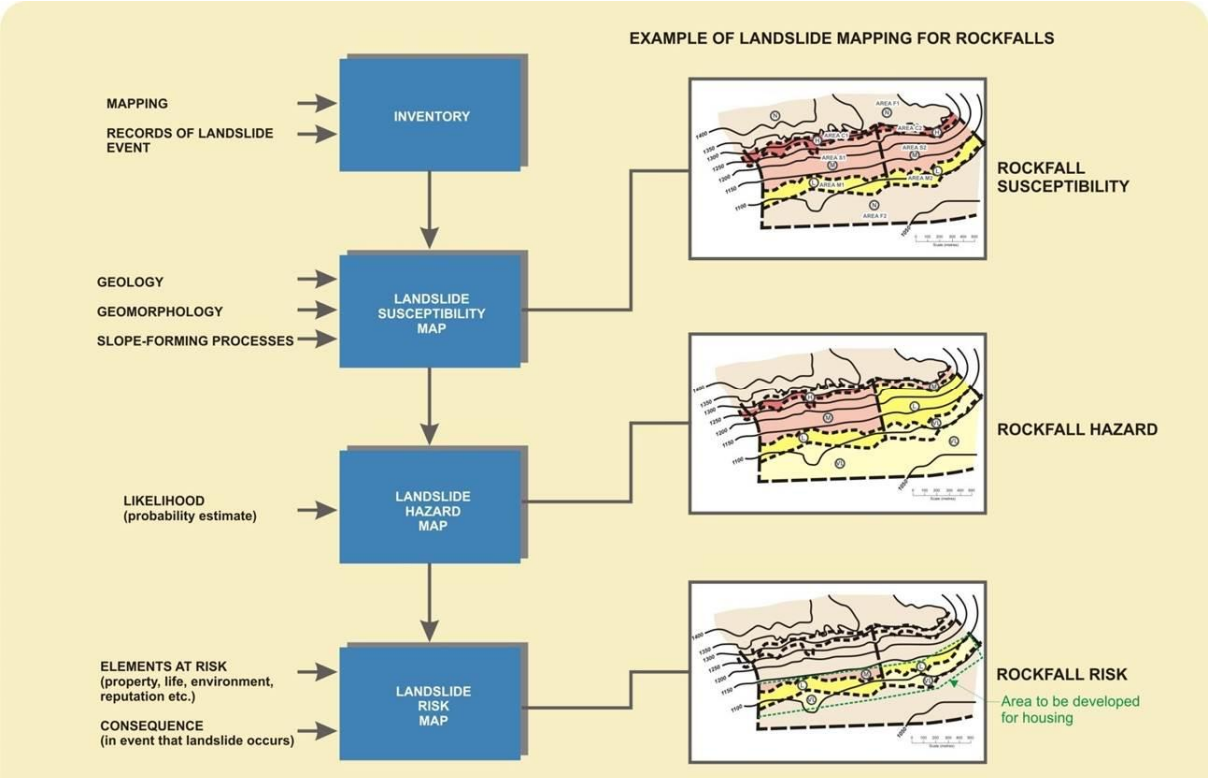

Figure 1: *Illustration of the milestones for Landslide Risk Mapping. (Whilst this diagram is illustrated by way of "rockfall", it is equally applicable to other landslide forms and types.).*

Whilst the Thredbo landslide of 30 July 1997, and the subsequent report on the Coroner's inquest inquiry (Coroner Hand, June 2000) suggested actions by *"the Building Code of Australia and any local code dealing with planning, development and building approval procedures….which require relevant consent authorities to take into account and to consider the application of proper hillside building practices and geotechnical considerations when assessing and planning urban communities in hillside environments" (cl 919),* it is fair to say that the regulatory interest in this task has waned and has not been widely adopted.

Only one Australian state, Queensland, has a state-wide policy for landslide risk management. New South Wales and Victoria have partial coverage through policies developed by particular Local Government Areas and agencies that have recognised the hazard to their communities. Many LGAs unfortunately have not recognised the landslide hazard, despite distribution of LRM information to all LGAs throughout the nation by AGS and SCCG as part of each of the two "Risky Roadshow" events.

Existing mapping is fragmented; and effectively is not funded, nor maintained, in all bar a few locations. Much of the reason for the lack of take-up of inventory and susceptibility mapping has been assigned (informal personal advice) to the cost for an individual agency to develop land use planning mapping.

With reference to Figure 1, the first two steps, being inventory mapping and the development of consistent susceptibility mapping across the nation, are key to providing both the regulators and practitioners with tools to conduct landslide risk assessments, by provision of landslide data that is usually not economic for an individual project or for and individual local government area.

As you note in the opening paragraph of Section 4.1, *"Natural hazard information is a key input to risk understanding and risk treatment by all parts of the community. In general,*

households and businesses are responsible for managing their risks, including by obtaining and using information). However, natural disaster information needs to be available and accessible to people who face natural disaster risks." We agree with and support this principle, and further believe that Commonwealth or State-level mapping is the most effective way to achieve the base-level mapping that would greatly assist the community.

Your draft recommendations 4.1 and 4.2 state that all forms of government should be involved. You should appreciate that AGS has previously done just this in the development of and distribution of information about the LRM Guidelines - known by way of shorthand as AGS (2000) and AGS (2007). AGS has developed these internationally recognised guidelines and the Education Empowerment website with the assistance of Commonwealth funding, and through interaction with Commonwealth and state agencies across the nation, local government personnel and a wide range of professional geotechnical practitioners.

In the instance of this next step, of inventory and susceptibility mapping, Commonwealth and State-level government is best suited to take the lead.

We suggest that the aim should be for development of a nationally consistent system for the collection and storage of landslide information within a landslide inventory and establishment of broad scale landslide susceptibility zoning regionally.

By providing a national consistent strategy for landslide management and data collection, this natural hazard could be consistently managed across the country by all levels of government. Local governments across the country will be better equipped to deal with this under-recognised geohazard. Further, consistent evidence based documentation of landslide occurrences will facilitate improved emergency management and allocation of resources nationally.

Yours faithfully,

Australian Geomechanics Society

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