

# PRACTICE NOTE GUIDELINES FOR LANDSLIDE RISK MANAGEMENT 2007

slow. The size, similarly, can vary enormously. The combination of type of landslide, size and rate of movement can determine the destructive power, and hence potential consequences of the landslide in terms of damage to property, loss of life, economic costs and impact on the environment. Subsidence, as a mechanism, is excluded from consideration, though it may be similar in consequence and appear to be of a similar form. Appendix B presents a summary of the terminology used to classify and describe landslides.

Landslides can impact on human development and activity as well as natural areas / features. It is the potential impact on human development which becomes of concern to the planners, regulators and disaster management authorities. Landslides can be just one of a number of threats which have to be considered, others being for example flooding, bush fires, and seismicity.

Examples of where landsliding is potentially an issue include:-

- a) Where there is a history of landsliding.
- b) Where there is no history of sliding but the topography dictates sliding may occur.
- c) When there is no history of landslides but geological and geo-morphological conditions are such that sliding is possible.
- d) Where there are constructed features which, if they fail, may travel rapidly.
- e) Forestry works and agricultural land clearing which can lead to landslides causing damage to the environment.

Specific examples of the above are given in the AGS Guidelines for Landslide Susceptibility, Hazard and Risk Zoning for Land Use Planning (AGS 2007a). AGS (2007a) also provides detailed guidance to the regulator in relation to landslide zoning for planning purposes.

## 3.2 RELEVANCE TO APPROVALS PROCESS

Details of the approvals process may vary in detail from state to state. It is understood that in all States and Territories of Australia, the regulator has a statutory responsibility to consider the impact of a number of hazards, including landslides, on potential development of land as a 'duty of care' exercise. The regulator is usually the local government, but may be a State Government department or body. The actual mechanism and regulatory context for dealing with planning controls, building controls and approval process varies from state to state. However, the outcome should be that areas having a landslide risk are properly considered in relation to land use and development proposals.

In order to develop planning controls and building regulations, local government (or other regulators) must ensure that it has the statutory means to:

- a) Through a planning scheme and using the principles in AGS (2007a), identify the areas that are susceptible to or at risk from landslides.
- b) Require planning and/or building approvals for all land use and development within the areas zoned as susceptible to landslides.
- c) Ensure there is a proper process for assessment in relation to existing and proposed development, including the requirement for completion of LRM reports in accordance with this Practice Note.
- d) Provide appropriate risk tolerance criteria for loss of life and property so that there is a means to determine whether it is appropriate for development to occur or the required land use to proceed.
- e) Apply, if necessary, consent conditions on the land use and/or development approval, including conditions requiring maintenance that will appropriately manage the landslide risk for that use and/or development.

It can be seen from the above that zoning in accordance with AGS (2007a) becomes the 'initiator' under the planning scheme and building approvals process to determine whether LRM controls are required and whether more detailed LRM consideration is required.

## 3.3 POLICY REQUIREMENTS

**The regulator should have a specific policy which sets out the requirements for LRM assessments as part of the development application documentation and process.**

The need for such a policy should be determined by zoning studies in accordance with AGS (2007a). Essential components of such a policy will include:

- 3.3.1 When a LRM assessment is required.** This may be related to a Susceptibility or Hazard Zoning Study or some other plan or criteria defining areas or types of development included or excluded.
- 3.3.2 The necessary competencies of practitioners undertaking LRM assessments. Such practitioners should be required to have LRM as a core competency.** A method of demonstrating core competency in LRM is being addressed by the Australian Geomechanics Society and Engineers Australia as a specific area of practice within the National Professional Engineers Register (NPER). Some regulators may choose to define another method of demonstrating competency.
- 3.3.3 The basic requirements of LRM reports** which should be based on compliance with the requirements of this Practice Note.