

Paper Title: Landslide risk assessment for individual facilities

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Abstract:

Geotechnical practice has progressed to the stage that slope engineering is no longer confined to investigation of slope stability. Instead, landslide risk has to be examined and managed in totality. This brings a broad spectrum of landslide-related problems to the agenda of risk assessment. This paper addresses landslide risk assessment that is undertaken at a large scale, in which the facilities at risk are individually recognized and assessed. Selected application cases are presented to illustrate the approaches adopted, their capability and constraints, and the development trends in risk assessment practice. There is a choice between using a qualitative or quantitative approach. There are also significant differences between applying the assessment to a few individual sites and to a large number of slopes. The challenge is for the geotechnical profession to master the diverse range of landslide risk assessment processes, to use the right tools for the right problems, and to become more effective in risk communication with stakeholders.