EU Project IRASMOS - Harmonization of Natural Hazard Risk Management

J. Rhyner
WSL Institute of Snow and Avalanche Research SLF

Rock avalanches, debris flows, and snow avalanches are sliding and flow processes, subsumed under the term “extremely rapid mass movements”. These processes pose varying degrees of risk to land use, infrastructure, and personal security in many mountainous regions. Despite increasing efforts to quantify the risk in terms of potential damage or loss of life, most previous studies have achieved partial rather than total risk solutions. These short-comings were addressed within the EU FP6 project IRASMOS (“Risk Management of Extremely Rapid Mass Movements”), completed in May 2008 and including 8 partners from Austria, France, Italy, Norway, and Switzerland. IRASMOS attempted to review, evaluate, compare and augment methodological tools for hazard and risk assessment extremely rapid mass movements, crossing borders between hazard processes and between countries.

IRASMOS was subdivided into 5 work packages, including forecast and warning procedures, technical counter measures, hazard mapping, vulnerability, and risk management methodology.

An international harmonization in all fields addressed by the IRASMOS work packages would be desirable from several perspectives, e.g. from the point of view of internationally comparable risk levels or from the point of view of system interoperability under cross border hazard situations. As the project IRASMOS showed, the present state and the future possibilities of harmonization are very different between different risk management aspects as well as between different hazard processes. E.g. while snow avalanche forecast and warning is harmonized throughout Europe, the harmonization has not reached the same level in, e.g., hazard mapping.

In the talk the present state of risk management for extremely rapid mass movements is assessed, the main short-comings and possible lines of further development are discussed.