



Munich Re serves worldwide natural hazards application on the Web

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Losses from earthquakes, volcanic eruptions, hurricanes, tornadoes, and floods are increasing worldwide. For the insurance industry, it is becoming more and more important to estimate these potential losses. Every year, primary insurers are hit by billion dollar natural catastrophes, not to mention the expenses rung up by man-made accidents and terrorism.

This is where a reinsurer, or an insurer of insurers, comes in. Munich Reinsurance Company, also known as Munich Re, operates from its headquarters in Munich, Germany, serving more than 60 offices worldwide. Its business partners are insurers in more than 140 countries. These insurers transfer parts of the risks they assume. Whenever someone is faced with the task of assessing a risk or location – no matter where in the world and including natural hazard factors – that person should know the risk potential from natural catastrophes. The result of this risk assessment may have an impact on the design and position of buildings, industrial plants, and infrastructure or influence the design of the insurance product and premium required.

Munich Re's Geo Risks Research Dept. has been gathering worldwide information on natural hazards and catastrophes for more than 30 years. Geo-informatics is a core discipline that Munich Re has pursued for more than ten years.

Nowadays, complex GIS applications are an integral part of the IT environment and are widely used by underwriters in their daily business. The potential fields of application include all phases of the risk management process, ranging from data capture to risk analysis (accumulation issues and the identification of con-centrations), risk modelling, and the visualisation. All the geo-data and spatial services (functionalities) are centralized in the GDS (Geo Data Service) – a group wide geo-data warehouse.

Using the GDS web-services, Munich Re's partners can now query these extensive geo-databases of natural events and catastrophes using an intuitive mapping application called the NATural Hazards Assessment Network (NATHAN). Based on ESRI's ArcIMS software, NATHAN is designed to create an efficient and easy-to-use interactive online tool to mine this comprehensive global database of natural hazards and catastrophes.