



The Interreg IV Italia-Austria "SeismoSAT" Project: connecting Seismic Data Centers via satellite

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Since 2002 the Istituto Nazionale di Oceanografia e di Geofisica Sperimentale - OGS in Udine (Italy), the Zentralanstalt für Meteorologie und Geodynamik (ZAMG) in Vienna (Austria), and the Agencija Republike Slovenije za okolje (ARSO) in Ljubljana (Slovenija) are using the Antelope software suite as the main tool for collecting, analyzing, archiving and exchanging seismic data in real time, initially in the framework of the EU Interreg IIIA project "Trans-national seismological networks in the South-Eastern Alps".

The data exchange has proved to be effective and very useful in case of seismic events near the borders between Italy, Austria and Slovenia, where the poor single national seismic networks coverage precluded a correct localization, while the usage of common data from the integrated networks improves considerably the overall reliability of real time seismic monitoring of the area. At the moment the data exchange between the seismic data centers relies on internet: this however is not an ideal condition for civil protection purposes, since internet reliability is poor.

For this reason in 2012 the Protezione Civile della Provincia Autonoma di Bolzano in Bolzano (Italy) joined OGS, ZAMG and ARSO in the Interreg IV Italia-Austria Project "SeismoSAT" aimed in connecting the seismic data centers in real time via satellite. The general schema of the project, including first data bandwidth estimates and a possible architecture will be illustrated.