



"SeismoSAT" project state of the art: connecting seismic data centres via satellite

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Since 2002 the OGS (Istituto Nazionale di Oceanografia e di Geofisica Sperimentale) in Udine (Italy), the Zentralanstalt für Meteorologie und Geodynamik (ZAMG) in Vienna (Austria), and the Agencija Republike Slovenije za Okolje (ARSO) in Ljubljana (Slovenia) 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 Italia-Austria 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 centres 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 centres in real time via satellite.

As it will be illustrated, the general technical schema of the project has been approved, data bandwidths and monthly volumes required have been quantified, the common satellite provider has been selected, the hardware has been purchased and installed, and the all SeismoSAT project is in testing phase.