



"SeismoSAT" project results in connecting seismic data centres via satellite

Damiano Pesaresi (1), Wolfgang Lenhardt (2), Markus Rauch (3), Mladen Živčić (4), Rudolf Steiner (2), and Michele Bertoni (1)

(1) OGS (Istituto Nazionale di Oceanografia e di Geofisica Sperimentale), Centro di Ricerche Sismologiche (CRS), Udine, Italy (dpesaresi@inogs.it), (2) ZAMG, Vienna, Austria, (3) Protezione Civile, Bolzano, Italy, (4) ARSO, Ljubljana, Slovenia

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. Up to now the data exchange between the seismic data centres relied on internet: this however was 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 already presented in the past, 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 and the hardware has been purchased and installed. We will here illustrate the SeismoSAT project final tests and results.