



The heritage of the 1976 Friuli earthquake

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Beside the negative consequences of the major earthquakes, sometimes it happens that, together with the efforts for the physical reconstruction, a positive approach starts tending to establish a right long-term policy of seismic risk mitigation. This is the case of the 1976 earthquake in Friuli (north-eastern Italy) because reconstruction, Earth studies, and civil protection policies followed a virtuous development.

The magnitude 6.4 main shock of May 6 was followed by a long sequence of aftershocks among which two quakes on September 11, other two on September 15, and another one on September 16, 1977 exceeded magnitude 5. The victims were almost 1000, injured 2,500 and the damage was estimated at about 2,200,000 Euro over a 5,000 km² area.

After the Friuli earthquake it was recognized the need to establish a specific national body for handling emergencies: the Department of the Civil Protection with regional autonomous sections. Moreover, it was decided to establish a scientific group to study the national seismic risk and to provide mitigation strategies: the “Progetto Finalizzato Geodinamica”, bulk of the “Gruppo Nazionale per la Difesa dai Terremoti”. The national law on civil protection took the final step after a decennial stand-by in the Parliament.

The presence of a scientific institute (OGS, acronym of Osservatorio Geofisico Sperimentale then, now Istituto Nazionale di Oceanografia e Geofisica Sperimentale) at a close distance from the epicentral area allowed the control of the whole sequence with a detection threshold around magnitude 3 and it was the main actor of the geological and geophysical studies financed by the Civil Protection of the Friuli Venezia Giulia Region together with the universities of Trieste and Udine. Among the main projects, it is worth citing the deployment and management of the regional seismometric network, which at present monitors the seismicity of north-eastern Italy, the realization of the regional seismic hazard and risk maps, and, recently, the assessment of the seismic performance of all the school buildings of the Friuli Venezia Giulia region.