



Building an educational seismic network in Romanian schools

Bogdan Zaharia (1), Dragos Tataru (1), Bogdan Grecu (1), Constantin Ionescu (1), Nicoleta Bican-Brisan (2), and Cristian Neagoe (1)

(1) National Institute of Earth Physics, BUCHAREST, Romania (bzaharia@infp.ro), (2) "Babeş-Bolyai" University, Faculty of Environment Science and Engineering, Cluj-Napoca, Romania

Understanding the earthquake phenomena and their effects is an important step toward the education of population and aims to raise the awareness about the earthquake risk and possible mitigation actions. In this sense, The Romanian Educational Seismic Network project represents an efficient communication tool, allowing teaching and learning about the earthquakes and seismic wave impact through experimental practices and educational activities.

The seismic network consist of nine SEP seismometers installed in high-schools from the most important seismic areas (Vrancea, Banat, Făgăraş, Dobrogea), vulnerable cities (Bucharest, Iasi) or high populated places (Cluj, Sibiu, Timisoara, Zalău) and is coordinated by the National Institute of Earth Physics from Bucharest.

Once installed, the seismic network is the starting point of activities for students through an e-learning platform. Some objectives are aimed:

- To train students and teachers how to make analysis and interpretation of seismological data;
- To make science more interesting for students;
- To improve the participation rates in physical sciences for students;
- To raise awareness of geoscience as a scientific discipline for pre-university students;
- To promote the installation and effective use of educational seismographs and seismic data;
- To reinforce and develop relationships between participating schools and research institutes;
- To create an earthquake database this will be used by students and teachers for educational purposes.

Different types of practical activities using educational seismometer, designed by researchers for students, are described in educational materials and in the web platform project. Also we encourage the teachers from the participating schools to share their experiences and produce new didactic tools for the classroom. This collaborative work could illustrate the conjugated efforts of researchers and teachers for a better education and awareness of the risk culture. Additionally, educating the children, as the future of any community at risk, can be considered as an effective strategy to communicate safety messages to the entire community.