Building a Modern System for Real-time Seismic Monitoring in Bosnia and Herzegovina within the Slovak Official Development Assistance Programme

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A b s t r a c t : Bosnia and Herzegovina is located in the western Balkan region – one of the most earthquake prone areas in Europe. Two institutions are involved in seismic monitoring in Bosnia and Herzegovina – Federal Hydrometeorological institute in Sarajevo is responsible for the territory of Federation of Bosnia and Herzegovina and Hydrometeorological institute in Banja Luka is responsible for the territory of Republika Srpska. The project DETERMINE (Development of Earthquake Monitoring Infrastructure for Bosnia and Herzegovina, November 2009 – February 2011) supported by SlovakAid (Slovak Official Development Assistance Programme) was a response to the urgent need of the state-of-the-art seismic monitoring system on the territory of Bosnia and Herzegovina. The seismic monitoring systems consisting of four seismic stations and of the equipment of the data center were delivered to and installed in each of both entities of Bosnia and Herzegovina. Planning of the monitoring network development and also installation works were done in cooperation with project partners from local Bosnian institutions. The real-time continuous data acquisition from the installed seismic stations and the international real-time data exchange were established in the framework of the project. The vital part of the installed systems is automatic processing

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module providing automatic location and alerting tools. This contribution summarizes seismic activity of the area, gives the overview of the systems delivered within the framework of the DETERMINE project and outlines first outcomes of the project.

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Key words: seismic monitoring system, real time data acquisition, Bosnia and Herzegovina, SlovakAid