



The British Geological Survey seismic monitoring system

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The British Geological Survey (BGS) monitors the seismicity in and around the British Isles. The seismic network was started in the seventies and built up over the years to 146 short-period stations. An upgrade of this network started a few years ago and will result in a modern network with broadband seismometers, high dynamic range digitizers and real-time communication (Internet, ADSL, satellite). In total the network will comprise about 50 stations, with only few short-period stations remaining. Equipment is used from both Guralp and Nanometrics, and their respective software for data acquisition is used to bring the data to the centre in near real-time. The automated data processing is done through Earthworm. Event data are analysed using SEISAN. Continuous data are kept for all broadband stations and checked for quality and completeness. Real-time data is also exchanged with neighbouring networks. The data is used for routine monitoring, but also research. The main research objectives are to understand distribution of seismicity and relating earthquakes to tectonics, develop velocity and attenuation models and study the seismic hazard and earthquake effects.