



## Networking seismological data exchange in Europe

Reinoud Sleeman, Torild van Eck, Gert-Jan van den Hazel, Luca Trani, and Alessandro Spinuso  
ORFEUS Data Center, KNMI, De Bilt, Netherlands (sleeman@knmi.nl)

The mission of the ORFEUS Data Centre (ODC) is to collect and archive high-quality seismic broadband waveform data from European-Mediterranean organizations and to provide open access to this data for monitoring and research purposes by the scientific community. The core activity of the ODC is to run an automatic, sustainable system to achieve this mission. Our 4 key operations are: data exchange protocols, quality control procedures, data management and data services. All these activities at the ODC benefit from developments within the EC Infrastructure (I3) project NERIES (Network of Research Infrastructure for European Seismology).

For the data acquisition the ODC uses different standard, real-time data exchange protocols (e.g. Antelope, SeedLink, Scream) to ensure a very high data availability from stations in the Virtual European Broadband Seismic Network (VEBSN), which currently exists of about 500 BB stations. Within the data services a number of tools (e.g. Wilber II, NetDC, BreqFast, AutoDRM and webforms) are in place to serve the scientific community. These are currently being complemented by webservices and an integrated portal. The data management part relies on a simple flat file structure and a MySQL data management system on which both ArcLink and the Generic Data Interface (GDI) operate.

In this presentation we will present an overview of the different aspects concerning data acquisition, services and management at ODC.