Introduction of digital object identifiers (DOI) for seismic networks

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Proper attribution for scientific source data is important in promoting transparency and recognising the role of data providers in science. Data sets such as those produced by seismic networks now need to be citable and permanently locatable for research users. Recently the EIDA and IRIS-DMC communities have worked together on development of methods for generation, maintenance and promotion of persistent identifiers for seismic networks. This resulted in a 2014 Recommendation by the International Federation of Digital Seismograph Networks (FDSN) on the use of Digital Object Identifiers (DOI) for seismic networks. These can be cited equivalently to scientific papers, and tools such as DataCite allow the tracking of citations to these datasets.

The GEOFON, IRIS and RESIF data centres have now begun to roll-out of these seismic network DOIs. This has involved working with principal investigators to prepare metadata consistent with the FDSN recommendation, preparation of landing pages, and changes to the web sites to promote DOIs where available. This has involved preparing improved descriptions of the data (metadata) and clarifying how individuals and institutions should best be recognised for their contributions to making the data available. We illustrate this process for a few representative networks. We will be in contact with additional network operators to help them establish DOIs for their networks in future.