



## **National Data Repositories Bridges Academia and Industry Needs.**

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National Data Repositories (NDR) have sprung up in a number of oil producing countries as databases for holding subsurface geoscience and geological data primarily related to oil and gas exploration and production. The NDRs have been implemented as the focal point not only for national data but also it has become a showcase of technology and a focal point for geoscience research.

The first NDRs were implemented about 10 years ago in Norway, UK and Peru. The reason for creating the NDRs varies between the countries. Norway wanted to reduce the cost of data storage and have a common set of shared seismic data of known quality. The UK was initially interested in managing large amounts of information associated with wells and logs. Peru's focus was on protecting its data from degradation and promoting its oil and gas opportunities through a modern technology center.

With over 30 NDRs around the world the impact on the international geoscience community is substantial. Both academia and industry in these countries now have a single source for high quality subsurface data. The NDRs serve a number of missions from providing governments with the best information on the country's subsurface resources and how to exploit them, oil companies with a place to submit their data to the government and receive government approved data and academia as a data source for researchers and students. Some countries have provided an interpretation facility with the NDR. These facilities are normally used to study exploration and production data residing in the NDR, but the facility also serves as a center of excellence for the country's geoscience community.

It is necessary to view the NDRs in a larger perspective and how they relate to other

geoscience libraries within the country. A number of countries have significant core storage facilities. With a web interface between the electronic and the physical data the geoscience community has for the first time a comprehensive and complete set of information about the earth's subsurface.

The NDRs are often large; one of the largest subsurface datasets has 70 terabytes of data. When one includes surface and atmospheric data then there are databases containing several petabytes of data.

There are a number of countries that are interested in and have plans to implement NDRs. These countries are often emerging nations that recognize that they have to invest in a NDR in order to attract foreign investments and to retain and attract geoscience professionals.