

Live, Direct and Free Access to the UK Onshore Seismic Archive

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Access to well-catalogued seismic data is crucial in order to understand the tectonic and stratigraphic development of prospective sedimentary basins. Whilst this is often hard to obtain, a new initiative by the UK Onshore Geophysical Library (UKOGL) will give an unprecedented opportunity to gain new insights into the development and evolution of the British Isles, something that will be greatly appreciated and applauded by industry and academia alike.

UKOGL is the main data repository for onshore seismic data. The organisation was set up as a Charity in 1994, jointly by the UK Onshore Operators Group (UKOOG) and (what was then) the Department of Trade and Industry (DTI). Since the latter did not have copies of the seismic field tapes and was not able to administer data release, UKOGL's main role was initially to locate, archive and facilitate the release of these data to aid subsurface interpretations, be they undertaken by industry or academics.

Malcolm Butler, who was then Chairman of UKOOG, became Chairman of UKOGL, on the understanding that it would work independently of its sponsors, and he has held that position ever since.

Lynx Information Systems (Lynx) won the original contract to carry out the work for UKOGL and because of their excellence have remained the prime custodian of the onshore seismic archive, having had their contract renewed several times. Under the leadership of Neil Anderton, Lynx's dedicated team has carried out the wishes of the UKOGL trustees with minimal input, in a proactive, responsible and efficient manner, throughout the fifteen years the partnership has been running.

In recent years, the trustees have championed

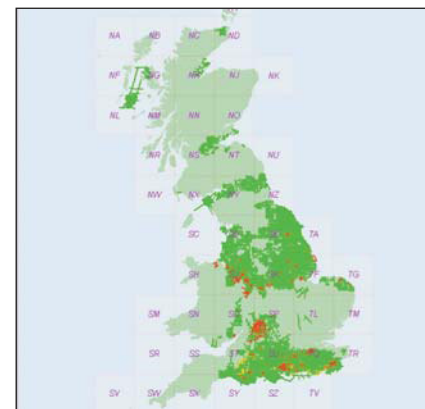
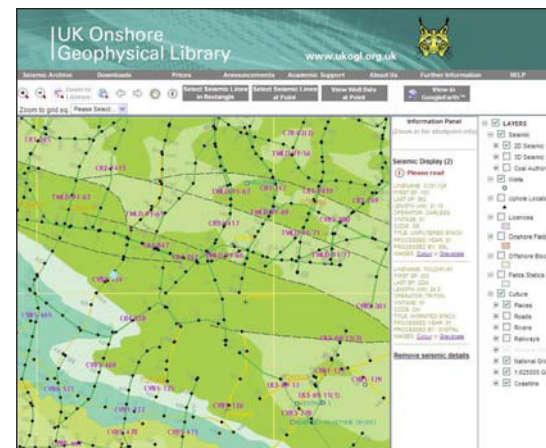
the cause of onshore seismic data access amongst industry and academics alike. This has now culminated in the recent launch of a website on June 15th 2009 through which colour and greyscale jpegs of every line in the archive can be accessed simply by clicking on a seismic base map.

Out of 74,246 kms of 2D data recorded Onshore UK and available for release, UKOGL has fully archived (including field tapes, etc.) 66,771 kms and has archived the processed data of 71,833 kms, amounting to 96.7% of the total database. Whilst work continues on the remaining 2,413 kms, that too is nearing completion.

Seismic data have been loaded in sufficient detail to be printed out at 1:25,000 and 10 cms/sec and, by zooming in to the map, it is possible to see the common depth points (CDP) locations for each line. The 1:625,000 BGS geology map is also linked in as an overlay on the main site, so that the seismic lines can be related to surface geology. A link to Google Earth has been created, so that the seismic base can be viewed as an overlay, although without CDPs for the time being. Importantly, no log-in or password is necessary to access the site and all data access is free to use, for whatever purpose.

UKOGL has now begun to add drop-down sheets of tops and (where available) Two Way Travel Time values for seismic markers for most of the exploration wells and key wells from multi-well fields like Wytch Farm.

Over the years since its inception, UKOGL has spent a total of over 2 million pounds on building the National Archive, all of which was raised from charitable donations or by licensing data to industry. It has never received any monetary contribution from central government. Interest in last year's 13th Onshore Round led to a large volume of orders for data from UKOGL and with that financial injection came the final push to complete the archive and begin the plan to



arrange open access for the onshore seismic archive.

Whilst it has had major success of late, things have not always run smoothly for UKOGL and it has been a struggle for it to maintain the momentum of the archive, particularly through the low oil price years. However, being a charity UKOGL is run at a very low cost: the trustees give their time on a voluntary basis. By careful management of the financial resources at their disposal and by maintaining a flexible approach to the level of archiving UKOGL has achieved what it was originally commissioned and set out to do, which is no mean feat.

Having received a cash injection from the 13th Round, the trustees took the view that UKOGL should use its funds to make the data freely available in a form that offers access to everybody. UKOGL does, however, have a small ongoing overhead cost of about £20,000 per year, so it will still license the digital data to industry but even that will be now done at a much reduced price.

More recently, UKOGL has branched out to fund and support educational projects, including the development of "Sub-surf

rocks!", aimed at enhancing the teaching of structural and economic geology at A level using seismic datasets from the library. Students can actually see features such as faults and folds in the seismic data and have the opportunity to interpret their own seismic sections. Simplified descriptions and links to the hydrocarbon industry will also be provided, targeted at younger children. The resource is being developed in conjunction with the University of Derby and is due to be available by September in the form of a website, with copies on CD being made available to members of the Earth Science Teachers Association.

In conclusion, whilst UKOGL has gone about its business in a quiet, efficient manner, we owe a debt of gratitude to the far sight and commitment of UKOGL's trustees and their contract partner, Lynx. As a result, a new generation of oil company geologists, university researchers and motivated schoolchildren will all have ready access to an unrivalled database and academics will at last be able to place classic field exposures into their proper regional context.

To access the site, go to

www.ukogl.org.uk