

New Seismic Rules Yield Instant Results: First Surveys In Five Years

The first none-exclusive marine surveys to be acquired in Australia for five years were started in March 2007 as a direct result of the federal government extending data confidentiality periods to 15 years, following an extensive lobbying effort by the International Association of Geophysical Contractors (IAGC).

IAGC Austral Chairman and PGS Marine Geophysical Country Manager, Nick David, said neither of the surveys, estimated to cost up to \$50 million, would have commenced without the extensions to the confidentiality periods. "The change of rules has certainly softened the corporate stance of IAGC member companies towards making investments in Australia", David said.

The 3D and 2D surveys are being carried out over the North West Shelf by Petroleum Geo-Services (PGS) using the vessels *Orient Explorer* and *Akademik Fersman*. The 3D survey, being carried out by the *Orient Explorer* using four streamers, will focus on the Barrow and Dampier sub-basins, covering an area of about 1,100 km² and is expected to take about 75 days to acquire. David said PGS had wanted to carry out the surveys 18 months ago, but had held off, pending a decision by the government to extend the confidentiality periods to make them economically viable.

"The area we are covering for the 2D survey runs all the way from southern Exmouth up to the southern part of the Vulcan sub-basin", he said. "Final coverage will be approximately 18,000 line km of data and we are estimating it may take about five months to acquire."

David said PGS had obtained pre-commitments for both surveys. "I think that because of the history associated with the whole non-exclusive business we, like the other geoservice companies, have very realistic guidelines in terms of the amount of initial investment we need before we can take on any new survey."

"With 2D the actual costs of the vessel is significantly lower than 3D which means you can sometimes take a bit more risk on a new basin. If the basin turns out to be a good one, then the survey can prove to be a very good investment."

David said one of the attractions for companies prepared to underwrite the surveys was an opportunity to benefit from discretionary rates in recognition of their preparedness to back the venture. They can also have a direct input into the acquisition and processing phases, particularly with the 3D survey.

"Normally with multi-client surveys we retain the responsibility for initiating, managing and running the project", he said. "Another advantage that perhaps sometimes the oil companies don't recognise is that we are the ones who are preparing and submitting the environmental and other regulatory approvals and we remain responsible for them."

David said the increasing exploration activity on the NWS was creating a demand for new data. "In terms of the 2D we are acquiring over the whole of the shelf which recognises the fact that the existing regional data was

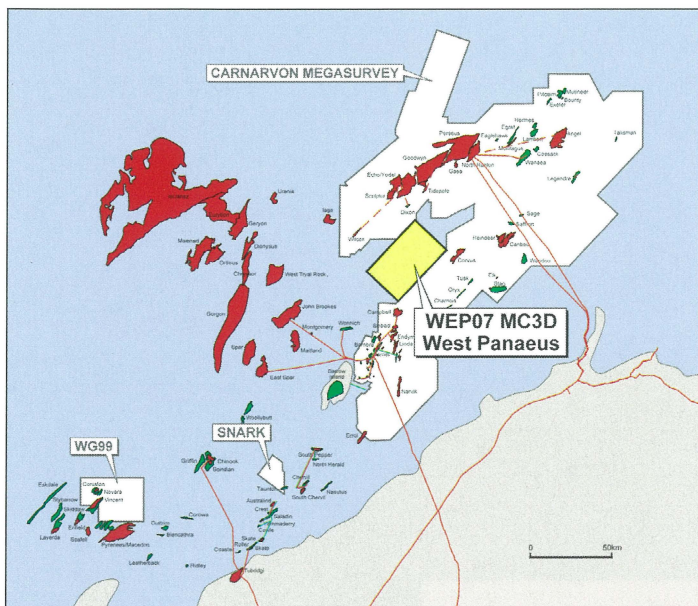
really getting a little bit old in the context of what can be done now. Our aim in acquiring this ultra long offset data is to really let people assess the overall basin architecture of the whole region."

He said the demand for new data sets was coming from companies already well established on the NWS who want improved understanding of the area, and new companies wanting to get into the region.

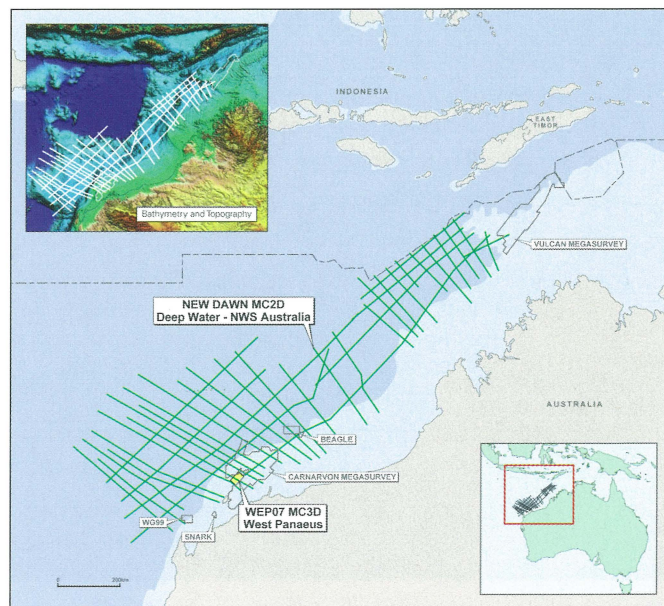
"Most of the original data that did exist was originally AGSO/Geoscience Australia data and it was acquired using only up to 4 km offset", he said. "We will be acquiring data with an 8 km streamer and 12 second records which we have found is hugely beneficial for imaging deeper targets."

David said the existing data was acquired during the 1970s and had been reprocessed several times. "But I guess there is a limit to what you can do with such data. There have been (smaller scale) surveys acquired for oil companies using long streamers and everyone we've spoken to has said this survey should be quite a step change in terms of the data imaging that we will achieve."

He said the increasing focus on gas exploration on the NWS was changing the size of surveys. "A typical 3D survey to look for oil would be somewhere between 300 - 500 km² but because deep gas is now in vogue, a typical-sized 3D area over a deep water gas discovery is 1,500 - 2,000 km² so there's a real step change in overall activity levels." ■



The 3D survey, being carried out by the *Orient Explorer* using four streamers, will focus on the Barrow and Dampier sub-basins, covering an area of about 1,100 km² and is expected to take about 75 days to acquire.



The area being covered by the 2D survey runs all the way from southern Exmouth up to the southern part of the Vulcan sub-basin. Final coverage will be approximately 18,000 line km of data and is estimated to take about five months to acquire."