



Sunday, September 20, 2020

Alan Smart
ACIL Allen
Level 6, 54 Marcus Clarke Street
CANBERRA CITY ACT 2600

RE: Review of Parts 7 to 10 and Schedules 1 to 5 of the Offshore Petroleum and Greenhouse Gas Storage Regulations

Alan,

IAGC is writing to you with a written submission to the review ACIL Allen is completing of the Offshore Petroleum and Greenhouse Gas Storage (Resource Management and Administration) (OPGGS) Regulations 2011 on behalf of The Department of Industry, Science, Energy and Resources (DISER).

Further to our verbal conversations in this letter IAGC provides background material on the multi-client or 'non-exclusive' seismic data industry and feedback on the OPGGS regulations, as currently implemented.

Background

The Multi-Client data business model plays a preeminent role in the global geophysical industry. Members of the IAGC acquire the majority of marine 3D data around the world and a large proportion of the land and transition zone (*e.g. shallow waters or nearshore areas*) 3D data in North America on a Multi-Client basis. In a Multi-Client survey model the company that acquires the survey owns the data during a confidential period defined by the host jurisdiction. During the confidentiality period the data is marketed and licensed to as many clients as possible. The Intellectual Property only has value during the confidentiality period.

The value accrued to a Multi-Client survey, the value of its 'Intellectual Property', resides in two areas:

- 1) The 'Field Data' – The data acquired in the field. Traditionally the field tapes of geophysical responses recorded during the survey itself. While now these data are stored on disks or virtually in a cloud, the Field data are an enormous volume of data that cannot be recreated in another way and are the starting point for the Processed data.
- 2) The 'Processed Data' – These are data produced after the Field Data has been processed through a set of algorithms to enhance the geophysical response. The Processed Data has several incarnations and will be re-generated as processing technology advances and customer requirements evolve.

Once the confidentiality period expires the data is made available to the host government to be distributed in accordance with local regulation. The value of the Intellectual Property is passed to the host jurisdiction.

Through its activities and its members business the IAGC has seen various jurisdictions successfully use the Multi-Client model stimulate energy exploration and areas where host governments efforts have been less successful. From these observations the IAGC has compiled a **Statement of Principles for Multi-Client surveys** these are:

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1. Jurisdictions should establish reasonable confidentiality periods for Multi-Client Data collected in their countries or jurisdictions consistent with the anticipated commercial life of these Multi-Client Data and the time frame needed by Data Owners to recoup costs and generate a reasonable profit.
2. Once established, such a confidentiality period should be maintained.
3. Should any changes to the confidentiality period be considered, such changes should only be made on a prospective “go forward” basis for permits not yet issued.
4. A model based on a 25-year confidentiality period for processed Multi-Client Data and a 50-year confidentiality period for raw field tape Multi-Client data should be adopted as “industry standard” for Multi-Client data.

In Australia, there is a 15-year confidentiality period for both Processed Data and Field Data. The confidentiality period is under review as part of the Department of Industry, Innovation and Science’s review of the Petroleum Data Management Regulations (DMR). In the following section we discuss how the Intellectual Property (IP) in Multi-Client data has generated value for the host jurisdiction, exploration and production companies and the geophysical contractors.

United States (USA):

In the USA the confidentiality period for Processed Data is 25 years and for Field Data it is 50 years. With at least 25 years within which the IP value can be recouped a vibrant Multi-Client business environment exists. Geophysical operators compete to create the most continuous and technologically advanced surveys and images (Figure 1 & Figure 2).

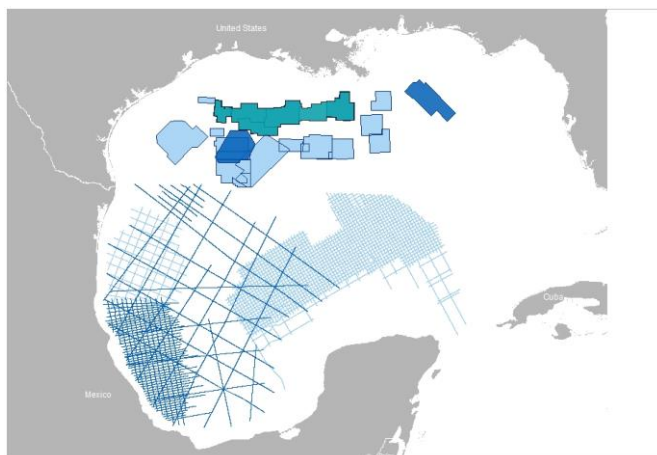


Figure 1 Multi-Client seismic datasets in the Gulf of Mexico from PGS (source: www.pgs.com)

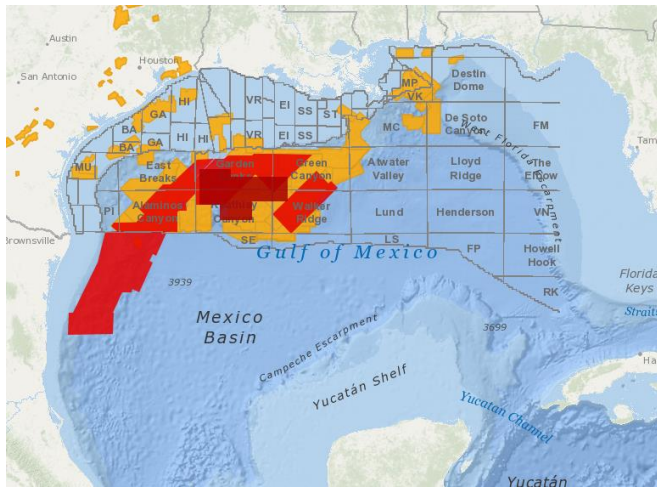


Figure 2 Multi-Client seismic datasets in the Gulf of Mexico from CGG (source: geostore.cgg.com)

Australia:

In Australia the IP Value of the 15-year confidentiality period for both Processed and Field Data has resulted in advances in exploration and the accrual of value to the geophysical survey owner, the titleholders and the Australian Commonwealth. Three examples are discussed below:

Capreolus 3D: The Capreolus 3D is a 22,130 sq. km seismic survey (Figure 3) across proven, but underexplored petroleum plays in the Beagle and Bedout sub-basins offshore northwest Australia. The Capreolus 3D survey replaced multiple 2D and 3D vintage seismic datasets.

The regional nature of the Capreolus 3D allowed the imaging of a new play. The canyon-fill play that resulted in the Dorado-1 discovery. Dorado is one of the largest oil-discoveries ever on the Australian North-West Shelf. This type of play cannot be seen on the legacy 2D data in this area and is notoriously difficult to image on 2D seismic.

A search for analogues to Dorado resulted in the exceptional bidding activity seen in the 2018 exploration release bids for title WA-541-P (W-18-4).

The IP value of this survey will accrue in tax revenue from production at Dorado to the Australian Commonwealth, profit on production to the titleholder and data license fees to the survey owner. None of this value will be realized had the survey owner not taken the risk to acquire a regional survey across the underexplored Bedout and Beagle sub-basins.

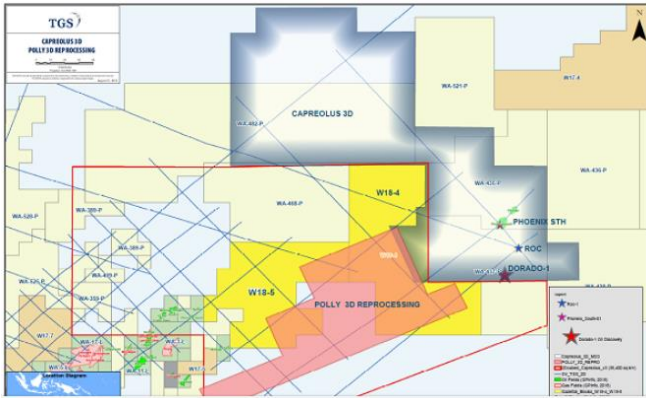


Figure 3 TGS Capreolus 3D (source: www.TGS.com)

Great Australian Bight (GAB):

The GAB is one of the world’s most under-explored regions. The GAB has a viable oil source rock, but petroleum traps have not yet been tested by drilling. To date, only two petroleum wells have been drilled in an area the size of the US Gulf of Mexico. In 2014 and 2015 two Multi-Client datasets were acquired, the Springboard 3D and the Nerites 3D. These data resulted in the GAB being covered from edge-to-edge by a 3D seismic survey totalling more than 30,000 sq. km (Figure 4), 1,000s of sq. km more than the titleholders had committed to.

These data enabled titleholders to make informed risk-based drill or drop decisions about their permits and minimized the environmental disturbance of this sensitive region.

The recognition of IP value in these surveys through the 15-year confidentiality period incentivizes the survey owners to market the GAB and keep the geophysical product up-to-date with current technology, augmenting the efforts of the Commonwealth to promote exploration in the GAB.

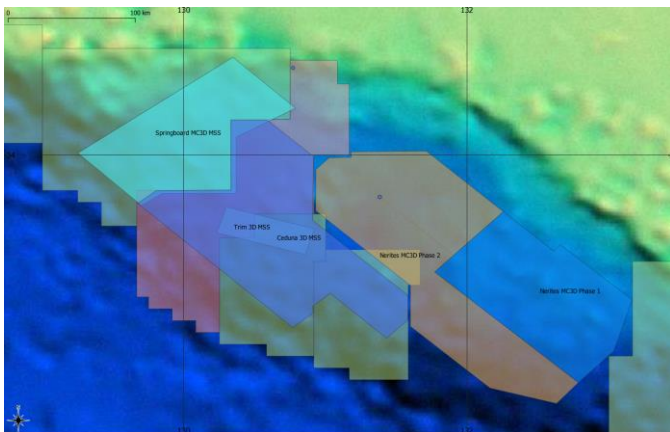


Figure 4 3D seismic surveys in the GAB. Multi-Client surveys Springboard 3D and Nerites 3D augment the proprietary Ceduna 3D and Trim 3D to provide edge-edge seismic coverage of the GAB (Source: NOPIMS and NEATS).

Discussion

IAGC has collated confidentiality periods from various jurisdictions around the world for Field and Processed Multi-Client Data in Table 1. All jurisdictions apply a longer or equal confidentiality period to Field data versus Processed data i.e. Field Data has greater IP value than the Processed Data. For Field data, Australia's confidentiality periods at 15 years are close to a global best practice, albeit behind the IAGC's Statement of Principles confidentiality period of 50 years for Field Data.

Processed Data confidentiality periods are more variable. In addition, the technical product defined as 'Processed Data' varies. In all the jurisdictions detailed in the table the release period is 10 years or more. These data emphasise that jurisdictions recognise the need for an extended period for data owners to achieve a return on their investment. Norway augments this by allowing an extension to the confidentiality period if cost recovery (recouping of survey expenditure through sales revenue) has not been achieved. In Brazil, Processed data has a further 10-year extension to the confidentiality period if the data is re-processed, re-iterating that if data owners invest in their product the owners are permitted a period to achieve a return on their investment.

The IAGC regards the Statement of Principle for Multi-Client Surveys to be a foundation of a strong, profitable Multi-Client industry, and the IAGC recognises the right of any jurisdiction to vary these principles based on local norms or characteristics of the local petroleum industry. The examples described in this text demonstrate that the 15-year confidentiality periods in-place in Australia have, over the last decade, fostered a Multi-Client industry that has advanced exploration, recognised the value of the Multi-Client industry IP while allowing that industry to make a return on their investment and provide Australia with a better understanding of resources available to the country.

A perception of the Multi-Client model is that the data can appear to be 'locked-up' and out of reach of academic research, government or weakly capitalised industry participants. The IAGC does not agree with this perception. Commonly, IAGC members execute licensing agreements with academic researchers, government and a range of industry participants on a no-cost, low-cost or deferred-cost basis. While the data remains the property of the data owners, research findings can be published and exploration undertaken, while license fees could be conditional subject to acquisition of an asset or a positive outcome to a search for funding. Importantly, the IAGC notes that data acquired by our members is always available for contracting at agreeable terms, thus, confidentiality periods should be seen as both an incentive to drive investment and a period where data are available under contract to encourage geophysical companies to explore.

IAGC understands that the Australian data regulations were intended to allow a release of a 5 x 5 km grid of seismic data extracted from 3D multi-client datasets. It is understood that while some data owners released this grid, the regulations did not prohibit non-release of the 5 x 5km grid. Consequently, not all multi-client data owners released the grid of data. IAGC recognises the intention of the regulations and proposes that discussions take place about implementing for new 3D multi-client seismic datasets:

- a) The 15-year data confidentiality period; and
- b) A 5 x 5 km grid of seismic grid of seismic data is released.

Table 1 Comparison of Multi-Client Confidentiality terms in selected jurisdictions (Source: IAGC files)

Confidentiality term
(Processed)

Confidentiality term (Field)

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<i>Australia</i>	15 years	15 years
<i>USA</i>	25 years	50 years
<i>Brazil</i>	10 years	10 years
<i>New Zealand</i>	15 years	15 years
<i>Indonesia</i>	MC3D: 15+5 (possible further extension) MC2D: 10 + 5 (possible further extension)	MC3D: 15+5 MC2D: 10 + 5
<i>Malaysia</i>	10-15 years	10-15 years
<i>India</i>	12 years	12 years
<i>Papua New Guinea</i>	typically 12 years (6-15 at Ministers discretion)	typically 12 years (6-15 at Ministers discretion)
<i>United Kingdom</i>	In process – 10 years**	In process – 15/20 years**
<i>Mexico</i>	12 years	

* Commonwealth waters, offshore. States of South Australia and Western Australia have 15-year exclusivity.

** Post-2017 terms. (data acquired Pre-2018 is not subjected to release/disclosure)

NOTES:

- (1) Release of data is nominally set at ten years but can be extended upon mutual agreement for an additional period if cost recovery has not been achieved (Norway).
- (2) Release of an extracted 2D grid is unique to Australia.
- (3) Indonesia grants extensions to the nominal 10-year period if the survey has not reached cost recovery. These extensions are granted as increments of three years.

Conclusion:

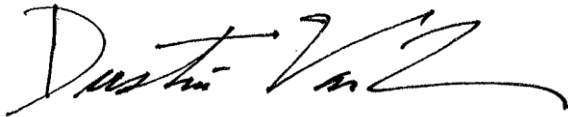
The IAGC asserts that the recognition of the IP value in Multi-Client surveys is built upon certainty in the length of the confidentiality period. The global examples used show how jurisdictions with a certain confidentiality period have built a vibrant Multi-Client industry (e.g. USA) underpinning a strong petroleum industry and where the absence of a viable Multi-Client industry hinders efficient exploration.

The Australian examples used show how, with a business case underwritten by a 15-year confidentiality period, the Multi-Client industry has invested considerably into the market becoming the largest contributor to the data acquisition industry, advanced the geological understanding of new basins yet to be tested, accelerated the conventional E&P cycle enabling informed decision making from new datasets that are immediately available and unlocking new discoveries including one of the largest ever on the North-West shelf.

Australia’s confidentiality period is set near global normative practice at 15-years for Field and Processed Data, albeit a far shorter period than that in IAGC’s Statement of Principles. Nevertheless, a 15-year confidentiality period provides time to achieve a return on the IP value of the new geophysical data. IAGC believes that no change should be made to the 15-year confidentiality period. IAGC is open to discuss the release of a 5 x 5 km grid of seismic data from all new multi-client surveys conducted in Australia, provided the confidentiality terms remain at 15 years.

Thank you for your attention. IAGC would be pleased to answer any questions or provide any clarification you may have. Please in the first instance contact Dr Simon Molyneux our Asia-Pacific Representative based in Perth (simon.molyneux@iagc.org +61 418 349 672).

Sincerely,

A handwritten signature in black ink, appearing to read "Dustin VanLiew". The signature is fluid and cursive, with a long horizontal stroke at the end.

Dustin VanLiew

Vice President, Regulatory & Governmental Affairs

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