

## **Invitation for Proposals**

### **Seismic acquisition, seismic reprocessing and/or acquisition of any other geophysical, geological, or geochemical data, offshore South Africa**

#### **1. Introduction**

South Africa is currently preparing for the release of open acreage, both on and offshore, under license rounds to be scheduled following the enactment of the Upstream Petroleum Resources Development (“UPRD”) Bill, 2021, currently before Parliament. While committed to achieve carbon neutrality by 2050, and recognizing the sensitivities associated with marine seismic acquisitions in the country, it remains the Government of South Africa’s stated policy and desire to develop the country’s indigenous natural gas and oil resources to ensure national energy security, stability, and economic development. South Africa is thus on a clear path to respond to national developmental imperatives by exploring, discovering, quantifying, and developing its indigenous petroleum resources in an environmentally sustainable and responsible manner.

The Department of Mineral Resources and Energy hereby calls for proposals from seismic acquisition, seismic reprocessing or any other companies involved in exploration data acquisition or enhancement, to enter into an agreement with the Petroleum Agency South Africa (“PASA” or “the Agency”) for data acquisition and/or enhancement over all or any of the areas shown below. The new datasets are planned to be released as part of a licensing round program and will be made a mandatory purchase for prospective bidders as part of the bid package, timing and terms are to be negotiated.

Open acreage areas for release under license rounds to be held in terms of the new Act have been identified. Some of these areas are mature in terms of data coverage and are considered ready for immediate release. Other areas may benefit from reprocessing of old data or the acquisition of further data before release. Seismic acquisition and/or seismic reprocessing programs shown below are indicative only and alternative proposals that will benefit the imaging of the areas to be covered will be considered. Other data acquisition surveys such as gravity and magnetic surveys, geochemical surveys, Controlled Source

Electromagnetic (CSEM) studies, and satellite slick studies will also be considered. The Agency may elect to award different data type acquisitions to multiple contractors within an area.

Proposed activities relating to the acquisition of new data or reprocessing of existing data in response to this invitation for proposals shall be undertaken solely at the risk of the Company proposing such activities. Successful Companies bidding on the acquisition and processing of new data will be required to apply for, and be granted a reconnaissance permit before commencing any operations. While the State, through the Petroleum Agency of South Africa will remain the rightful owner of the newly acquired or processed data, the Company will be granted sole marketing rights for a period of ten years, renewable by agreement. Terms and conditions relating to profit sharing and skills transfer will be discussed with the Companies that submit proposals and shall form part of an agreement to be entered into between the selected Company and PASA. In areas where no new data acquisition is required and the work program only requires reprocessing of existing data, work can start as soon as an agreement with PASA, as outlined above has been executed.

PASA shall host a non-compulsory briefing session for this invitation for proposals. Interested parties are therefore requested to register to receive communication regarding this invitation for proposals by sending an email to [offshoresurveys@petroleumagency.co.za](mailto:offshoresurveys@petroleumagency.co.za).

Proposals to acquire and/or process and reprocess seismic data will be evaluated in line with the scoring schedules included below. Proposals for any other type of data acquisition will be evaluated on their respective merits.

## **2. Proposals for Data Acquisition and Reprocessing**

Proposals will be accepted at the discretion of the Petroleum Agency SA.

There are three license areas for which Companies may send proposals for data acquisition and/or data processing. Companies may submit proposals for one, two

or all three of the planned license areas. These areas are described in Paragraph 3 below.

Companies submitting successful data acquisition proposals will be required to apply for a reconnaissance permit and Environmental Authorisation in terms of the Mineral and Petroleum Resources Development Act, 28 of 2002 read together with the National Environmental Management Act, 107 of 1998.

Companies submitting successful proposals for data reprocessing or enhancement will have to enter into a contractual agreement with the Petroleum Agency SA before commencing work and the work can start immediately upon execution of the contract.

The areas/blocks for the preparation of proposals are described below, two of the areas are for new data acquisition, and the third area is where reprocessing of existing data may be more optimal:

### **3. Offshore planned license areas**

#### **3.1 West coast**

The work program in this area requires the acquisition and processing of new seismic data. As field operations offshore are required, Company will have to apply for, and be granted a Reconnaissance Permit prior to commencing work. The effort and risk to successfully apply for and be granted this reconnaissance permit lies solely with the bidding Company.

##### **3.1.1 License Area**

The identified License area is situated in the deep water off the southwestern Orange Basin and covers an area of approximately 113 000km<sup>2</sup>. Water depths range from 3 500m along the eastern boundary of the block up to 5 000m to the west and south.

##### **3.1.2 Seismic Data**

The current seismic database of the area consists of approximately 1 794 line km's of migrated and stacked 2D data in Seg-Y format that

range in vintage from 2003 to 2012. Data quality ranges from fair to very good and reaches two-way time depths up to 10s for good quality surveys.

Images of three dip and one strike line in the neighbouring ER224 can be downloaded from the Agency website.

The main geological well control with respect to source rocks is inferred from two wells, O-A1 and DSDP 361. Both these wells recorded oil-prone Aptian source rock with average TOC values exceeding 4%. The source rock in DSDP 361 is a good quality Aptian source rock, recorded as immature. The source rock in O-A1 has been partially eroded but seismic data indicates significant thickening distally. C-B1, to the east, did not intersect any source rocks.

### **3.1.3 Prospectivity**

Several high amplitude anomalies have been identified in the license area adjacent to the deep-water West Coast open block. The anomalies have been interpreted as basin floor fan and channel fan complexes. They all occur in water depths between 3 500 and 4 500 metres below sea level (mbsl). Within the DSDP361 borehole, a thick and rich Aptian source rock was intersected. Although it was classified as immature at the borehole location, the overburden towards the north and east becomes thicker which could improve the maturity. Reservoirs are expected to be sand-rich within the license area sourced from detached canyon systems along the shelf break.

### **3.1.4 Infrastructure**

There are currently crude oil storage facilities in Saldanha Bay (OTMS Tank Farm). The storage facilities are located roughly ~210km from the West Coast Open Acreage and have a capacity to store 13.2 million barrels of crude oil. This could create a potential direct entry point for the transport of crude oil to the State owned and PetroSA operated Gas to Liquids Refinery (GTL) in Mossel Bay or other future refineries. The PetroSA GTL Refinery in Mossel Bay, South Africa is the third largest in

the world and is directly located some 500km from the eastern-most identified lead.

### 3.1.5 Suggested Seismic Acquisition

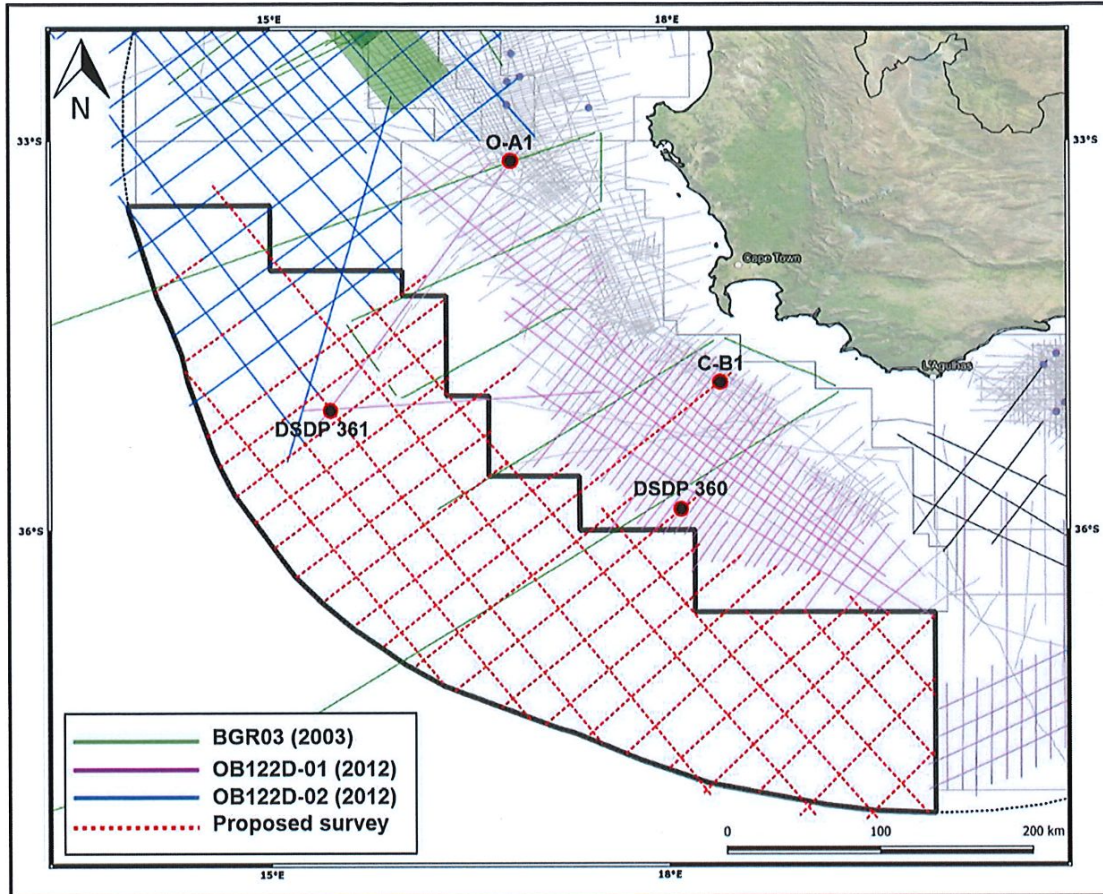


Figure 2: Suggested new seismic data acquisition grid for the West Coast area. High resolution maps are available on the Agency website.

### 3.1.6 Seismic Data

The current seismic database of the adjacent area consists of approximately 1 800 line km's of migrated and stacked 2D data archived in Seg-Y format that range in vintage from 2003 to 2012. Data quality ranges from fair to very good and reaches two-way time depths up to 10s for good quality surveys.

It is suggested that at least 6 900km total 2D lines be acquired, with grid spacing of 25 to 35km, tied to existing seismic lines and well locations. Bidding companies can propose alternative acquisition plans to improve



efficiency of the proposed survey(s) whilst meeting the primary objective of imaging and being able to extend the regional interpretation to the edge of South Africa's exclusive economic zone (EEZ).

### 3.2 Western Bredasdorp Basin and Infanta Embayment

The work program in this area is focused on data enhancement of existing data as opposed to acquiring new data. As no field work will be done, no environmental impact assessment is required for this block. This work program can be initiated as soon as a contract with the Petroleum Agency of South Africa (PASA) has been executed.

#### 3.2.1 License Area

The license area is situated in the Western Bredasdorp Basin (WB) and covers an area of approximately 10 000km<sup>2</sup>. Water depths range from 50m along the northwest, gradually deepening to 116m to the southwest. The Infanta Embayment (IE) license area covers under 6 900km<sup>2</sup>, with water depths ranging between 50m in the northwest to 200m in the southeast.

#### 3.2.2 Seismic Data

The current seismic data in the WB and IE areas totals approximately 7 000 line km, of migrated and stacked 2D data in archived Seg-Y format that range in vintage from 1969 to 2016. Data quality ranges from fair to very good quality surveys.

A table of vintage and seismic line length earmarked for reprocessing is included below.

Survey year	Line length (km)	# of Lines	Quality Ranking
1974	44.0	2	Very Poor to Poor
1976	351.2	10	Very Poor to Fair
1978	673.0	14	Very Poor to Fair
1979	693.2	17	Very Poor to Fair
1980	1,141.3	17	Very Poor to Fair
1981	476.8	16	Very Poor to Fair
1982	261.6	6	Very Poor to Fair
1983	884.9	19	Very Poor to Fair

1984	199.9	4	Poor to Fair
1985	303.4	12	Very Poor to Fair
1986	641.0	22	Very Poor to Good
1987	124.3	5	Poor to Good
1989	434.6	17	Very Poor to Fair
1990	258.5	6	Very Poor to Fair
1991	482.3	12	Very Poor to Fair
1992	91.5	4	Very Poor to Poor
1993	230.9	5	Very Poor to Fair

The surveys acquired before 2012 were acquired with 3 000m streamers, and the very early ones with only 2 400m of cable. AVO processing of the deeper data on these lines is therefore compromised by a lack of fold in angle gathers.

### 3.2.3 Well Data

Four wells were drilled in the Western Bredasdorp Basin (WB) between 1973 and 1987. These wells intersected fair to good quality oil to wet-gas prone source sequences. Two wells in the Southern Sub-basin had oil shows. Seven wells were drilled in the Infanta Embayment (IE) between 1970 and 1986. Three wells intersected dry to wet-gas prone source sequences above the late Cenomanian unconformity, while F-K1 also intersected dry gas prone source rock of the Aptian succession.

All these wells have recommendation to drill reports and well completion reports. Sets of wireline logs are available in digital format. Composite logs, lithologs, petrography, geochemistry and micro-palaeontology data sets are available for most wells and a full catalogue of the data and reports is available.

### 3.2.4 Prospectivity

Several high amplitude anomalies have been identified in the Western Bredasdorp license areas. The P50 recoverable volume for the WB prospects is estimated at 1 800 MMbbl, while the in-place volume is

6 000 MMbbl. This excludes prospect P6 as it constitutes the north-western up dip portion of the Rinkhals prospect, which straddles Block 9. The Agency has delineated six prospects in the Infanta Embayment, of which four comprise stratigraphic traps, while F-D1 and the Anomaly comprise a structural and combination trap, respectively. Further details of these prospects are available on the Agency website.

### **3.2.5 Infrastructure**

Both license areas are adjacent to the existing gas and condensate pipeline connecting Block 9 to shore. This could create a potential direct entry point for the transport of crude oil to the GTL facility in Mossel Bay or other future refinery facilities.

### **3.2.6 Suggested seismic reprocessing proposal**

Seismic lines suggested for reprocessing relevant to the western Bredasdorp Basin and Infanta Embayment are shown in the figures below, ranked from 1 to 5, according to image quality. Rank 1 lines in red, are poorest quality, followed by rank 2 in orange, rank 3 in yellow, rank 4 in cyan and the best quality lines, rank 5, are shown in indigo.

Furthermore, regional inversion studies can also be carried out, where lines intersect boreholes that have the required acoustic logs.



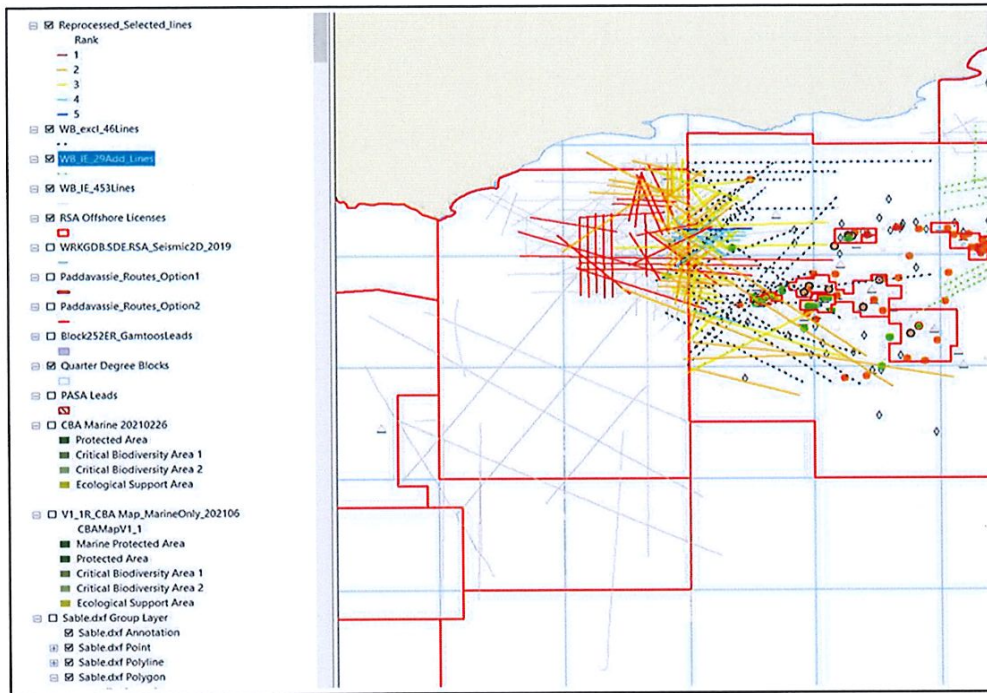


Figure 3: Reprocessing suggestions for the western Bredasdorp area, ranked from 1 to 5. A high-resolution map can be accessed on the Agency website.

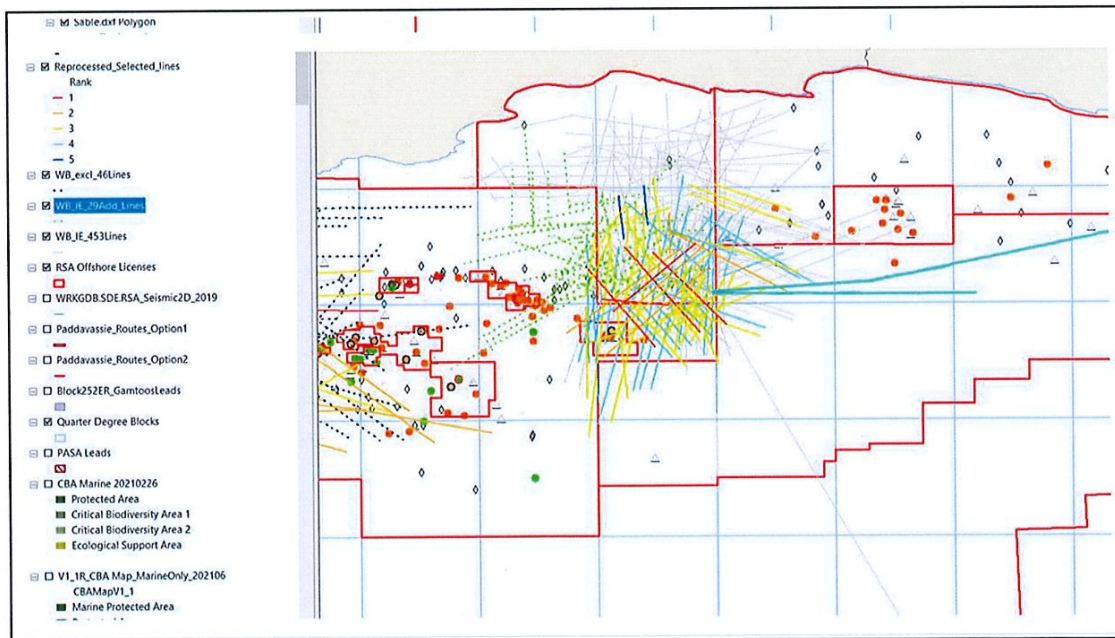


Figure 4: Reprocessing suggestions for the Infanta Embayment area, ranked from 1 to 5. A high-resolution map can be accessed on the Agency website.

### 3.3 East Coast

#### 3.3.1 License Area

The License block forms part of the southern extent of the Durban basin, northern Transkei swell and the deep-water Natal Valley. The area covers approximately 50 000km<sup>2</sup> with water depths ranging between 4 200 to 5 500m.

#### 3.3.2 Seismic Data

The east coast offshore area has seen an increase in seismic acquisition activity during the last decade. More than 40 000km of 2D and 5 000km<sup>2</sup> of 3D seismic data was acquired since 2010; with drilling activity expected soon to add to the existing offshore wells. The 3 500km of 2D seismic data was acquired between 2013 and 2018 through License holders and a series of non-exclusive permits between seismic contractors and the Agency.

#### 3.3.3 Borehole Data

The four wells that were drilled offshore the Durban basin although regarded as dry, provide primary evidence of an active petroleum system. The wells have sets of digital logs, cuttings, and reports that are readily available from the Agency. The evidence supporting the presence of source rocks and active petroleum systems is found in DSDP330 and DSP511, located on the Maurice Ewing Bank, that intersected thick oil prone source rocks of Kimmeridgian to Aptian age.

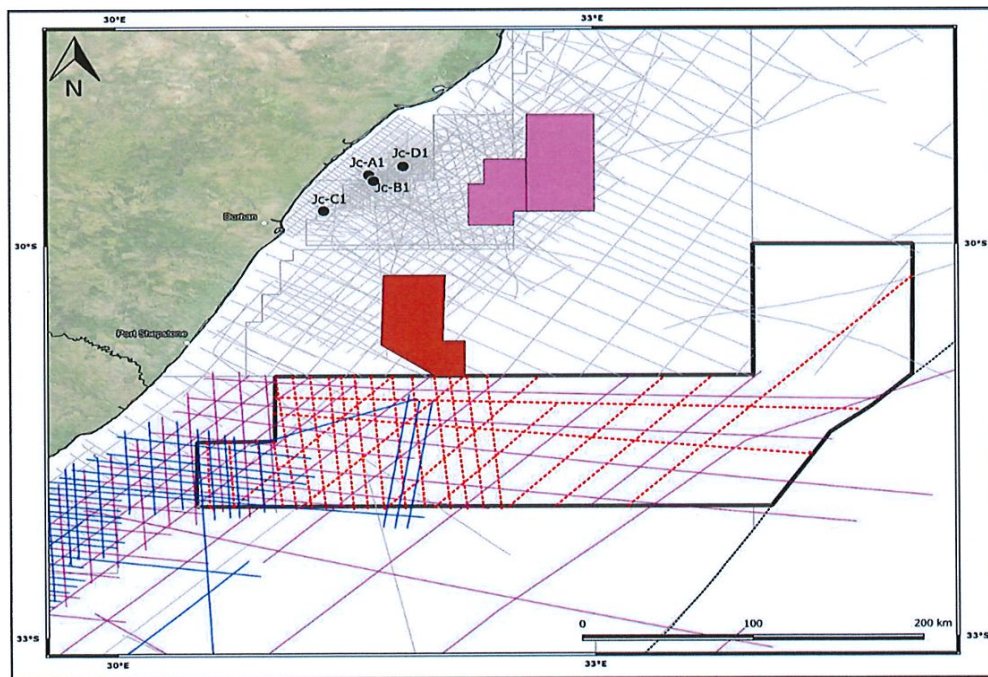
Similar age source rocks are postulated to occur within the Durban Basin in the rift and early drift succession that underlies the Tugela Cone. Jc-B1 exhibited minor gas shows and the associated shale has total organic carbon values, ranging from 2.75% to 5%. Jc-D1 mud gas values indicate a trend of increasing wetness with depth. In addition, fluid inclusion studies of Jc-D1 samples provide evidence for seeping light hydrocarbons and an extract sample yielded slightly biodegraded oil. Fluorescence was also observed in this interval and in the basal section

of the well in association with bitumen staining. An extract from the latter yielded evidence for a light oil derived from marine claystone of Cretaceous to Jurassic age.

**3.3.4 Prospectivity**

The major play in the area consists of high amplitude Mid Cretaceous fans and turbidites. During this time, the movement along the Agulhas Falkland Zone, created space for the distribution of offshore sediments on the new oceanic crust offshore South Africa. Furthermore, there conditions for the formation of basin floor fans and turbidites were optimal. These features extend for more than 10km offshore within the deep water.

**3.3.5 Suggested acquisition proposal**



<p><b>Existing seismic data</b> Northern Durban basin 2x 3D seismic data sets</p> <ul style="list-style-type: none"> <li>Existing and reprocessed seismic datasets</li> <li>PGS Non-exclusive 2D seismic data (2013 &amp; 2018)</li> </ul>	<ul style="list-style-type: none"> <li>Existing 2D (1974 – 2013)</li> <li>SA132D-01 (2013)</li> <li>MC2D-SA-2018 (2018)</li> <li>DB163D-01 (2016)</li> <li>DB183D-01 (2018)</li> <li>Proposed 2D survey</li> </ul>
<p><b>Proposed 2D seismic datasets</b></p> <ul style="list-style-type: none"> <li>Minimum Total Line km's: 3500km</li> <li>Grid spacing approx. 5-10km</li> </ul>	



*Fig 5: Suggested new seismic data acquisition grid for the East Coast area. A high-resolution map can be accessed on the Agency website.*

#### **4. Proposals**

Companies wishing to submit proposals may do so for one, two or all three of the areas described above.

Proposals must clearly demonstrate a good understanding on the part of the proposer of what is required including the permitting process and nature of agreement to be entered into with Petroleum Agency SA, as well as the timeline involved for a return on the investment to be made.

The new data acquired under these proposals is to be released as part of the licence round package for these areas. This will only be possible once the UPRD Bill is enacted. In addition, the successful proposing Company(ies) for the acquisition and processing of new data in the west coast and east coast areas will be required to apply for a reconnaissance permit following all the normal requirements, including environmental authorisation for seismic or other new data acquisition at the sole risk of the successful Company. Company being awarded the reprocessing work program in the Western Bredasdorp, Infanta Embayment areas need not apply for a reconnaissance permit and work can start as soon as a contract with the Agency has been executed.

Proposals will be evaluated in accordance with the scoring and weighting schedules shown below. Besides demonstrating a good understanding of what is required as described above for both new data acquisition and reprocessing proposals, the following criteria will be considered during evaluation.

##### **4.1 New Seismic Data Acquisition Proposals**

New seismic data acquisition proposals must address, and will be evaluated on the following factors:

- a. Quality of proposal including the company's understanding of what is required including the permitting process to be followed.
- b. Profit sharing proposal.
- c. Skills transfer/training proposal.
- d. Speculative survey acquisition experience.
- e. Acquisition technology offered including mitigation measures for local conditions.
- f. Processing technology offered including understanding of local imaging challenges.
- g. Acquisition experience within the last 5 years.
- h. References and track record.
- i. SHEQ certification.

#### **4.2 Proposals for reprocessing of existing seismic data**

Proposals for reprocessing of existing seismic data must address and will be evaluated on the following factors:

- a. Quality of proposal including a good understanding of what is required including the permitting process as described above.
- b. Profit sharing proposal.
- c. Skills transfer/training opportunities proposed.
- d. Speculative project experience.
- e. Processing technology offered including understanding of local imaging challenges.
- f. References and track record
- g. SHEQ/ISO certification.

#### **4.3 Proposals for any other type of data acquisition**

Proposals for any other type of data acquisition are expected to be limited and unique, will be evaluated on their respective merits.

## 5. Evaluation schedules and weightings

### 5.1 New seismic data acquisition and processing (West Coast; East Coast acreage)

	Evaluation Criteria	Contribution
1	Quality of proposal ( <i>Overall understanding and meeting scope of requirements</i> )	25%
2	Profit sharing mechanism proposed.	20%
3	Skills transfer / training opportunities proposed.	15%
4	Non-proprietary / speculative surveys experience	8%
5	Acquisition Technology offered in 2D fleet; Mitigations offered demonstrates understanding of local metocean conditions	8%
6	Processing Technology offered; Proposed processing treatment demonstrates understanding of local imaging challenges	8%
7	2D surveys > 5 000km <u>acquired and processed</u> in last 5 years	6%
8	(average) Client feedback from references provided	5%
9	Company SHEQ / ISO certification	5%



### 5.1.1 Quality of Proposal

25%	Quality of proposal
<ul style="list-style-type: none"> <li>• Overall understanding and meeting scope of requirements</li> </ul>	
Score	Evaluation targets
5	<ul style="list-style-type: none"> <li>• Excellent proposal - The important issues are approached in an innovative and efficient way, indicating that the bidder has the required knowledge of state-of-the-art approaches to successful acquisition and processing projects.</li> <li>• Proposed project execution plan is tailored to address the project objectives, and sufficiently flexible to accommodate changes that may occur during execution.</li> <li>• The quality and risk management plans plan are tailored to the critical characteristics of the project.</li> <li>• The primary objectives and key success factors are identified, and the proposal is clear how this will be pursued in an innovative and efficient way using state-of-the-art methodologies and technologies to meet the objectives.</li> <li>• The proposed approach details ways to improve the project outcomes and quality of the outputs.</li> </ul>
4	<ul style="list-style-type: none"> <li>• Very good proposal</li> <li>• Proposed project execution plan is tailored to address specific project objectives and methodology and is sufficiently flexible to accommodate changes that may occur during execution.</li> <li>• The quality plan and approach to managing risk etc. are tailored to the critical characteristics of the project.</li> </ul>
3	<ul style="list-style-type: none"> <li>• Good proposal</li> <li>• Proposed project execution plan is satisfactory and partially tailored to address the project objectives. The approach proposed minimally deals with the critical characteristics of the project.</li> </ul>

	<ul style="list-style-type: none"> <li>The quality plan, and approach to managing risk etc. are compliant with project specifications.</li> </ul>
2	<ul style="list-style-type: none"> <li>Average Proposal</li> <li>Proposed project execution plan is of a generic nature and not necessarily tailored to address the project objectives.</li> <li>The quality plan, and approach to managing risk etc. are too generic.</li> </ul>
1	<ul style="list-style-type: none"> <li>The proposed project execution plan is poor and unlikely to satisfy project objectives and requirements.</li> <li>The company has misunderstood certain aspects of the scope of work and therefore does not deal with the critical aspects of the project.</li> </ul>
<b>Eliminated</b>	<b>No technical proposal submitted by the company</b>

### 5.1.2 Profit-sharing

<b>20%</b>	<b>Ranked profit sharing mechanism proposed.</b>
	<ul style="list-style-type: none"> <li><i>The profit-sharing mechanisms proposed in bids will be ranked against each other and the rank fitted into the 5-point scale with 5 being the most attractive and 1 the least attractive.</i></li> <li><i>Different bidders' profit-sharing proposals may be ranked as equally attractive, or not, and be awarded the same evaluation score.</i></li> <li><i>The profit-sharing scheme will be a subject for further negotiation upon identifying preferred bidders.</i></li> </ul>
<b>Score</b>	<b>Evaluation targets</b>
5	Most attractive initial profit-sharing proposal
:	Ranking fitted
:	
1	Least attractive initial profit-sharing proposal

0	Ignored requirement
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### 5.1.3 Skills transfer

<b>15%</b>	<b>Ranked training opportunities proposed.</b>
	<ul style="list-style-type: none"> <li>• <i>The training and experience opportunities proposed in bids will be ranked against each other and the rank fitted into the 5-point scale with 5 being the most attractive and 1 the least attractive.</i></li> <li>• <i>Different bidders' skills transfer proposals may be ranked as equally attractive, or not, and be awarded the same evaluation score.</i></li> <li>• <i>The training and experience opportunities during work program execution will be a subject for further negotiation during contract negotiations.</i></li> </ul>
<b>Score</b>	<b>Evaluation targets</b>
5	Most attractive training and experience exposure proposal
:	Ranking fitted
:	
1	Least attractive training and experience exposure proposal
0	Ignored requirement

### 5.1.4 Non-proprietary / speculative surveys experience

<b>8%</b>	<b>Non-proprietary / speculative surveys experience</b>
<b>Score</b>	<b>Evaluation targets</b>
5	<ul style="list-style-type: none"> <li>• Bidder has demonstrated track record of successfully acquiring, processing, promoting and licensing non-proprietary, multi-client seismic data during the last 5 years.</li> <li>• Bidder has track record of partnering with PASA to acquire and process data</li> </ul>

	<ul style="list-style-type: none"> <li>• Bidder has track record of partnering with African NOCs and regulators to acquire data, process and license data to companies wishing to bid on a license round auction</li> <li>• Company offers regional level interpretation of new data to add value and assist in promoting new multi-client data</li> </ul>
4	<ul style="list-style-type: none"> <li>• Bidder has demonstrated track record of acquiring, processing, promoting and licensing non-proprietary, multi-client seismic data successfully during the last 5 years.</li> <li>• Bidder has track record of partnering with African NOCs and regulators to acquire data, process and license data to companies wishing to bid on a license round auction</li> <li>• Company offers regional level interpretation of new data to add value and assist in promoting new multi-client data</li> </ul>
3	<ul style="list-style-type: none"> <li>• Bidder has demonstrated track record of acquiring, processing, promoting and licensing non-proprietary, multi-client seismic data successfully during the last 5 years.</li> <li>• Bidder has track record of partnering with African NOCs and regulators to acquire data, process and license data to companies wishing to bid on a license round auction</li> </ul>
2	<ul style="list-style-type: none"> <li>• Bidder has demonstrated track record of acquiring, processing, promoting and licensing non-proprietary, multi-client seismic data successfully during the last 5 years.</li> </ul>
0	<ul style="list-style-type: none"> <li>• Less than 5 years track record of successfully acquiring, processing, promoting and licensing non-proprietary, multi-client seismic data.</li> </ul>



### 5.1.5 Acquisition Technology

<b>8%</b>	<b>Acquisition Technology offered in 2D fleet</b>
	<ul style="list-style-type: none"> <li>• <i>Technical submission demonstrates appreciation for, mitigation and/or treatment of offshore South African metocean conditions – such as (but not limited to) water depths in east and west coast areas under this RFP, long period persistent swells, fast flowing currents and swirling eddies, barnacle growth on in-water equipment, shark and seal bite damage to streamers, interaction with long-line and trawling fishing fleets, maritime traffic, environmental compliance requirements, etc...</i></li> </ul>
<i>Scores of 2 or 4 not provided for in this criterion</i>	
<b>Score</b>	<b>Evaluation targets</b>
5	<ul style="list-style-type: none"> <li>• Demonstrate that local conditions have been investigated and are well understood.</li> <li>• Bidding document provides comprehensive proposals to mitigate and/or deal with local/metocean conditions.</li> </ul>
3	<ul style="list-style-type: none"> <li>• Bidding document's treatment references and proposals to mitigate local metocean, seafloor geometry, etc. are generic in nature.</li> </ul>
1	<ul style="list-style-type: none"> <li>• Cursory references to local conditions and challenges without firm proposals how to mitigate</li> </ul>
0	<ul style="list-style-type: none"> <li>• <b>Processing challenges not addressed</b></li> </ul>

### 5.1.6 Processing Technology

<b>8%</b>	<b>Processing Technology</b>
	<ul style="list-style-type: none"> <li>• <i>Proposed processing treatment demonstrates understanding of local imaging challenges</i></li> </ul>

Scores of 2 or 4 not provided for in this criterion	
Score	Evaluation targets
5	<ul style="list-style-type: none"> <li>• Demonstrate that local imaging challenges and nature of deep-water seismic processing are well understood</li> <li>• Bidding document provides comprehensive proposals to mitigate local imaging challenges.</li> <li>• Flexibility offered in parameter testing and refinement of processing parameters</li> </ul>
3	<ul style="list-style-type: none"> <li>• Bidding document's treatment references and proposals to mitigate local imaging problems are generic in nature.</li> </ul>
1	<ul style="list-style-type: none"> <li>• cursory references to local conditions and challenges without firm proposals how to mitigate</li> </ul>
0	<ul style="list-style-type: none"> <li>• <b>Processing challenges not addressed</b></li> </ul>

### 5.1.7 2D seismic Experience

6%	2D surveys > 5 000km acquired, processed last 5 years
	<ul style="list-style-type: none"> <li>• 2D survey experience can be proprietary or speculative.</li> <li>• List survey size, operator, region, high level acquisition parameters- cable length, record length, project plan efficiency (actual vs planned)</li> </ul>
Score	Evaluation targets
5	>=8 surveys with contactable references for 3 surveys
4	>=5 surveys with contactable references for 3 surveys
3	>=8 surveys but less than 3 references provided
2	>=5 surveys but less than 3 references provided
1	<5 surveys



<b>0</b>	<b>No surveys listed</b>
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### 5.1.8 Client Feedback

<b>5%</b>	<b>Averaged Client feedback from references provided</b>
	<ul style="list-style-type: none"> <li><i>Averaged qualitative rating feedback sourced from references provided</i></li> </ul>
	<i>Scores of 3 not provided for in this criterion</i>
<b>Score</b>	<b>Evaluation targets</b>
5	Exceeded expectations, will use again, will recommend
4	Met Expectations, will use again, will recommend
2	Will use again but with stricter operator oversight
1	Will not use again
<b>0</b>	<b>Scored <math>\leq 3</math> for criterion asking for 3 references</b>

### 5.1.9 SHEQ Certification

<b>5%</b>	<b>Up to date SHEQ Certification</b>
	<ul style="list-style-type: none"> <li><i>The company must have a good track record and provide relevant certification. (e.g., ISO 45001, ISO14001, ISO 9001)</i></li> </ul>
	<i>Scores of 1, 2 or 4 not provided for in this criterion</i>
<b>Score</b>	<b>Evaluation targets</b>
5	Demonstrated valid certification
3	Lapsed certification; In process to renew
<b>0</b>	<b>No certification</b>

## 5.2 Re- processing proposal (Bredasdorp and Infanta Embayment acreage)

	<b>Evaluation Criteria</b>	<b>Contribution</b>
1	Quality of proposal ( <i>Overall understanding and meeting scope of requirements</i> )	25%
2	Profit sharing mechanism proposed.	20%
3	Skills transfer / training opportunities proposed.	15%
4	Non-proprietary / speculative project experience	10%
5	Processing Technology offered; Proposed processing treatment demonstrates understanding of local imaging challenges	15%
6	2D surveys > 5 000km <u>processed</u> in last 5 years	5%
7	(average) Client feedback from references provided	5%
8	Company SHEQ / ISO certification	5%

## 5.2.1 Quality of Proposal

25%	Quality of proposal
<ul style="list-style-type: none"> <li>Overall understanding and meeting scope of requirements</li> </ul>	
Score	Evaluation targets
5	<ul style="list-style-type: none"> <li>Excellent proposal - The important issues are approached in an innovative and efficient way, indicating that the bidder has the required knowledge of state-of-the-art approaches to successful acquisition and processing projects.</li> <li>Proposed project execution plan is tailored to address the project objectives, and sufficiently flexible to accommodate changes that may occur during execution.</li> <li>The quality and risk management plans plan are tailored to the critical characteristics of the project.</li> <li>The primary objectives and key success factors are identified, and the proposal is clear how this will be pursued in an innovative and efficient way using state-of-the-art methodologies and technologies to meet the objectives.</li> <li>The proposed approach details ways to improve the project outcomes and quality of the outputs.</li> </ul>
4	<ul style="list-style-type: none"> <li>Very good proposal</li> <li>Proposed project execution plan is tailored to address specific project objectives and methodology and is sufficiently flexible to accommodate changes that may occur during execution.</li> <li>The quality plan and approach to managing risk etc. are tailored to the critical characteristics of the project.</li> </ul>
3	<ul style="list-style-type: none"> <li>Good proposal</li> <li>Proposed project execution plan is satisfactory and partially tailored to address the project objectives. The approach proposed minimally deals with the critical characteristics of the project.</li> <li>The quality plan, and approach to managing risk etc. are compliant with project specifications.</li> </ul>
2	<ul style="list-style-type: none"> <li>Average Proposal</li> <li>Proposed project execution plan is of a generic nature and not necessarily tailored to address the project objectives.</li> <li>The quality plan, and approach to managing risk etc. are too generic.</li> </ul>
1	<ul style="list-style-type: none"> <li>The proposed project execution plan is poor and unlikely to satisfy project objectives and requirements.</li> <li>The company has misunderstood certain aspects of the scope of work and therefore does not deal with the critical aspects of the project.</li> </ul>
<b>Eliminated</b>	<b>No technical proposal submitted by the company</b>



## 5.2.2 Profit-sharing

<b>20%</b>	<b>Ranked profit sharing mechanism proposed.</b>
	<ul style="list-style-type: none"> <li>• <i>The profit-sharing mechanisms proposed in bids will be ranked against each other and the rank fitted into the 5-point scale with 5 being the most attractive and 1 the least attractive.</i></li> <li>• <i>Different bidders' profit-sharing proposals may be ranked as equally attractive, or not, and be awarded the same evaluation score.</i></li> <li>• <i>The profit-sharing scheme will be a subject for further negotiation upon identifying preferred bidders.</i></li> </ul>
<b>Score</b>	<b>Evaluation targets</b>
5	Most attractive initial profit-sharing proposal
⋮	Ranking fitted
1	Least attractive initial profit-sharing proposal
<b>0</b>	<b>Ignored requirement</b>

## 5.2.3 Skills Transfer and Training

<b>15%</b>	<b>Ranked training opportunities proposed.</b>
	<ul style="list-style-type: none"> <li>• <i>The training and experience opportunities proposed in bids will be ranked against each other and the rank fitted into the 5-point scale with 5 being the most attractive and 1 the least attractive.</i></li> <li>• <i>Different bidders' skills transfer proposals may be ranked as equally attractive, or not, and be awarded the same evaluation score.</i></li> <li>• <i>The training and experience opportunities during work program execution will be a subject for further negotiation during contract negotiations.</i></li> </ul>
<b>Score</b>	<b>Evaluation targets</b>
5	Most attractive training and experience exposure proposal
⋮	Ranking fitted
1	Least attractive training and experience exposure proposal
<b>0</b>	<b>Ignored requirement</b>

## 5.2.4 Non-proprietary / Speculative processing experience

10%	Non-proprietary / speculative processing experience
Score	Evaluation targets
5	<ul style="list-style-type: none"> <li>• Bidder has demonstrated track record of successfully processing, promoting and licensing non-proprietary, multi-client seismic data during the last 5 years.</li> <li>• Bidder has track record of partnering with PASA to process data</li> <li>• Company offers regional level interpretation of new data to add value and assist in promoting new multi-client data</li> </ul>
4	<ul style="list-style-type: none"> <li>• Bidder has demonstrated track record of processing, promoting and licensing non-proprietary, multi-client seismic data successfully during the last 5 years.</li> <li>• Bidder has track record of partnering with African NOCs and regulators to process data</li> <li>• Company offers regional level interpretation of new data to add value and assist in promoting new multi-client data</li> </ul>
3	<ul style="list-style-type: none"> <li>• Bidder has demonstrated track record of processing, promoting and licensing non-proprietary, multi-client seismic data successfully during the last 5 years.</li> <li>• Bidder has track record of partnering with African NOCs and regulators to process data</li> </ul>
2	<ul style="list-style-type: none"> <li>• Bidder has demonstrated track record of processing, promoting and licensing non-proprietary, multi-client seismic data successfully during the last 5 years.</li> </ul>
0	<ul style="list-style-type: none"> <li>• <b>Less than 5 years track record of successfully processing, promoting and licensing non-proprietary, multi-client seismic data.</b></li> </ul>

## 5.2.5 Processing Technology

<b>15%</b>	<b>Processing Technology</b>
<ul style="list-style-type: none"> <li>Proposed processing treatment demonstrates understanding of local imaging challenges</li> </ul>	
Scores of 2 or 4 not provided for in this criterion	
<b>Score</b>	<b>Evaluation targets</b>
5	<ul style="list-style-type: none"> <li>Demonstrate that local imaging challenges and nature of deep-water seismic processing are well understood</li> <li>Bidding document provides comprehensive proposals to mitigate local imaging challenges.</li> <li>Flexibility offered in parameter testing and refinement of processing parameters</li> </ul>
3	<ul style="list-style-type: none"> <li>Bidding document's treatment references and proposals to mitigate local imaging problems are generic in nature.</li> </ul>
1	<ul style="list-style-type: none"> <li>Cursory references to local conditions and challenges without firm proposals how to mitigate</li> </ul>
<b>0</b>	<ul style="list-style-type: none"> <li><b>Processing challenges not addressed</b></li> </ul>

## 5.2.6 2D Seismic Experience

<b>5%</b>	<b>2D surveys &gt; 5 000km processed last 5 years</b>
<ul style="list-style-type: none"> <li>2D survey experience can be proprietary or speculative.</li> <li>List survey size, operator, region, imaging challenges, technology used, project plan efficiency (actual vs planned)</li> </ul>	
<b>Score</b>	<b>Evaluation targets</b>
5	>=8 surveys with contactable references for 3 surveys
4	>=5 surveys with contactable references for 3 surveys
3	>=8 surveys but less than 3 references provided
2	>=5 surveys but less than 3 references provided
1	<5 surveys
<b>0</b>	<b>No surveys listed</b>



## 5.2.7 Client Feedback

<b>5%</b>	<b>Averaged Client feedback from references provided</b>
	<ul style="list-style-type: none"> <li><i>Averaged qualitative rating feedback sourced from references provided</i></li> </ul>
	<i>Scores of 3 not provided for in this criterion</i>
<b>Score</b>	<b>Evaluation targets</b>
5	Exceeded expectations, will use again, will recommend
4	Met Expectations, will use again, will recommend
2	Will use again but with stricter operator oversight
1	Will not use again
<b>0</b>	<b>Scored &lt;=3 for criterion asking for 3 references</b>

## 5.2.8 SHEQ

<b>5%</b>	<b>Up to date SHEQ Certification</b>
	<ul style="list-style-type: none"> <li><i>The company must have a good track record and provide relevant certification. (e.g. ISO 45001, ISO14001, ISO 9001)</i></li> </ul>
	<i>Scores of 1, 2 or 4 not provided for in this criterion</i>
<b>Score</b>	<b>Evaluation targets</b>
5	Demonstrated valid certification
3	Lapsed certification; In process to renew
<b>0</b>	<b>No certification</b>