PUBLIC AND STAKEHOLDER CONSULTATION PROCESS ON THE ENVIRONMENTAL ASSESSMENT PROCESS TO SUPPORT THE APPLICATION FOR ENVIRONMENTAL CLEARANCE CERTIFICATE (ECC) FOR PETROLEUM GEO-SERVICES (PGS)

EXPLORATION (UK) LIMITED FOR THE PROPOSED MULTICLIENT/PROPRIETARY 2D / 3D SEISMIC SURVEY OVER THE AREA OF INTEREST (AOI) SITUATED IN THE WALVIS, ORANGE, AND LÜDERITZ BASINS, OFFSHORE NAMIBIA.

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Background1

1 Background

Petroleum Geo-Services (PGS) Exploration (UK) Limited, here referred to as ("PGS") (the "Proponent"), is proposing to conduct a Multiclient/Proprietary 2D / 3D Seismic Survey over the Area of Interest (AOI) situated in the Walvis, Orange, and Lüderitz Basins, offshore Namibia (Figs. 1-3).

The Proposed survey area falls in water depths ranging from ca-200 m to ca-4000 m from east to west, respectively. Although the proposed AOI may appear large, the actual areas to be surveyed are likely to be highly localized, and limited and subject to the interest for seismic survey datasets by Petroleum Exploration License (PEL) holders overlapping the AOI to support their exploration journey.

PGS is an integrated marine geophysics company with offices in 14 countries. Modern geophysics applies big data concepts to record and image Earth's subsurface and is one of the largest uses of compute power on the planet. The business supports the energy industry, including oil and gas, offshore renewables, Carbon Capture and Storage (www.pgs.com).

Product offerings span from survey planning and data acquisition, through advanced imaging, to reservoir analysis and interpretation. The company has multiple offshore seismic vessels, processing, and imaging megacenters, and three (3) main offices in Oslo, London, and Houston, with a presence in over ten (10) countries with headquarters in Oslo, Norway (www.pgs.com).

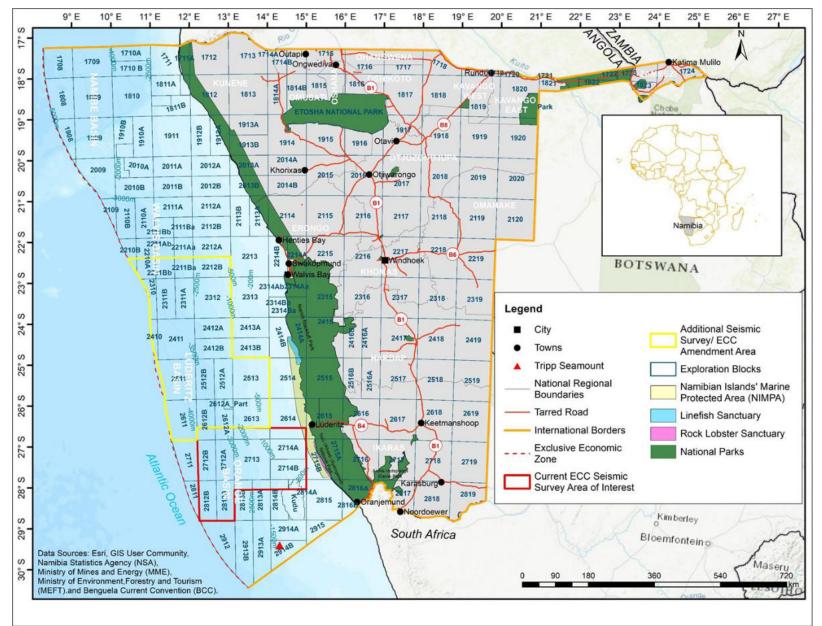


Figure 1: Regional location of the proposed Multiclient/Proprietary 2D / 3D Seismic Survey over the current ECC Area of Interest (AOI) and proposed ECC Amended AOI situated in the Walvis, Orange, and Lüderitz Basin, offshore Namibia.

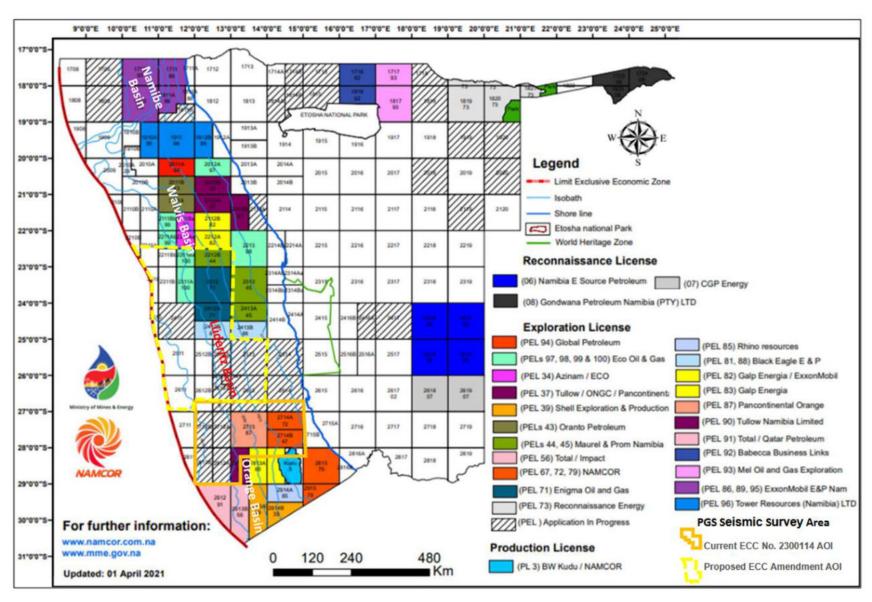


Figure 2: Hydrocarbon map of Namibia showing the proposed Multiclient/Proprietary 2D / 3D Seismic Survey AOI falling in the Walvis, Orange, and Lüderitz Basins Offshore Namibia (Modified Source: www.mme.gov.na).

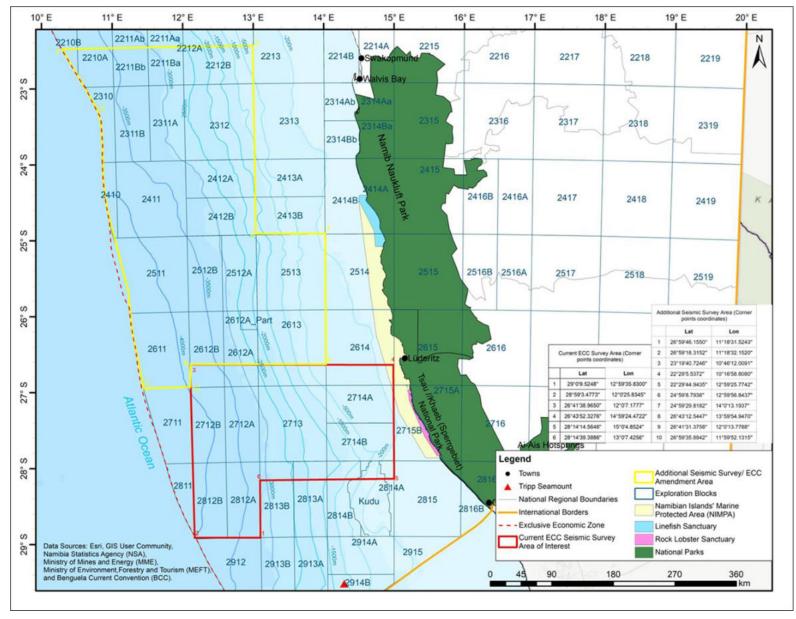


Figure 3: PGS proposed Multiclient/Proprietary 2D / 3D Seismic Survey area covering Blocks 2310, 2311B, 2311A, 2312, 2410, 2411, 2412A, 2412B, 2511B, 2512B, 2512A, 2513, 2611, 2612B, 2612A, 2613, 2712B, 2712A, 2713, 2714A, 2714B, 2812B, and 2812A, and Portions of Blocks, 2210B, 2210A, 2211Bb, 2211Ba, 2212B, 2614, 2813B, 2813A, 2814B, and 2814A, Walvis, Orange, and Lüderitz Basins Offshore Namibia.

2 Purpose of Document

This document serves as formal documentation, providing evidence of the consultation activities conducted during the stakeholder engagement process for the proposed Multiclient/Proprietary 2D / 3D Seismic Survey over the Area of Interest (AOI) situated in the Walvis, Orange, and Lüderitz Basins, offshore Namibia by Petroleum Geo-Services (PGS) Exploration (UK) Limited. The environmental assessment and management process, which includes public and stakeholder consultations, is governed by the Environmental Impact Assessment (EIA) Regulations No. 30 of 2012, as published under the Environmental Management Act (EMA) of 2007, also known as Act No. 7 of 2007. These regulations and the accompanying Act contain schedules that list specific activities subject to environmental assessment. Activities listed in these schedules cannot be undertaken without an Environmental Clearance Certificate (ECC). The issuance of an ECC for a listed activity is contingent on the review and approval by the Environmental Commissioner, who assesses the findings of an Environmental Assessment. This assessment encompasses various stages, including Scoping, Environmental Impact Assessment (EIA), and the formulation of an Environmental Management Plan (EMP).

Both the Environmental Impact Assessment (EIA) Regulations No. 30 of 2012 and the Environmental Management Act, (EMA), 2007, (Act No. 7 of 2007) explicitly outline the procedures and requirements for the public consultation process, which is a crucial aspect of ensuring transparency and involving stakeholders in decision-making.

This stakeholder consultation report serves as a comprehensive record of the engagement activity carried out in accordance with these regulatory requirements, demonstrating Petroleum Geo-Services (PGS) Exploration (UK) Limited commitment to fulfilling its environmental responsibilities and fostering collaboration with relevant stakeholders in Namibia.

3 Consultation Undertaken

3.1. Overview

The key consultation approach focused on the following activities.

- 1. Preparation of the appropriate project materials such as public notices, Background Information Document (BID), posters, and presentations.
- 2. Placed public notices prioritized in Lüderitz..
- 3. Published notices/adverts in the local newspapers as follows:
 - (i) 1st advert published in the New Era English language newspaper dated Friday, 27th October 2023
 - (ii) 2nd multiple adverts published in the Market Watch of the Namibian Sun (English language newspaper), Republikein (Afrikaans language newspaper) and Allgemeine Zeitung (Namibian German language newspaper) of Tuesday, dated 31st October 2023.
- 4. Organised the following public meetings:
 - (i) **Lüderitz:** Thursday 7th November 2023, Place: Benguela Community Hall, Lüderitz Town, Time: From 09hrs30-12hrs00, and.

4 Methodology

The public and stakeholder consultations process has considered all appropriate ways to reach the targeted groups by way of public notices in local newspapers and placement of public notices around Lüderitz.

4.1. Preparation of the Appropriate Project Materials such as Public Notices, BID, Posters, and Presentations

Comprehensive information-sharing activities have been conducted with the Interested and Affected Parties (I&APs) or stakeholders in relation to the proposed Multiclient/Proprietary 2D/3D Seismic Walvis, Lüderitz, and Orange Basins offshore Namibia. The goal of these activities is to ensure transparency and engage stakeholders in the project's environmental assessment and management process. Various methods were employed to disseminate information, including public notices, bid documents, posters, and walk-in and PowerPoint presentations.

Content of the presentation shared:

The presentation was delivered by Ms. Emerita Ashipala, the Environmental Assessment Practitioner of RBS, covered a wide range of topics related to the project including but not limited to:

- 1. Hydrocarbons Map of Namibia: Showcasing tenants of subsurface resources.
- 2. Sedimentary Basins: Overview of global sedimentary basins, with a focus on those in the West, Central, and Southern African Atlantic Margin.
- 3. Sedimentary Basins in Namibia: Specifics about sedimentary basins in Namibia.
- 4. Historical Perspective on Marine Seismic Survey: Insights into the history of marine seismic surveys in Namibia.
- 5. PEL, Block, AOI, Seismic Survey, Well Drilling & Oil/Gas Field: Key elements such as Petroleum Exploration Licenses, Blocks, Areas of Interest, Seismic Surveys, Well Drilling, and Oil/Gas Fields.
- 6. Key AOI for Proposed Offshore 2D/3D Seismic Survey: Identification of critical Areas of Interest for the proposed offshore 2D/3D seismic survey.
- 7. Offshore 2D/3D Seismic Survey and Compliance Requirements: Exploration of the seismic survey and the associated compliance requirements.
- 8. Environmental Assessment Process: Overview of the Environmental Management Act of 2007 and Environmental Impact Assessment Regulations of 2012.
- 9. Overview of Marine 2D/3D Seismic Survey: An introduction to marine 3D seismic surveys.
- 10. Proposed 2D/3D Seismic Survey and Video Illustration: Details and a visual representation of the proposed 2D/3D seismic survey.
- 11. AOI and Living Marine Resources Receiving Environment: Consideration of Areas of Interest and their impact on the living marine resources receiving environment.
- 12. AOI, Commercial Fishing Grounds, and MFMR Survey Areas: Connection between Areas of Interest, commercial fishing grounds, and Ministry of Fisheries and Marine Resources (MFMR) survey areas.
- 13. AOI and Tuna Landing: Discussion on Areas of Interest and their relationship to tuna landing sites.

- 14. Understanding Constructive and Destructive Waves Interferences: Exploration of wave interferences and their effects.
- 15. Overview of modeling underwater noise acoustics.
- 16. Identification of potential sources of negative impact on the marine receiving environment.
- 17. Evaluation of potential positive impacts.
- 18. Seismic survey mitigation measures based on international best practices.
- 19. Visual representation of mitigation measures for offshore seismic surveys.
- 20. KBSMM Opportunity for Coexistence Framework
- 21. Summary of key findings and proposed recommendations, concluding with the way forward.
- 22. Questions and Answers

4.2. Published Notices Adverts in the Local Newspapers.

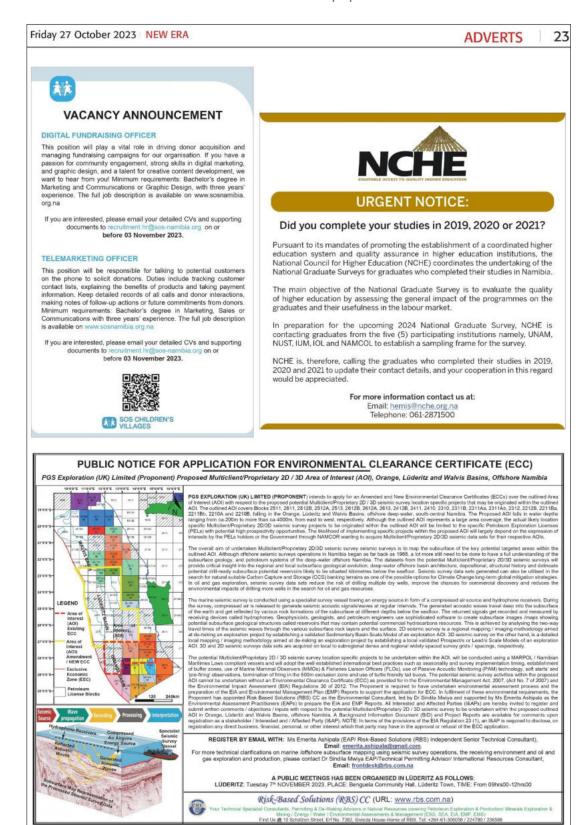


Figure 4: 1st advert published in the New Era English language newspaper dated Friday, 27th October 2023

>> To soften blow of budget cuts

South Africa plans to raise borrowing

trillion of debt and spends 18c of every tax rand collected on debt service costs.

Outh Africa's Finance Minister Enoch Godongwana says he will "bump up borrowing" to soften the blow of budget cuts when

soften the blow of budget cuts when he tables the medium-term policy statement on Wednesday. Speaking at the Kgalema Mot-lanthe Foundation Inclusive Growth Forum in the Drakensberg on Friday evening, Godongwana painted a dire picture of the state of public finances, and said that of public finances, and said that if nothing was done about public debt. South Africa would have no debt, South Africa would have no cash by the end of March next year. South Africa has about 184.3 tril-ilon of debt and spends 18c of every tax rand collected on debt service costs. Godongwana said SA had been hit by a triple whammy of falling revenue due to low growth, a rising cost of borrowing, and the dumping of South Africa govern-ment bands by freeign investors. dumping of South Africa govern-ment bonds by foreign investors. Said Godongwana: "The problem with debt is not its size, it is the ca-pacity of the economy to service it. In this environment, our capac-ity to service it is constrained. And what complicates things is that we have to redeem old debt. This year alone, the amount we are soint to alone, the amount we are going to redeem is such that if we don't do nything, we won't have cash by the

much? We have to cut expenditure and increase borrowing."



The problem with debt is not its size, it is the capacity of the economy to service it. In this environment, our capacity to service it is constrained.

Enoch Godongwana, Finance Minister: SA

ELECTION

Godongwana's plan to make budget cuts in an election year has come under fire in the ANC.

"They call me Mr Austerity, I don't like it, but I can live with it," he said. He said the proposed budget cuts would be smaller than the amount by which wore grown to the said the work of the said to the said would be smaller than the amount by which government typically un-derspends on its budget. In the last financial year, state departments underspent by R28 billion. In the previous year, underspending amounted to R31 billion. Two of the biggest factors weigh-ing down debt are load shedding and the deteriorating logistics ca-pacity which is constraining mining

pacity which is constraining mining

exports.

The government had made the



South Africa's Finance Minister Enoch Godongwana. PHOTO REUTERS

mistake in the past by focusing on fixing Eskom when what was needed was to fix the electricity supply system.

e mistake should not be made with Transnet, said Godonginvolves a request for an R47-billion capital injection and R61 billion of debt relief. Rather than focusing on fixing Transnet, the government should focus on getting products to the ports, he said.

Ministry to bost consumer protection workshop

TUESDAY 3) OCTOBER 202

ELIJAH MUKUBONDA

The Ministry of Industrialisation and Trade is in the process of developing the Consumer Protection Legislation to protect consumers from unfair, deceptive, and fraudulent business practices. In alliance with the United States Federal Trade Commission (USFTC), the Ministry Irade Commission (USFIC), the Ministry is hosting a Consumer Protection work-shop from 1-3 November 2023 at Hilton Hotel in Windhoek, within its mandate to facilitate and strengthen stakeholder engagements, dialogue and cooperation. The seminar is expecting to host more than 50 participants and officials from neighbouring Botswana. Zambia and than SO participants and officials from neighbouring Botswana, Zambia and South Africa to promote cross-pollination of ideas from experts in the field. The scheduled workshop is themed 'Con-sumer Protection and E-commerce' and seeks to demystify the development of the consumer protection legislation in relation to the current framework for con-sumer protection in Namibia and pros-pects for reform; emerging con-

emerging con sumer protection trends in Southrn Africa and the future of reform of consumer pro tection laws in Namibia.

Mukubonda.



PUBLIC NOTICE FOR APPLICATION FOR ENVIRONMENTAL CLEARANCE CERTIFICATE (ECC)

PGS Exploration (UK) Limited (Proponent) Proposed Multiclient/Proprietary 2D / 3D Area of Interest (AOI), Orange, Lüderitz and Walvis Basins, Offshore Namibia



PGS EXPLORATION (UK) LIMITED (PROPONENT) intends to apply for an Amended and New Environmental Clearance Certificates (ECCs) over the outlined Area of Intenset (AOI) with respect to the proposed potential Multidisent/Proprietary 2D / 3D seismic survey location specific projects that may be originated within the outlined AOI. The outlined AOI covers Biolose 2511, 2611, 2512, 2512, 26128, 26132, 2613

The overall aim of undertaken Multiclient/Proprietary 2D/3D seismic surveys seismic surveys is to map the subsurface of the key potential targeted areas within outlined AOI. Although offshore seismic surveys operations in Namibia began as far back as 1968, a lot more still need to be done to have a full understanding of subsurface geology, and periodeum systems of the deep-water offshore Namibia. The datasets from the potential facilient/Proprietary 2D/3D seismic surveys provide critical insight into the regional and local subsurface geological evolution, deep-water offshore basin architecture, depositional, structural history and delining the potential retain-ready subsurface potential retain-retinis filely to be situated kidnertees below the seafloor. Scientic survey data sets generated can also be utilized in search for natural suitable Cartion Capture and Storage (CCS) banking terrains as one of the possible options for Climate Change long-term global mitigation strate; in oil and gas exploration, seismic survey data sets reduce the risk of drilling multiple dry wells, improve the chances for commercial discovery and reduces environmental impacts of drilling more wells in the search for oil and gas resources.

The marine seismic survey is conducted using a specialist survey vessel towing an energy source in form of a compressed air source and hydrophone receivers. During the survey, compressed air is released to generate seismic acoustic signals/waves at regular intervals. The generated acoustic waves travel deep into the subsurface of the earth and get reflected by a various rock formations of the subsurface at different depths below the seaflow. The remained signals get recorded and measured receiving devices called hydrophones. Geophysicists, geologists, and petroleum engineers use sophisticated software to create subsurface images "maps showing potential subsurface geologists instructures called reservoirs that may contain potential commercial hybricarbons resources. This is achieved by analysing the two-we travel times of the seamic waves through the various subsurface rock layers and the suffice. 20 estimic survey is a regional mapping "maging methodology and to local reapping" in region methodology and the control of the seamic surveys and the surface. 20 estimic survey is a regional mapping "maging methodology and color in the surface of the seamic surveys and the surface of the surface of the seamic surveys and the surface of the surface of the seamic surveys of the seamic surveys and the surface of the seamic surveys and the surface of the seamic surveys of the seamic surveys and the surface of the surface of the seamic surveys and the surface of the surface of the seamic surveys are surfaced to the surface of the seamic surveys and the surface of the seamic surveys and the surface of the seamic surveys are surfaced to the surface of the seamic surveys and the surface of the surface of the seamic surveys and the surface of the surfa

The potential Multiclient/Proprietary 2D / 3D seismic survey location specific projects to be undertaken within the AD, will be conducted using a MARPOL / Namibian Maritimes Laws compliant vessels and will adopt the well-established international best practices such as seasonality and survey implementation timing, establishment of buffer zones, use of Marine Marinma Laws compliant vessels and will adopt the well-established international best practices such as seasonality and survey implementation timing, establishment of buffer zones, use of Marine Marinma Deservers (MMICe) & Fasheries Lisison Officers (FLOs), use of Passave Acoustic Monitoring (PAM) technology, soft starts and pre-ferring observations, termination of firing in the SOme exclusions zone and use of Uttle finendly state burys. The potential seamic survey activities within the proposed AOI cannot be undertaken without an Environmental Clerance Certificate (ECC) as provided for in the Environmental Management Act, 2007, (Act No. 7 of 2007) and the Environmental impact Assessment (EAN Regulations 30 of 2012. The Proponent is required to have undertaken environmental assessment process and the preparation of the ELA and Environmental Management Plan (EMP) Reports to support the application for ECC. In fulfilment of these environmental requirements, the Environmental Assessment Practitioners (EAP's) to prepare the ELA and ENP Reports. All Interested and Affected Parties (BAPP) are hereby invited to register and submit written comments / objections or inputs with respect to the potential Multicident/Propinistry 27 of 30 esimisms unveryed to undertaken within the proposed outlined AOI in Orange, Liddentz and Walvis Basins, offshore Namibia. A Background information Document (BID) and Project Reports are available for comments upon the proposed outlined AOI in Orange, Liddentz and Walvis Basins, offshore Namibia. A Background information Document (BID) and Project Reports are available for comments upon registration as a stakeholder / Interested and Affa

REGISTER BY EMAIL WITH: Ms Emerita Ashipala (EAP/ Risk-Based Solutions (RBS) Independent Senior Technical Consultant),
Email: _emerita_ashipala@gmail.com
For more technical clarifications on marine /offshore subsurface mapping using seismic survey operations, the receiving environment and oil and gas exploration and production, please contact Dr Sindia Miviya EAP/Technical Permitting Advisor/ International Resources Consultant,

A PUBLIC MEETINGS HAS BEEN ORGANISED IN LÜDERITZ AS FOLLOWS: LÜDERITZ: Tuesday 7th NOVEMBER 2023, PLACE: Benguela Community Hall, Lüderitz Town, TIME: From 09hrs00-12hrs00

Risk-Based Solutions (RBS) CC (URL: www.rbs.com.na) Your Technical S

Figure 5: 2nd multiple adverts published in the Market Watch of the Namibian Sun (English language newspaper), Republikein (Afrikaans language newspaper) and Allgemeine Zeitung (Namibian German language newspaper) of Tuesday, dated 31st October 2023

4.3. Organised Public Meeting

Date: 07th November 2023 **Venue**: Benguela Community Hall

Time: 09h30

The meeting showcased a positive stance towards the project, with active participation from the stakeholders in attendance and showed an eagerness to understand the process such as various aspects of the project, ranging from understanding why hydrocarbons are found deep underground to exploring the impacts on fisheries and extending beyond the seismic survey to encompass drilling and rehabilitation processes. Attendees also sought insights into the specific benefits derived from the project and their role in the overall engagement.

Notwithstanding the positive atmosphere, concerns and queries were also raised at the session. Of particular note was the community's limited attendance at stakeholder engagements. Additionally, concerns were raised regarding the absence of accessible platforms for local vendors or service providers to register for project-related opportunities. Participants also sought guidance on the recruitment process taking place and advocating for a structured guide to facilitate active involvement in these opportunities.

5 Recommendations

Based on this stakeholder engagement report and the plan for ongoing engagement and communication, the following is recommended:

- i. Notify key stakeholders who attended the engagement sessions about the completion of the reports. Provide them with access to the finalised reports, ensuring transparency and accountability.
- ii. Establish a communication plan to keep institutional/registered stakeholders informed about the progress of the project and the outcomes of stakeholder engagement.
- iii. Continue to maintain and update the master database, ensuring it remains accurate and up to date. Use the database as a tool to facilitate ongoing communication and engagement with stakeholders including inviting attendees that previously attended past meetings.
- iv. Ensure that responses to stakeholder comments and grievances are timely and well-documented. Implement an effective tracking system for these responses.
- V. Develop a clear protocol for handling conflicts and disputes that may arise during the project. Ensure that mechanisms for resolution are fair, transparent, and accessible to all stakeholders.
- **Vi.** Continuously seek opportunities for improvement in stakeholder engagement efforts. Actively seek feedback from stakeholders on how the engagement process can be enhanced.

6 Conclusions

The conclusion of the stakeholder engagement report reflects a positive and successful outcome of the engagement process. The sentiments expressed by stakeholders indicate a high level of satisfaction and support for the proposed project. Stakeholders have noted that the information provided throughout the engagement process was detailed and comprehensive. However, it's worth noting that some stakeholders have expressed concern about the lack of information regarding recruitment opportunities for community members. This is a valid consideration, and addressing this

issue could further enhance community support. The proactive stance of certain members who are willing to mobilise their communities to better understand the developments in the oil and gas industry demonstrates an opportunity for collaboration and improved communication. Overall stakeholders are enthusiastic and forward-looking. They anticipate positive opportunities that the entire oil and gas sector can bring to the country.

Annex 1: Minutes of physical meeting in Lüderitz

Date: 07th November 2023

Venue: Benguela Community Hall

Time: 09h30

Stakeholders register as attached to the minutes.

Presentation

The presentation was delivered by Ms. Emerita Ashipala, the Environmental Assessment Practitioner of RBS on the project, as below:

- 1. Hydrocarbons Map of Namibia Showing Tenants of Subsurface Resources
- 2. Sedimentary Basins of the World, including Basins of West, Central and Southern African Atlantic Margin
- 3. Sedimentary Basins Namibia
- 4. Historical Perspective on Marine Seismic Survey in Namibia
- 5. PEL, Block, AOI, Seismic Survey, Well Drilling & Oil /Gas Field
- 6. Key AOI for Proposed Offshore 2D/3D Seismic Survey
- 7. Offshore 2D/3D Seismic Survey and Compliance Requirements
- 8. Environmental Assessment Process, EMA, 2007 and EIA Regulations 2012
- 9. Overview of Marine 3D Seismic Survey
- 10. Proposed 3D Seismic Survey and Video illustration
- 11. AOI and Living Marine Resources Receiving Environment
- 12. AOI, Commercial Fishing Grounds and MFMR Survey Areas
- 13. AOI and Tuna Landing
- 14. Understanding Constructive and Destructive Waves Interferences
- 15. Underwater Noise Acoustic Modelling
- 16. Likely Sources of Negative Marine Receiving Environment
- 17. Potential Positive Impacts Assessment
- 18. International Best Practices Seismic Survey Mitigation Measures
- 19. Illustration of Offshore Seismic Survey Mitigation Measures
- 20. KBSMM Opportunity for Coexistence Framework
- 21. Conclusion and Recommendations and Way Forward:
- 22. As part of the ongoing environmental assessment process leading to the preparation of the EIA and EMP Report in support of the application for the ECC, all Interested and Affected Parties (I&APs) are invited to register and submit written comments /objections/inputs with respect to the proposed 2D/3D seismic survey operations on or before the **Friday**, **17**th **November 2023**.
- 23. Questions and Answers

Questions/Discussions:

1. How long is the proposed Environmental Impact Assessment (EIA) process? Seismic Survey operations and how long is the validity of the Environmental Clearance Certificate (ECC) once issued?

The process of the Environmental Assessment covers the preparation of the Environmental Scoping, Environmental Impact Assessment (EIA), and Environmental Management Plan (EMP) reports to support the application for the Environmental Clearance Certificate (ECC). The Environmental Management Act guides the length of this process and may depend on the project's complexity.

The Environmental Clearance Certificate (ECC), once approved, the ECC is valid for three years and is subject to renewal. The ECC is granted to the applicant Petroleum Geo-Services (PGS) Exploration (UK) Limited (the "Proponent"), who is seeking to conduct the seismic survey and not the PEL holders.

PGS (the "Proponent") may use the Environmental Clearance Certificate (ECC) to acquire both Multiclient (MC) and Proprietary (Exclusive) seismic surveys on conditions that all the contractual arrangements and data ownership requirements among the various parties involved in the partnership including the Government have been agreed. The duration of the seismic survey will be dependent on the likelihood of implementing specific projects within the proposed AOI, which will largely depend on the expression of interest by the PEL holders wanting to acquire Multiclient/Proprietary 2D/3D seismic data sets over their licenses.

2. As mentioned earlier, the red block outline has an existing ECC, and now you are seeking a new application ECC for the AOI outline in yellow blocks on the map. Will these two ECCs run concurrently?

Yes, the two Environmental Clearance Certificates (ECCs) will run concurrently, as they remain valid.

3. What is your expectation from us, the community members attending this meeting? What is the aim of our coming to these community meetings?

Public and stakeholder consultation is conducted as part of the Environmental Impact Assessment (EIA) Regulations No. 30 of 2012, published under the Environmental Management Act (EMA) No. 7 of 2007.

As community members attending this meeting, the expectation is that you actively participate and contribute to the discussions related to the proposed activities. The aim of your attendance at the community meetings is to:

- Provide a platform for sharing information about the proposed project activities, although they take place far offshore. This is to ensure that you, as community members, are well-informed about the projects and their potential negative and positive impacts and seek possible opportunities.
- The meetings are an opportunity for you to express your comments, concerns, and recommendations regarding the application for an ECC for the proposed project. Community input is crucial in the decision-making process and helps address potential environmental and social impacts. The feedback contributes to the overall evaluation of the project and assists the government in making informed decisions, including the possible issuance of a clearance certificate.

4. I have heard a lot about ESG in this industry. What exactly does it mean and how does it relate to oil and gas industry?

ESG stands for Environmental, Social, and Governance, and it is a set of criteria used to evaluate an investment or business's sustainability and ethical impact. Regarding oil and gas projects, ESG considerations are crucial due to the industry's significant environmental and social impacts.

ESG factors are integral in assessing oil and gas projects' sustainability and ethical impact. Environmental considerations involve managing climate change impact and biodiversity, while social aspects focus on community engagement, health and safety, and human rights. Governance evaluates transparency, accountability, and adherence to ethical standards. Companies in the oil and gas sector are expected to contribute to social programs, uphold ethical supply chain practices, and navigate the transition to renewable energy. The increasing scrutiny from investors and the public underscores the importance of aligning with ESG criteria, reflecting a broader shift towards a more responsible and sustainable approach within the industry.

5. The formation of oil and gas as mentioned was formed from dead animals and plants buried deep. So why is the oil and gas found so deep in the ground?

The oil formation process began with the burial of the remains of dead organisms and plant debris. The dead organisms and plant debris got buried in sand, mud, and rock layers over millions of years at the bottom of the oceans or riverbeds. Over time, they were buried and crushed under millions of tons of sediments at very high temperatures and pressure. This process transformed plant debris and organic matter into hydrocarbons with more heat, time, and pressure. Hence, that is how oil and gas are found so deep beneath the earth. Consequently, these hydrocarbons accumulate in geological formations, forming reservoirs that necessitate deep drilling to access.

6. How does the oil drilling impact the fishing industry?

The current proposed project is not for drilling yet, however; we can explain the impact of the seismic survey. Seismic surveys, conducted to explore for oil and gas reserves, can have significant impacts on marine ecosystems. The primary concern lies in the intense acoustic sound generated by airgun compressors used in these surveys. The underwater pulses can potentially harm fish larvae, eggs, and other marine life. Extensive sound modelling is typically undertaken to assess the potential impact on various species. This modelling informs the establishment of safety buffer zones, often around 500 meters, to minimize harm to marine organisms. Additionally, various mitigation measures are employed, such as adjusting the timing and location of surveys to avoid critical periods for marine life, implementing real-time acoustic monitoring, and adhering to strict regulatory guidelines. These measures aim to balance the need for resource exploration with the preservation of marine ecosystems and fisheries.

We are aware that the proposed 2D/3D Seismic survey area falls within the Benguela Current Large Marine Ecosystem (BCLME), which has abundant living and non-living marine resources. The BCLME is an essential and productive Large Marine Ecosystem (LME), supporting important biodiversity and biomass of fish, sea birds and marine mammals. The EIA study shall address any such likely negative impacts; hence, several mitigations are in place to ensure that they don't impact the fishing breeding grounds and migration routes, and exclusions/buffer zones are identified. The use of fisheries liaison

officers and marine mammal observers and passive acoustic monitoring of big mammals like whales and dolphins during the survey are other mitigation measures to prevent or minimize the impacts.

7. At what depth are they going to drill for oil?

The depth at which oil drilling occurs can vary widely depending on the location, geological conditions, and the specific characteristics of the oil reservoir being targeted. With the latest oil discoveries by companies such as Total Energies and Shell, drilling occurred on the sea floor, and they go through a water column of approximately 4km. Once on the sea floor, they'll probably drill to a depth of up to 3km.

8. How do local people register to become a service provider for oil and gas, or where do they advertise for service opportunities for oil? Where can they access advertisements?

To register as a service provider for the oil and gas industry and discover opportunities, companies may use different channels such as advertising, including on their official websites, newspapers, and LinkedIn. Some companies also utilise agencies. To our knowledge, no single official platform is exclusively dedicated to advertising oil and gas-related jobs. Therefore, individuals seeking such opportunities are advised to monitor various sources, including company websites, industry events, professional networking platforms, and relevant publications.

9. What are the possible opportunities for this proposed seismic survey?

Opportunities on seismic survey vessels tend to be limited and often demand specialised skills. Most possible opportunities are typically in environmental monitoring, which necessitates specific training and includes marine mammal observing, fisheries liaison officers, passive acoustic monitoring, etc. Other possible opportunities involve catering and logistics servicing.

10. After clarifying how drilling occurs, I want to know what the plug and abandoning of a well entail.

Plugging and abandoning a well is the permanent sealing of a well that is no longer used to ensure safety and environmental integrity. The process involves evaluating the wellbore, removing casing, cleaning, and setting multiple cement plugs at different depths to isolate zones. All surface equipment is removed, a final cement plug is installed, and a wellhead and cap secure the well. The site is restored, and regulatory compliance is ensured to prevent potential environmental risks. The well-site is handed over to the government for monitoring, effectively becoming a state asset.

Comments/Suggestions

- 1. It was commented that some community members don't know what is happening offshore; hence, this is a good platform for consulting companies like Risk Based Solutions (RBS) to share information on upcoming project activities. This is a great opportunity and platform where they learn about new projects in their town. It is my first time attending a meeting hosted by this team.
- 2. Suggestions on future community engagements to try and get the notice to more people:
 - Reach out to individuals who have registered for previous projects and encourage them to share notices with a broader circle within the community.
 - Collaborate with local schools to distribute engagement notices to students, enabling them to take the information home and share it with their parents.

- Plan community meetings during the evening or after working hours to accommodate individuals who may be busy with work during the day, ensuring greater attendance and participation.
- Another concern is that recruitment is conducted secretively through recruitment agents, not directly by the oil and gas company. Usually, the community will hear afterwards that interviews have already taken place without seeing an advert placed locally or in the local newspapers.

Final Remarks:

The presenter, Ms. Emerita Ashipala, informed everyone present that the deadline for written submissions is on the 17th of November 2023. She further thanked everyone for taking the time to attend this engagement. She further urged them to submit any inputs and recommendations.

Annex 2: Public Attendance Register



10 Schützen Street, Erf No. 7382 Windhoek Central Business District (CBD), P. O. Box 1839 WINDHOEK, NAMIBIA Tel: +264-61-306058 / 224780 / 236598 Fax: +264-051-245001, Mobile: +264-811413229 Email: frontdesk@rbs.com.na Global Office / URL: www.rbs.com.na

Stakeholder Register for PGS Exploration (UK)

Proposed potential Multiclient/Proprietary 2D / 3D seismic survey within the outlined AOI, falling in the Orange, Lüderitz, and Walvis Basins, offshore deep-water, south-Central Namibia.

NOTE: This Stakeholder Register May Be Shared With Other Stakeholders as May Be Requested by the Government

Date: 7 NOVEMBER 2023

Time: 09:30 - 12:00

Location BENGUELA CUMUNITY HALL

No.	NAME AND SURNAME	ORGANISATION /ROLE
1.	Emerika Ashpala	12BS Consultant / ENP
2.	Meriam Kauyama	R:B.S.
3.	Maria Mufenda	RBS
4.	ProWAN ENGELBRECHT	865
5.	MARIA MBUDHI	NAMPOA
6.	Rosella Viskaie	APA PETRARIM
7.	Titomas Mulholco	OMAKE Import
8.	Hilya Angula	Comunity
9.	Tony Mbundu	Eb. Baptist church
10.	1011/1011/1000	V

1 of 5

Annex 3: Walk-in Posters, Presentation and Discussions













Annex 4: Public Notices





Lüderitz Town Council



OK Foods



Benguela Community Hall



Figure 6: Location of the site notices and public meeting venue at Benguela Community Hall.

Annex 5: Stakeholder Register from the Public Meetings

STAKEHOLDER	ORGANISATION	DETAILS
Ms Maria Mbudhi	NAMPOA	office@alphaofs.com
Ms Rosetta Visagie,	Alpha Petroleum	
Thomas Muthoko	Omake Import	
Hilya Angula	Community Member	
Tony Mbundu	Eb. Baptist Church	



VACANCY ANNOUNCEMENT

DIGITAL FUNDRAISING OFFICER

This position will play a vital role in driving donor acquisition and managing fundraising campaigns for our organisation. If you have a passion for community engagement, strong skills in digital marketing, and graphic design, and a talent for creative content development, we want to hear from you! Minimum requirements: Bachelor's degree in Marketing and Communications or Graphic Design, with three years' experience. The full job description is available on www.sosnamibia. org.na

If you are interested, please email your detailed CVs and supporting documents to recruitment.hr@sos-namibia.org on or before 03 November 2023.

TELEMARKETING OFFICER

This position will be responsible for talking to potential customers on the phone to solicit donations. Duties include tracking customer contact lists, explaining the benefits of products and taking payment information. Keep detailed records of all calls and donor interactions, making notes of follow-up actions or future commitments from donors. Minimum requirements: Bachelor's degree in Marketing, Sales or Communications with three years' experience. The full job description is available on www.sosnamibia.org.na

If you are interested, please email your detailed CVs and supporting documents to recruitment.hr@sos-namibia.org on or before 03 November 2023.







URGENT NOTICE:

Did you complete your studies in 2019, 2020 or 2021?

Pursuant to its mandates of promoting the establishment of a coordinated higher education system and quality assurance in higher education institutions, the National Council for Higher Education (NCHE) coordinates the undertaking of the National Graduate Surveys for graduates who completed their studies in Namibia.

The main objective of the National Graduate Survey is to evaluate the quality of higher education by assessing the general impact of the programmes on the graduates and their usefulness in the labour market.

In preparation for the upcoming 2024 National Graduate Survey, NCHE is contacting graduates from the five (5) participating institutions namely, UNAM, NUST, IUM, IOL and NAMCOL to establish a sampling frame for the survey.

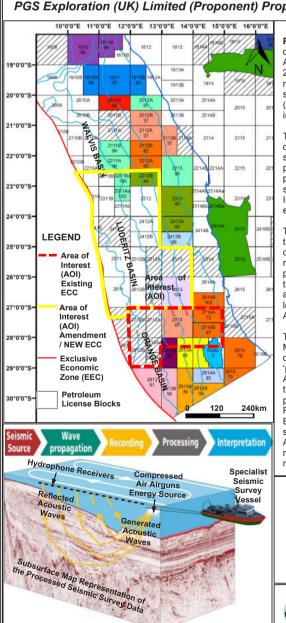
NCHE is, therefore, calling the graduates who completed their studies in 2019, 2020 and 2021 to update their contact details, and your cooperation in this regard would be appreciated.

For more information contact us at:

Email: hemis@nche.org.na Telephone: 061-2871500

PUBLIC NOTICE FOR APPLICATION FOR ENVIRONMENTAL CLEARANCE CERTIFICATE (ECC)

PGS Exploration (UK) Limited (Proponent) Proposed Multiclient/Proprietary 2D / 3D Area of Interest (AOI), Orange, Lüderitz and Walvis Basins, Offshore Namibia



PGS EXPLORATION (UK) LIMITED (PROPONENT) intends to apply for an Amended and New Environmental Clearance Certificates (ECCs) over the outlined Area of Interest (AOI) with respect to the proposed potential Multiclient/Proprietary 2D / 3D seismic survey location specific projects that may be originated within the outlined AOI. The outlined AOI covers Blocks 2511, 2611, 2512B, 2512A, 2513, 2612B, 2612A, 2613, 2412B, 2411, 2410, 2310, 2311B, 2311Aa, 2311Ab, 2312, 2212B, 2211Ba, 2211Bb, 2210A and 2210B, falling in the Orange, Lüderitz and Walvis Basins, offshore deep-water, south-central Namibia. The Proposed AOI falls in water depths ranging from ca-200m to more than ca-4000m, from east to west, respectively. Although the outlined AOI represents a large area coverage, the actual likely location specific Multiclient/Proprietary 2D/3D seismic survey projects to be originated within the outlined AOI will be limited to the specific Petroleum Exploration Licenses (PELs) with potential high prospectivity opportunities. The likelihood of implementing specific projects within the proposed AOI will largely depend on the expression of interests by the PELs holders or the Government through NAMCOR wanting to acquire Multiclient/Proprietary 2D/3D seismic data sets for their respective AOIs.

The overall aim of undertaken Multiclient/Proprietary 2D/3D seismic survey seismic surveys is to map the subsurface of the key potential targeted areas within the outlined AOI. Although offshore seismic surveys operations in Namibia began as far back as 1968, a lot more still need to be done to have a full understanding of the subsurface geology, and petroleum systems of the deep-water offshore Namibia. The datasets from the potential Multiclient/Proprietary 2D/3D seismic surveys will provide critical insight into the regional and local subsurface geological evolution, deep-water offshore basin architecture, depositional, structural history and delineate potential drill-ready subsurface potential reservoirs likely to be situated kilometres below the seafloor. Seismic survey data sets generated can also be utilised in the search for natural suitable Carbon Capture and Storage (CCS) banking terrains as one of the possible options for Climate Change long-term global mitigation strategies. In oil and gas exploration, seismic survey data sets reduce the risk of drilling multiple dry wells, improve the chances for commercial discovery and reduces the environmental impacts of drilling more wells in the search for oil and gas resources.

The marine seismic survey is conducted using a specialist survey vessel towing an energy source in form of a compressed air source and hydrophone receivers. During the survey, compressed air is released to generate seismic acoustic signals/waves at regular intervals. The generated acoustic waves travel deep into the subsurface of the earth and get reflected by various rock formations of the subsurface at different depths below the seafloor. The returned signals get recorded and measured by receiving devices called hydrophones. Geophysicists, geologists, and petroleum engineers use sophisticated software to create subsurface images /maps showing potential subsurface geological structures called reservoirs that may contain potential commercial hydrocarbons resources. This is achieved by analysing the two-way travel times of the seismic waves through the various subsurface rock layers and the surface. 2D seismic survey is a regional mapping / imaging methodology aimed at de-risking an exploration project by establishing a validated Sedimentary Basin Scale Model of an exploration AOI. 3D seismic survey on the other hand, is a detailed local mapping / imaging methodology aimed at de-risking an exploration project by establishing a local validated Prospect/s or Lead/s Scale Models of an exploration AOI. 3D and 2D seismic surveys data sets are acquired on local to subregional dense and regional widely spaced survey grids / spacings, respectively

The potential Multiclient/Proprietary 2D / 3D seismic survey location specific projects to be undertaken within the AOI, will be conducted using a MARPOL / Namibian Maritimes Laws compliant vessels and will adopt the well-established international best practices such as seasonality and survey implementation timing, establishment of buffer zones, use of Marine Mammal Observers (MMOs) & Fisheries Liaison Officers (FLOs), use of Passive Acoustic Monitoring (PAM) technology, soft starts' and 'pre-firing' observations, termination of firing in the 500m exclusion zone and use of turtle friendly tail buoys. The potential seismic survey activities within the proposed AOI cannot be undertaken without an Environmental Clearance Certificate (ECC) as provided for in the Environmental Management Act, 2007, (Act No. 7 of 2007) and the Environmental Impact Assessment (EIA) Regulations 30 of 2012. The Proponent is required to have undertaken environmental assessment process and the preparation of the EIA and Environmental Management Plan (EMP) Reports to support the application for ECC. In fulfilment of these environmental requirements, the Proponent has appointed Risk-Based Solutions (RBS) CC as the Environmental Consultant, led by Dr Sindila Mwiya and supported by Ms Emerita Ashipala as the Environmental Assessment Practitioners (EAPs) to prepare the EIA and EMP Reports. All Interested and Affected Parties (I&APs) are hereby invited to register and submit written comments / objections / inputs with respect to the potential Multiclient/Proprietary 2D / 3D seismic survey to be undertaken within the proposed outlined AOI in Orange, Lüderitz and Walvis Basins, offshore Namibia. A Background Information Document (BID) and Project Reports are available for comments upon registration as a stakeholder / Interested and / Affected Party (I&AP). NOTE: In terms of the provisions of the EIA Regulation 23 (1), an I&AP is required to disclose, or registration any direct business, financial, personal, or other interest which that party may have in the approval or refusal of the ECC application.

REGISTER BY EMAIL WITH: Ms Emerita Ashipala (EAP/ Risk-Based Solutions (RBS) Independent Senior Technical Consultant), Email: emerita.ashipala@gmail.com.

For more technical clarifications on marine /offshore subsurface mapping using seismic survey operations, the receiving environment and oil and gas exploration and production, please contact Dr Sindila Mwiya EAP/Technical Permitting Advisor/ International Resources Consultant, Email: frontdesk@rbs.com.na

A PUBLIC MEETINGS HAS BEEN ORGANISED IN LÜDERITZ AS FOLLOWS:

LÜDERITZ: Tuesday 7th NOVEMBER 2023, PLACE: Benguela Community Hall, Lüderitz Town, TIME: From 09hrs00-12hrs00



Your Technical Specialist Consultants, Permitting & De-Risking Advisors in Natural Resources covering Petroleum Exploration & Production/ Minerals Exploration &

Mining / Energy / Water / Environmental Assessments & Management (ESG, SEA, EIA, EMP, EMS)
Find Us @ 10 Schützen Street, Erf No. 7382, Sivieda House-Home of RBS, Tel: +264-61-306058 / 224780 / 236598

AZ Allgemeine Zeitung **Market Watch** TUESDAY 31 OCTOBER 2023

> To soften blow of budget cuts

South Africa plans to raise borrowing

South Africa has about R4.3 trillion of debt and spends 18c of every tax rand collected on debt service costs.

CAROL PATON

outh Africa's Finance Minister Enoch Godongwana says he will "bump up borrowing" to soften the blow of budget cuts when he tables the medium-term policy statement on Wednesday.

Speaking at the Kgalema Motlanthe Foundation Inclusive Growth Forum in the Drakensberg on Friday evening, Godongwana painted a dire picture of the state of public finances, and said that if nothing was done about public debt, South Africa would have no cash by the end of March next year.

South Africa has about R4.3 trillion of debt and spends 18c of every tax rand collected on debt service costs. Godongwana said SA had been hit by a triple whammy of falling revenue due to low growth, a rising cost of borrowing, and the dumping of South Africa government bonds by foreign investors.

Said Godongwana: "The problem with debt is not its size, it is the capacity of the economy to service it. In this environment, our capacity to service it is constrained. And what complicates things is that we have to redeem old debt. This year alone, the amount we are going to redeem is such that if we don't do anything, we won't have cash by the

end of March. Am I scaring you too much? We have to cut expenditure and increase borrowing.'



The problem with debt is not its size, it is the capacity of the economy to service it. In this environment, our capacity to service it is constrained.

Enoch Godongwana, **Finance Minister: SA**

Godongwana's plan to make budget cuts in an election year has come under fire in the ANC.

"They call me Mr Austerity, I don't like it, but I can live with it," he said. He said the proposed budget cuts would be smaller than the amount by which government typically underspends on its budget. In the last financial year, state departments underspent by R28 billion. In the previous year, underspending amounted to R31 billion.

Two of the biggest factors weighing down debt are load shedding and the deteriorating logistics capacity which is constraining mining exports.

The government had made the



South Africa's Finance Minister Enoch Godongwana. PHOTO REUTERS

mistake in the past by focusing on fixing Eskom when what was needed was to fix the electricity supply system.

The same mistake should not be made with Transnet, said Godong-

Transnet's new turnaround plan involves a request for an R47-billion capital injection and R61 billion of debt relief. Rather than focusing on fixing Transnet, the government should focus on getting products to the ports, he said.

Ministry to bost consumer protection workshop

ELIJAH MUKUBONDA

The Ministry of Industrialisation and Trade is in the process of developing the Consumer Protection Legislation to protect consumers from unfair, deceptive, and fraudulent business practices. In alliance with the United States Federal Trade Commission (USFTC), the Ministry is hosting a Consumer Protection workshop from 1-3 November 2023 at Hilton Hotel in Windhoek, within its mandate to facilitate and strengthen stakeholder engagements, dialogue and cooperation. The seminar is expecting to host more than 50 participants and officials from neighbouring Botswana, Zambia and South Africa to promote cross-pollination of ideas from experts in the field. The scheduled workshop is themed 'Consumer Protection and E-commerce' and seeks to demystify the development of the consumer protection legislation in relation to the current framework for consumer protection in Namibia and pros-

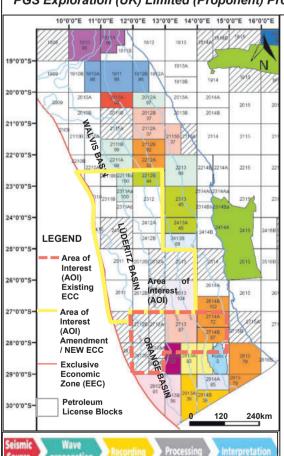
emerging consumer protection trends in Southern Africa and the future of reform of consumer protection laws in Namibia.

Elijah Mukubonda. PHOTO FILE



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PGS Exploration (UK) Limited (Proponent) Proposed Multiclient/Proprietary 2D / 3D Area of Interest (AOI), Orange, Lüderitz and Walvis Basins, Offshore Namibia



Compressed

Air Airguns

Energy Source

Generated

Acoustic

Waves

Hydrophone Receivers

Subsurface Map Representation of the Processed Seismic Survey Data

Reflected

Acoustic

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Specialist

Seismic

Survey

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