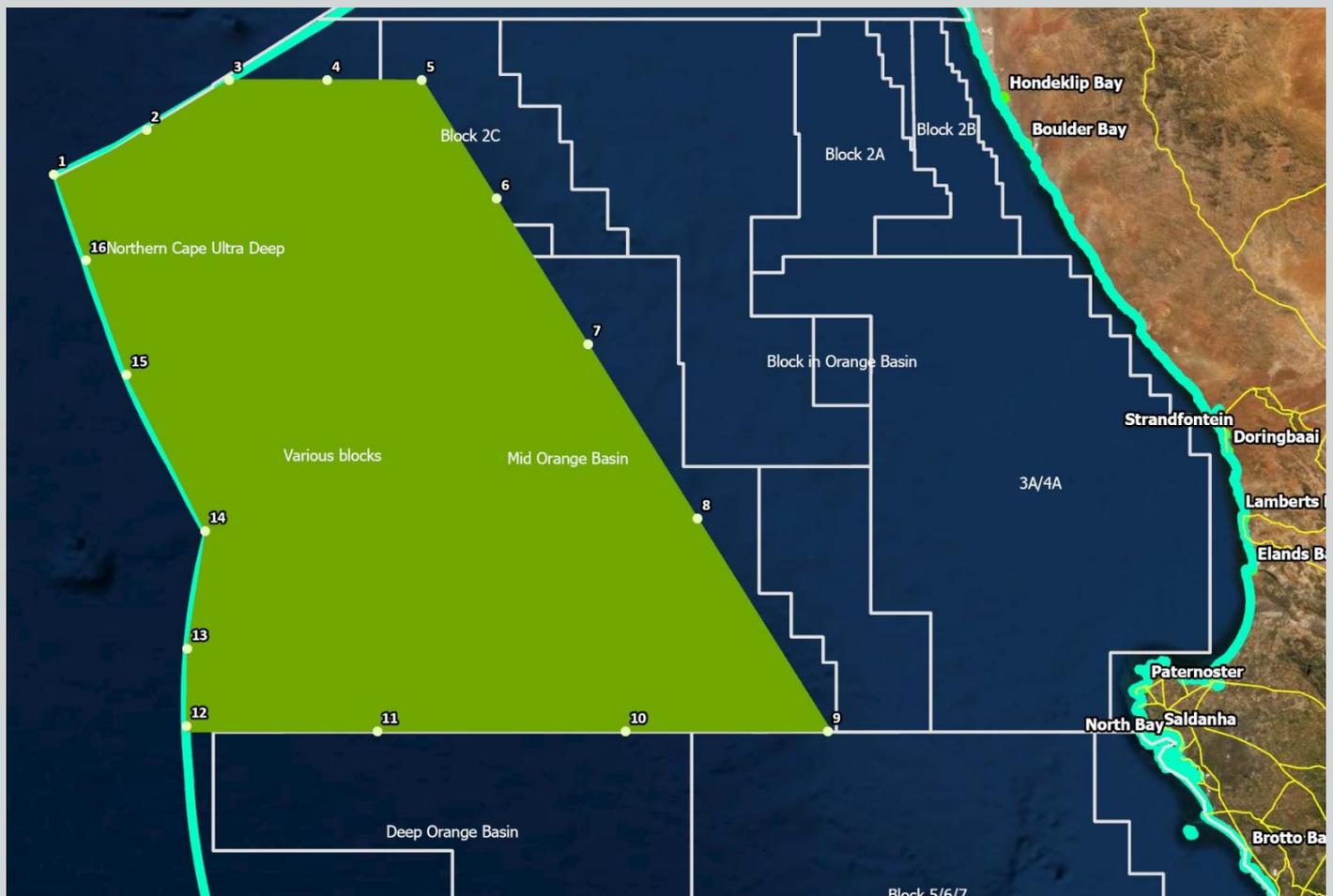


BACKGROUND INFORMATION DOCUMENT

ENVIRONMENTAL AUTHORISATION APPLICATION PROCESS FOR THE PROPOSED TGS ORANGE BASIN SEISMIC RECONNAISSANCE BASIC ASSESSMENT



DOCUMENT PURPOSE

- This Background Information Document (BID) provides you, as an Interested and Affected Party (I&AP), an overview of the proposed project.
- The BID invites you, as an I&AP, to participate in the required Public Participation Process.
- The BID provides you, as an I&AP with an opportunity to contribute and participate in the formulation of the Basic Assessment (BA) Report.
- The BID also provides you, as an I&AP an opportunity to provide the project team with your comments, concerns and

INTRODUCTION

TGS Geophysical Company (UK) Limited (hereafter referred to as the applicant - TGS) has appointed Environmental Impact Management Services (Pty) Ltd (EIMS) as the Environmental Assessment Practitioner (EAP) to assist with undertaking the required authorisation processes (including the statutory public participation), and to compile and submit the required documentation in support of application for:

Environmental Authorisation (EA) in accordance with the NEMA- Listed Activity 21(b) (GNR 983.

The Environmental Impact Assessment (EIA) process will be undertaken in terms of Chapter 6 of the EIA Regulations, 2014 (GNR 982) promulgated under the NEMA (as amended). A Basic Assessment (BA) process will be followed.

Aim of the Background Information Document (BID):

The aim of the BID is to:



objections to the proposed project.

- Provide an overview of the Environmental Authorisation/Licensing Applications as well as the public participation processes which will be undertaken for the proposed project;
- Allow Interested and Affected Parties (I&APs) the opportunity to obtain a broad understanding of the proposed project and to request or share information; and
- Provide details on how I&APs can register their interest with and submit comments on the project. It is important to note that only registered I&APs will receive further communication regarding the project for the duration of the EIA process (i.e. invitation to review and comment on the BA Report).

LOCATION, SCALE, AND EXTENT OF THE PROPOSED PROJECT

LOCATION

TGS proposes to undertake a 3D seismic survey off the West Coast of South Africa. The proposed project area is located between approximately 120 km offshore of St Helena Bay, extending north along the western coastline to approximately 230 km offshore of Hondeklip Bay over a number of petroleum licence blocks. The survey area corner coordinate points are as follows:

Point	Latitude	Longitude	Point	Latitude	Longitude
1	30°14'56.11"S	14°04'35.32"E	7	31°33'20.17"S	13°39'39.20"E
2	31°05'40.95"S	14°53'02.67"E	8	31°13'46.17"S	13°32'16.45"E
3	31°05'40.95"S	15°09'38.63"E	9	30°39'39.20"S	13°21'00.35"E,
4	32°35'25.54"S	15°09'38.92"E	10	30°33'45.66"S	13°33'50.71"E
5	32°35'33.69"S	13°53'56.75"E	11	30°25'05.62"S	13°47'32.20"E
6	32°10'23.58"S	13°58'29.69"E			

Closest towns or point of interest: Cape Town, Hout Bay, Saldanha, Lamberts Bay, Hondeklip Bay and Port Nolloth. Please refer to locality map at the end of this BID.

PROJECT DESCRIPTION

Hydrocarbon deposits occur in reservoirs in sedimentary rock layers. Being lighter than water they accumulate in traps where the sedimentary layers are arched or tilted by folding or faulting of the geological layers. Marine seismic surveys are the primary tool for locating such deposits and are thus an indispensable component of offshore oil or gas exploration. 3D seismic surveys are conducted on a tight survey grid and provide an image of the seafloor geology along each survey track–line.

The area of interest for the proposed 3D seismic survey is approximately 57 400 km² in extent. The proposed project area is located between approximately 256 km offshore of St Helena Bay, extending north along the western coastline to approximately 220 km offshore of Hondeklip Bay. The 3D survey will take in the order of 70 days including downtime.

It is proposed that a single survey vessel equipped with seismic sources and streamers be used. The proposed 3D survey would be supported by up to 2 escort vessels. The escort vessel will assist in monitoring for and alerting other vessels (e.g. fishing, transport, etc.) about the survey and the lack of manoeuvrability of the survey vessel. At a minimum, one Fisheries Liaison Officer (FLO) person speaking English and Afrikaans will be on board either the survey or the escort vessel to facilitate communication in the local language with the fishing (or other) vessels that are in the area. Additionally, there will be Marine Mammal Observers and Passive Acoustic Monitoring on board the survey vessel to monitor for marine mammals and fauna visually and ensure that the survey is conducted in compliance with the specified guidelines as stated in the Environmental Management Programme.

Crew changes will occur by support or survey vessel calling to port. The onshore logistics base will be in either the Port of Cape Town or the Port of Saldanha Bay. Actual survey commencement would ultimately depend on the authorization award date and the availability of a survey vessel.



LEGISLATIVE REQUIREMENTS

The proposed project requires certain authorisations, approvals, permits, and/or licences. The following requirements have specifically been identified:

Relevant Legislation	Listed activities or triggers	Authorisation, Approval, Licence, or Permit requirement:
Chapter 5 of the NEMA	GNR 983 (2014, as amended): <i>Activity 21(b): Any activity including the operation of that activity which requires a reconnaissance permit in terms of section 74 of the Mineral and Petroleum Resources Development Act, as well as any other applicable activity as contained in this Listing Notice or in Listing Notice 3 of 2014, required to exercise the reconnaissance permit, excluding- (a) any desktop study; and (b) any aerial survey</i>	Environmental Authorisation (EA)

As a consequence of triggering the provisions above, there is a requirement to undertake a Basic Assessment (BA) process. The BA is to be undertaken in accordance with the requirements of the NEMA EIA Regulations, 2014, as amended (GNR982). Additional listed activities and/or water uses may be identified during the process.

IMPACT ASSESSMENT PROCESS

An EIA (in this case **Basic Assessment**) process is a planning and decision-making tool, to describe and assess the physical, biological, social, and economic impacts which a given development or project may have. To be able to inform the decision-making process, it is important for public issues and concerns to be identified timeously, to enable the EIA team to evaluate them.

The EIA process allows for the environmental consequences of a proposed project to be identified up-front, investigated throughout the impact assessment process, and taken into consideration by the decision-making authorities. The EAP and various specialists also identify potential negative and positive impacts that could arise as a result of the proposed project and identify applicable mitigation measures required, to avoid or reduce negative impacts and to enhance positive impacts.

Once the relevant processes have been completed and the final documentation submitted to the competent authority, the competent authority reviews the application and makes an informed decision. The I&APs will be informed of the decision and their right to appeal in the event that they disagree with the decision.

PRELIMINARY ENVIRONMENTAL IMPACTS

One of the key drivers to a successful EIA is to ensure that potential impacts (both positive and negative) are identified and investigated. Additional impacts may be identified and relevant specialists will be included into the team in order to accurately and objectively assess these potential impacts. A number of potential environmental impacts associated with the proposed project have been identified. Preliminary identified potential impacts to be assessed in this BA process include amongst others:

- Fishing Sector Impacts;
- Physiological injury and/or mortality;
- Behavioural avoidance;
- Reduced reproductive success/spawning for marine fauna;
- Masking of environmental sounds and communication for marine fauna;
- Strandings and/or oiling of seabirds;
- Collision with or entanglement of turtles/marine mammals in towed acoustic apparatus; and
- Impacts on social environment and intangible heritage impacts.

The above-mentioned impacts should not be construed as the only impacts that will be identified during the course of the assessment. Based on public consultation, specialist input and further detailed assessments, additional impacts will likely be identified and assessed.

All potential impacts will be identified and assessed following an impact assessment methodology guided by the requirements of the NEMA EIA Regulations, 2014. The broad approach to the significance rating methodology is to determine the environmental risk (ER) by considering the consequence (C) of each impact (comprising Nature, Extent, Duration, Magnitude, and Reversibility)



and relate this to the probability/likelihood (P) of the impact occurring. This determines the environmental risk. In addition, other factors including cumulative impacts, public concern, and potential for irreplaceable loss of resources, are used to determine a prioritisation factor (PF) which is applied to the ER to determine the overall significance (S).

Furthermore, based on the identified impacts and their ratings, mitigation and management measures are recommended for the applicant and these are included in an Environmental Management Programme (EMPr) towards ensuring that any negative impacts that cannot be avoided are minimised and managed, and positive impacts maximised.

Specialist studies may be utilised to guide and inform the assessment of the potential impacts. The specialist studies identified to be included in this assessment include:

- **Marine Ecological Assessment;**
- **Heritage Assessment;**
- **Social Assessment**
- **Acoustic Assessment; and**
- **Fisheries Impact Assessment.**

The need for further specialist studies may be identified through the BA process.

HOW TO GET INVOLVED

Should you feel that you may be interested in, or affected by, this project, it is essential that you register as an Interested and Affected Party (I&AP) in which case you will be kept informed regarding the project and afforded an opportunity to participate in the process. Please note that only registered I&APs will be included in future correspondence regarding the project and associated updates. You may register and/or comment as an I&AP in any of the following ways:

- Complete the I&AP registration form and questionnaire and return it to EIMS via email, fax or post;
- Submit written comments, registrations, or requests to EIMS via email, fax or post; and/or
- Via telephone call.

It is important to note that the EIA process is guided by legally stipulated timeframes and as such, in order to ensure your continued and valuable involvement in the project, we request that your registration requests and any preliminary comments are submitted to EIMS (contact details provided below) by **19 September 2022**.

Please note that further to the above, all registered I&APs will also be notified in due course of further participation opportunities, as well as the availability of the BA Report upon which comments will be solicited.

Environmental Impact Management Services (Pty) Ltd (EIMS)

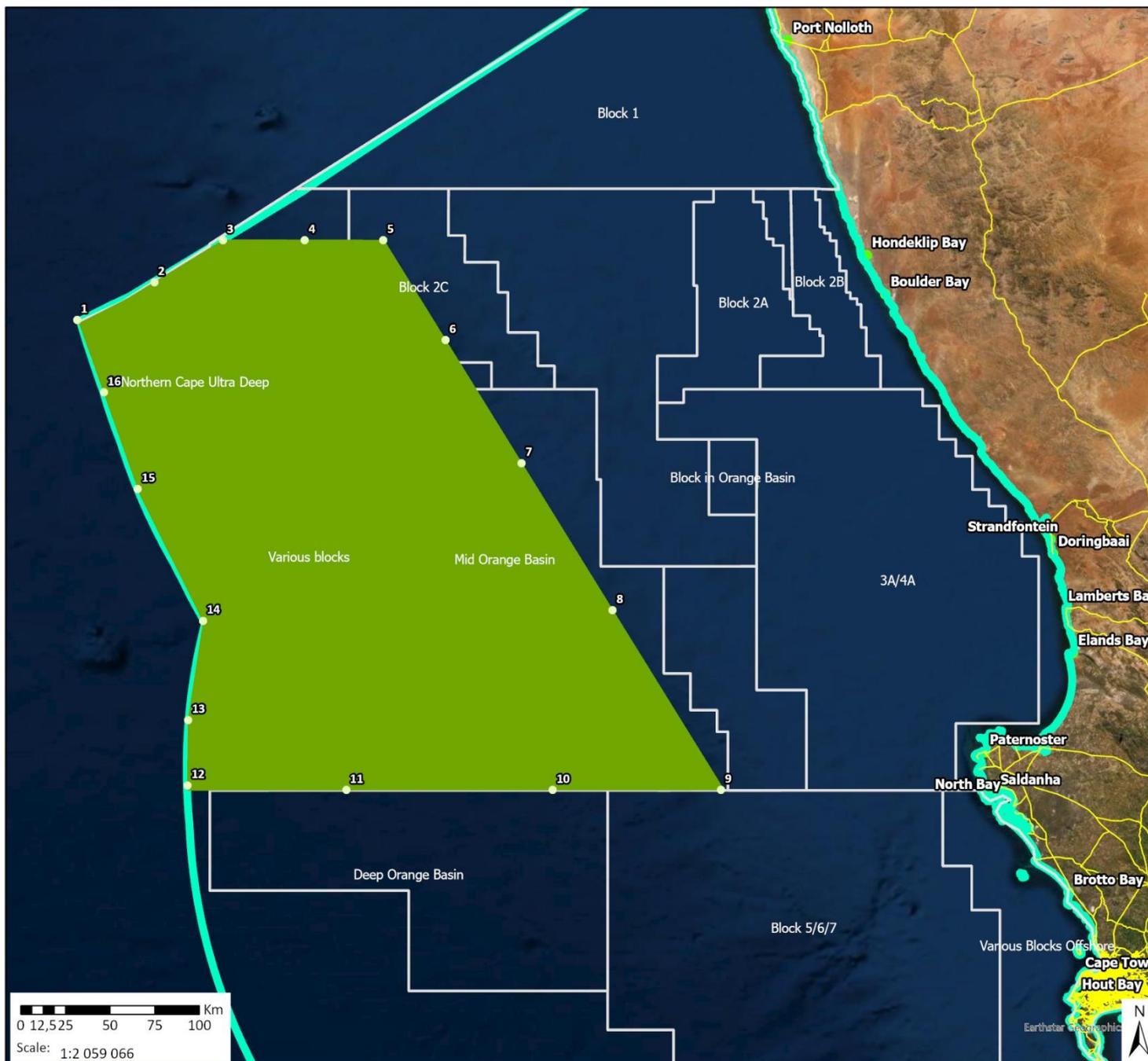
Contact Person: Andisiwe Xuma

EIMS Reference Number: 1520

Postal Address: P.O. Box 2083; Pinegowrie; 2123

Telephone: (011) 789 7170/ Fax: (086) 571 9047

E-mail: tgs@eims.co.za



Locality Map

1520 TGS Reconnaissance BA

- Legend**
- Coastal Towns
 - Roads
 - Offshore Permits Rights
 - South African Exclusive Economic Zone
 - Proposed 3D Seismic Survey Area

Proposed Project Area Coordinates:
Point: Latitude, Longitude

- 1: 30°39'18,094"S, 13°19'57,691"E
- 2: 30°28'1,697"S, 13°43'15,892"E
- 3: 30°15'25,924"S, 14°3'58,572"E
- 4: 30°15'24,84"S, 14°28'39,619"E
- 5: 30°15'27,745"S, 14°52'18,296"E
- 6: 30°45'15,898"S, 15°11'4,074"E
- 7: 31°22'4,228"S, 15°34'1,603"E
- 8: 32°6'8,856"S, 16°1'31,289"E
- 9: 32°59'53,488"S, 16°34'10,585"E
- 10: 32°59'54,895"S, 15°43'26,378"E
- 11: 32°59'56,623"S, 14°41'8,974"E
- 12: 32°58'29,485"S, 13°53'17,887"E
- 13: 32°38'57,055"S, 13°53'27,668"E
- 14: 32°9'15,206"S, 13°57'57,305"E
- 15: 31°29'51,529"S, 13°38'20,731"E
- 16: 31°1'0,005"S, 13°28'2,381"E

Data Sources:
CSG; ESRI
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: Locality Map

Date: 2022/07/21
EIMS Ref: 1520 Locality Map
Compiled: CM
Reviewed: GP
Approved: LW

