

APPLICATION PROCESS FOR THE PROPOSED SEARCHER SEISMIC RECONNAISSANCE BASIC ASSESSMENT

NON-TECHNICAL SUMMARY:

Searcher Geodata UK (Ltd) (Searcher) wants to do a special kind of study in the ocean, called a seismic survey. This means they use a boat with special equipment to send sound waves into the water and the ground under the water. The sound waves bounce back and tell them if there might be oil or gas under the ground. Searcher applied for permission to do this study in a big area far from the coast of South Africa.

Searcher has appointed EIMS as the Independent Environmental Assessment Practitioner (EAP) to check if their study would harm the environment or the people who live and work near the ocean. EIMS has written a report called an Environmental Basic Assessment Report (BAR), where they explained what they did and what they found. This Non-Technical summary is a shorter and simpler summary of the BAR, written for people who are not experts in science or engineering. The summary is meant to help people understand what the study is about, why it is important, and what are the possible benefits and risks of doing it.

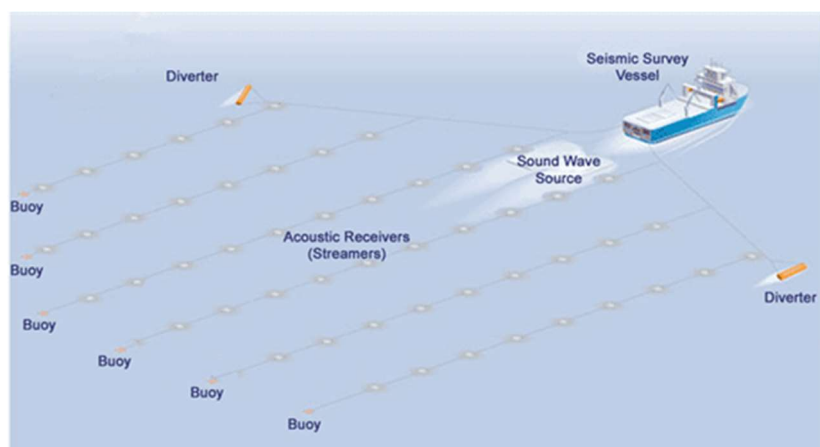
The summary has four main parts:

- The first part describes what the study is, where it will take place, when it will happen, and who is involved.
- The second part explains how the study might affect the environment, especially the animals that live in the water, like fish, whales, dolphins, turtles, and seabirds. It also explains how the study might affect the people who catch fish for a living or for food, and the people who have a special connection to the ocean because of their culture and history.
- The third part lists the rules that Searcher has to follow to protect the environment and the people, and what they will do if something goes wrong, like if the boat spills oil or loses some equipment in the water.

This summary is not a complete or final document. It is based on the detailed Environmental Impact Assessment, presented in the Basic Assessment Report (BAR). Should you require further detail on any particular aspect in this summary, please refer to the BAR.

WHAT , WHERE , WHEN AND WHO?

The study is called a seismic survey. It is a way of finding out if there is oil or gas under the ground in the ocean. To do the seismic survey, Searcher will use a boat with special equipment that can send sound waves into the water and the ground under the water. The sound waves will travel through the water and the ground and bounce back to the boat. The equipment on the boat will record the sound waves and



make a picture of what is under the ground. The picture will show if there are any places where oil or gas might be trapped. The picture will not show exactly how much oil or gas there is, or if it is easy or hard to get it out. To find that out, further studies and tests would need to be carried out later.

The study will take place in a large area in the ocean, about 220 kilometres from the coast of South Africa at its closest point. The planned study area is located in the Orange Basin and it covers about 30,000 square kilometres. The water in the area is very deep, between 1,000 and 3,500 meters. The area is part of South Africa's Exclusive Economic Zone (EEZ), which means that South Africa has the right to explore and use the natural resources in the water and under the ground.

The study will happen as soon as the relevant permissions are granted-

possibly in the first quarter of 2025. The timing of the study will also depend on the weather and the availability of the boat and equipment. The study will last for about four months, but not every day.

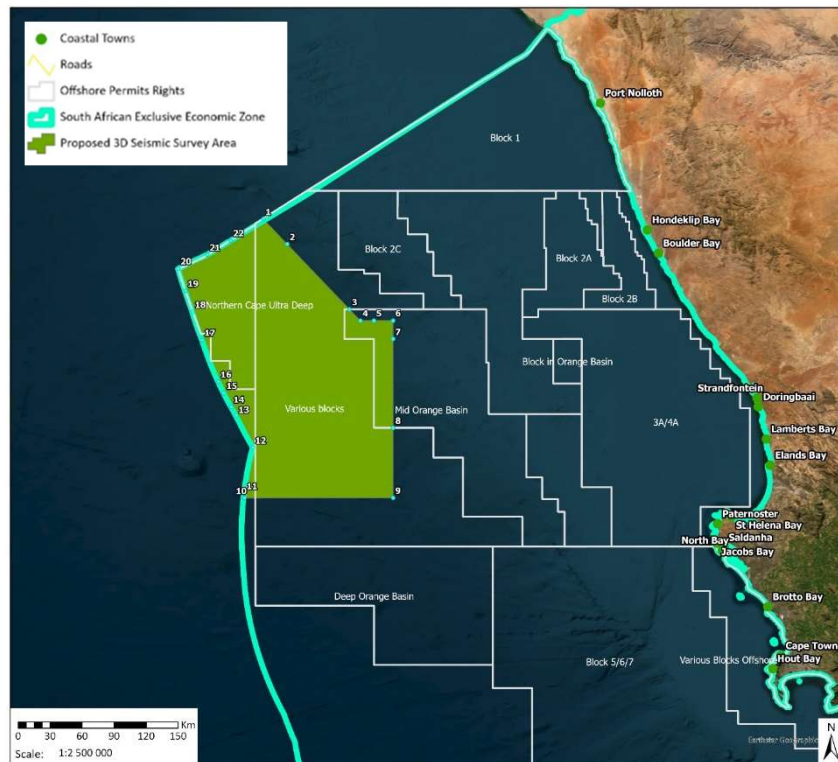
The study will be done by Searcher, a company that specializes in doing seismic surveys around the world. Searcher has a lot of experience and expertise in doing seismic surveys, and they follow the best practices and standards in the industry. Searcher will need a permit from the South African government to do the study (known as a Reconnaissance Permit), and they have to report to the government on their progress and results.

Searcher has appointed EIMS as the EAP to assess the potential environmental impacts of the planned study. The Environmental Impact Assessment is done through a Basic Assessment Process. The Environmental Basic Assessment Process is a process of finding out and reporting on how the study might affect the environment and the people who live and work near the ocean. The experts/ specialists are from different fields, like marine biology, fisheries, social sciences, and cultural heritage. The experts are independent and objective, and they follow the rules and guidelines of the South African law.

HOW MAY THE SURVEY OR STUDY AFFECT THE ENVIRONMENT?

The second part of the summary is about how the study might affect the environment, especially the animals that live in the water, like fish, whales, dolphins, turtles, and seabirds. It also explains how the study might affect the people who catch fish for a living or for food, and the people who have a special connection to the ocean because of their culture and history.

The main way that the study might affect the environment and the people is by making noise. The sound waves that the boat sends into the water and the ground are very loud, and they can be heard by the animals in the water. The noise might scare or annoy the animals, or make it harder for them to hear each other or find their food. The noise might also interfere with the natural sounds that the animals use to communicate, navigate, or sense their surroundings.



The experts looked at how the noise might affect different kinds of animals and people, and they found that the effects would vary depending on many factors, like the distance from the boat, the depth of the water, the sensitivity of the ears, the behavior and habits of the animals, and the background noise in the environment. The experts used the best available data and methods to estimate the effects, but they also acknowledged that there are some uncertainties and gaps in the knowledge, and that more research is needed to understand the effects better.

The experts found that the noise might have the following effects on the animals and the people:

- The noise might cause physical harm to the animals, like damage to the ears, organs, or tissues.
- The noise might cause behavioral changes in the animals, like moving away from the noise, changing their speed or direction, stopping their normal activities, or becoming more alert or stressed. The noise level is high enough to cause annoyance or disturbance, and the animals might try to avoid the noise or cope with it. The experts found some evidence of behavioral changes caused by seismic surveys in other places in the world, but they also found that the changes were usually temporary and mild, and that the animals returned to their normal behavior after the noise stopped or moved away. The study is short and covers a small area and therefore is unlikely to have a significant impact on the population or the community.
- The experts also looked at how the noise might affect different groups of animals, and they found that the effects would vary depending on their characteristics and situations. The experts used a scale of low, moderate, high, and very high to rate the effects, and they considered the following groups:
 - Fish: The experts rated the effects of the noise on fish as low to moderate, depending on the species and the location. Some fish might move away from the noise or change their behavior, but they are unlikely to suffer physical harm or population changes.
 - Marine mammals: The experts rated the effects of the noise on marine mammals, like whales and dolphins, as moderate to low, depending on the species and the location. Some marine mammals might move away from the noise or change their behavior, and they might also suffer physical harm or population changes if they are very close to the boat or very sensitive to the noise. Some marine mammals might also be more affected by the noise, because they use sound a lot to communicate, navigate, or find their food.
 - Turtles: The experts rated the effects of the noise on turtles as low to moderate, depending on the species and the location. Some turtles might move away from the noise or change their behavior, but they are unlikely to suffer physical harm or population changes. Some turtles might also be less affected by the noise, because they have less sensitive ears and they spend less time in the water.
 - Seabirds: The experts rated the effects of the noise on seabirds as low, because they are unlikely to hear the noise or be affected by it. Seabirds have more sensitive ears for air than for water, and they spend more time on the surface or in the air than under the water.
 - Fishers: The experts rated the effects of the noise on fishers as low to moderate, depending on the type and location of fishing. Some fishers might be annoyed or disturbed by the study, or have difficulty catching fish. Some fishers might also have to change their fishing plans or routes to avoid the boat or the noise.
 - Coastal communities: The experts rated the effects of the noise on coastal communities as low. Coastal communities might also have a special connection to the ocean because of their culture and history, but the noise is unlikely to affect their culture and heritage.

SUGGESTED MANAGEMENT AND MITIGATION.

The experts found that the study would not cause much harm to the environment or the people, as long as Searcher follows some rules to protect them. Some of these rules are:

- Don't do the study in places where there are special animals or areas that need to be protected.
- Use special tools to listen for animals in the water and stop the study if they are too close to the boat or if they look hurt or affected by the sound waves.
- Use the lowest possible sound level for the study and make sure the sound waves go mostly down and not sideways.
- Use special buoys that won't hurt turtles and avoid using streamers that have fluid inside them that could leak.
- Don't do the study in the months when the fishers catch the most fish, like June, and July.
- Tell the fishers and other people who use the ocean when and where they are doing the study and stay in touch with them during the study.
- Have someone on the boat who can talk to the fishers and help them if they have any problems or complaints because of the study.
- Work with the communities and the scientists to learn more about how the fish and other animals react to the study and how to do it better in the future.
- Work with the communities to find ways to make a positive contribution to them.
- The experts also found that the study could have some unplanned risks or accidents, like if the boat spills oil or loses some equipment in the water. These risks or accidents are very rare, because the boat and the equipment are well maintained and operated by trained and experienced staff. The boat and the equipment also have safety features and emergency plans to prevent or minimize the risks or accidents.

The experts think that Searcher should be allowed to do the study if they follow these rules and respect the environment and the people.