

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.

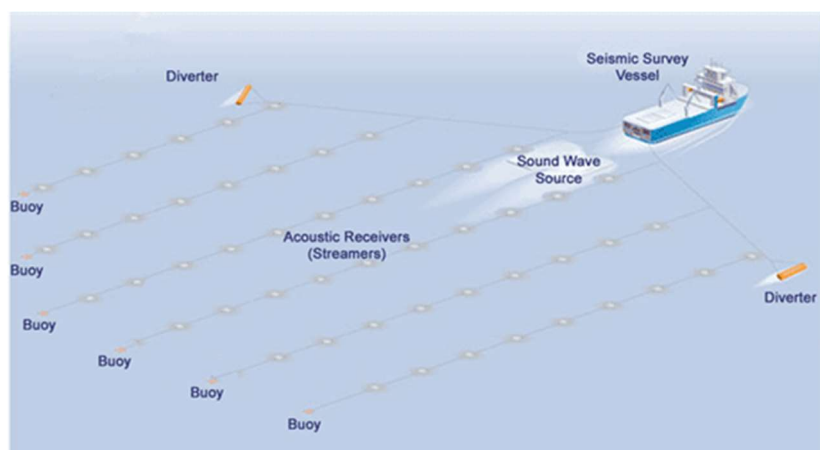
The summary has four main parts:

- 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.

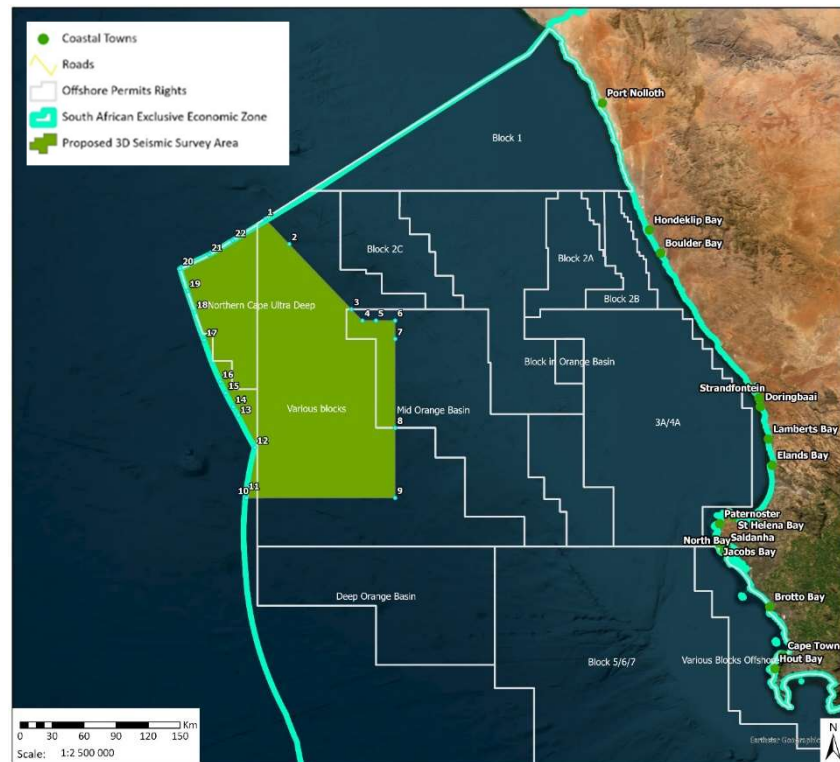
The study will be done by Searcher, a company that specializes in doing seismic surveys around the world. Searcher has a lot of experience and expertise in doing seismic surveys, and they follow the best practices and standards in the industry. Searcher will need a permit from the South African government 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:

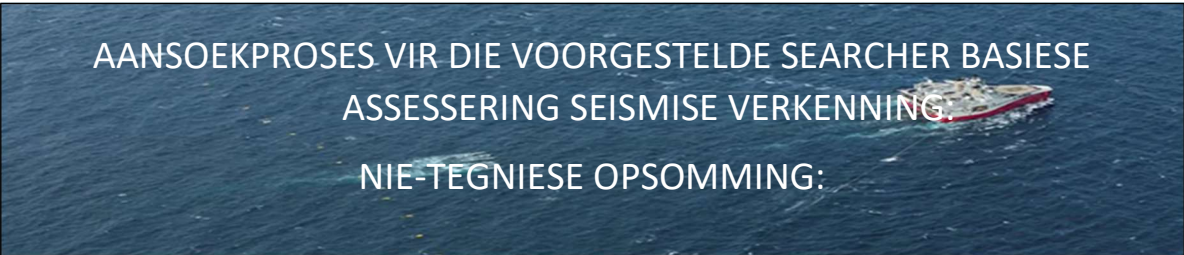
- The noise might cause physical harm to the animals, like damage to the ears, organs, or tissues.
- The noise might cause behavioral changes in the animals, like moving away from the noise, changing their speed or direction, stopping their normal activities, or becoming more alert or stressed. The noise 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.



AANSOEKPROSES VIR DIE VOORGESTELDE SEARCHER BASIESE ASSESSERING SEISMISE VERKENNING: NIE-TEGNIесе OPSOMMING:

Searcher Geodata UK (Ltd) (Searcher) wil 'n spesiale soort studie in die see doen, wat 'n seismiese opname genoem word. Dit beteken hulle gebruik 'n boot met spesiale toerusting om klankgolwe in die water en die grond onder die water in te stuur. Die klankgolwe bors terug en sê vir hulle of daar dalk olie of gas onder die grond is. Searcher het aansoek gedoen om toestemming om hierdie studie in 'n groot gebied ver van die kus van Suid-Afrika te doen.

Searcher het EIMS aangestel as die onafhanklike omgewingsevalueringspraktisyn (EAP) om te kyk of hul studie die omgewing of die mense wat naby die see woon en werk sal benadeel. EIMS het 'n verslag geskryf genaamd 'n Basiese Omgewingsbeoordelingsverslag (BAR), waar hulle verduidelik het wat hulle gedoen het en wat hulle gevind het. Hierdie nie-tegniese opsomming is 'n korter en eenvoudiger opsomming van die BAR, geskryf vir mense wat nie kundiges in wetenskap of ingenieurswese is nie. Die opsomming is bedoel om mense te help om te verstaan waaroor die studie gaan, hoekom dit belangrik is en wat die moontlike voordele en risiko's is om dit te doen.

Die opsomming het vier hoofdele:

- Die eerste deel beskryf wat die studie is, waar dit sal plaasvind, wanneer dit sal plaasvind en wie betrokke is.
- Die tweede deel verduidelik hoe die studie die omgewing kan beïnvloed, veral die diere wat in die water leef, soos visse, walvisse, dolfyne, skilpaaie en seevoëls. Dit verduidelik ook hoe die studie die mense kan raak wat vis vang vir 'n lewe of vir kos, en die mense wat 'n spesiale verbintenis met die see het as gevolg van hul kultuur en geskiedenis.
- Die derde deel lys die reëls wat Searcher moet volg om die omgewing en die mense te beskerm, en wat hulle sal doen as iets verkeerd loop, soos as die boot olie mors of toerusting in die water verloor.

Hierdie opsomming is nie 'n volledige of finale dokument nie. Dit is gebaseer op die gedetailleerde Omgewingsimpakbepaling, wat in die Basiese Evalueeringsverslag (BAR) aangebied word. Indien u verdere besonderhede oor enige spesifieke aspek in hierdie opsomming verlang, verwys asseblief na die BAR.

WAT, WAAR, WANNEER EN WIE?

Die studie word 'n seismiese opname genoem. Dit is 'n manier om uit te vind of daar olie of gas onder die grond in die see is. Om die seismiese opname te doen, sal Searcher 'n boot met spesiale toerusting gebruik wat klankgolwe in die water en die grond onder die water kan stuur. Die klankgolwe sal deur die water en die grond beweeg en terugbors na die boot. Die toerusting op die boot sal die klankgolwe opneem en 'n prentjie maak van wat onder die grond is. Die prentjie sal wys

of daar enige plekke is waar olie of gas vasgevang kan wees. Die prentjie sal nie presies wys hoeveel olie of gas daar is nie, of of dit maklik of moeilik is om dit uit te kry nie. Om dit uit te vind, sal verdere studies en toetse later uitgevoer moet word.

Die studie sal in 'n groot gebied in die see plaasvind, sowat 220 kilometer van die kus van Suid-Afrika op sy naaste punt. Die beplande studiegebied is in die Oranjekom geleë en dit beslaan sowat 30 000 vierkante kilometer. Die water in die gebied is baie diep, tussen 1 000 en 3 500 meter. Die gebied is deel van Suid-Afrika se Eksklusiewe Ekonomiese Sone (EEZ), wat beteken dat Suid-Afrika die reg het om die natuurlike hulpbronne in die water en onder die grond te verken en te gebruik.

Die studie sal plaasvind sodra die relevante toestemmings verleen word- moontlik in die eerste kwartaal van 2025. Die tydsberekening van die studie sal ook afhang van die weer en die beskikbaarheid van die boot en toerusting. Die studie sal ongeveer vier maande duur, maar nie elke dag nie.

Die studie sal gedoen word deur Searcher, 'n maatskappy wat spesialiseer in die doen van seismiese opnames regoor die wêreld. Searcher het baie ondervinding en kundigheid in die doen van seismiese opnames, en hulle volg die beste praktyke en standaarde in die bedryf. Searcher sal 'n permit van die Suid-Afrikaanse regering nodig hê om die studie te doen (bekend as 'n Verkenningspermit), en hulle moet aan die regering verslag doen oor hul vordering en resultate.

Searcher het EIMS as die WHP aangestel om die potensiële omgewingsimpakte van die beplande studie te evalueer. Die Omgewingsimpakstudie word deur 'n Basiese Evalueringsproses gedoen. Die Basiese Omgewingsevalueringsproses is 'n proses om uit te vind en verslag te doen oor hoe die studie die omgewing en die mense wat naby die see woon en werk kan beïnvloed. Die kundiges/spesialiste is van verskillende velde, soos mariene biologie, visserye, sosiale wetenskappe en kulturele erfenis. Die kundiges is onafhanklik en objektief, en hulle volg die reëls en riglyne van die Suid-Afrikaanse wet.

HOE KAN DIE OPNAME OF STUDIE DIE OMGEWING BEÏNVLOED?

Die tweede deel van die opsomming handel oor hoe die studie die omgewing kan beïnvloed, veral die diere wat in die water leef, soos visse, walvisse, dolfyne, skilpaaie en seevoëls. Dit verduidelik ook hoe die studie die mense kan raak wat vis vang vir 'n lewe of vir kos, en die mense wat 'n spesiale verbintenis met die see het as gevolg van hul kultuur en geskiedenis.

Die belangrikste manier waarop die studie die omgewing en die mense kan beïnvloed, is deur geraas te maak. Die klankgolwe wat die boot in die water en die grond instuur is baie hard, en dit kan deur die diere in die water gehoor word. Die geraas kan die diere bang maak of irriteer, of dit moeiliker maak vir hulle om mekaar te hoor of hul kos te vind. Die geraas kan ook inmeng met die natuurlike klanke wat die diere gebruik om te kommunikeer, te navigeer of hul omgewing te voel.

Die kenners het gekyk na hoe die geraas verskillende soorte diere en mense kan beïnvloed, en hulle het gevind dat die effekte sal wissel na gelang van baie faktore, soos die afstand vanaf die boot, die diepte van die water, die sensitiwiteit van die ore, die gedrag en gewoontes van die diere, en die agtergrondgeraas in die omgewing. Die kenners het die beste beskikbare data en metodes gebruik

om die uitwerking te skat, maar hulle het ook erken dat daar 'n paar onsekerhede en leemtes in die kennis is, en dat meer navorsing nodig is om die uitwerking beter te verstaan.

Die kenners het bevind dat die geraas die volgende uitwerking op die diere en die mense kan hê:

- Die geraas kan fisiese skade aan die diere veroorsaak, soos skade aan die ore, organe of weefsels.
- Die geraas kan gedragsveranderinge by die diere veroorsaak, soos om weg te beweeg van die geraas, hul spoed of rigting te verander, hul normale aktiwiteite te stop, of om meer waaksaam of gespanne te raak. Die geraasvlak is hoog genoeg om ergernis of steurnis te veroorsaak, en die diere kan probeer om die geraas te vermy of dit te hanteer. Die kenners het bewyse gevind van gedragsveranderinge wat veroorsaak is deur seismiese opnames op ander plekke in die wêreld, maar hulle het ook gevind dat die veranderinge gewoonlik tydelik en min was, en dat die diere na hul normale gedrag teruggekeer het nadat die geraas opgehou of wegbeweeg het. Die studie is kort en dek 'n klein area en sal dus waarskynlik nie 'n noemenswaardige impak op die bevolking of die gemeenskap hê nie.
- Die kenners het ook gekyk na hoe die geraas verskillende groepe diere kan beïnvloed, en hulle het gevind dat die effekte sal verskil na gelang van hul eienskappe en situasies. Die kenners het 'n skaal van laag, matig, hoog en baie hoog gebruik om die effekte te beoordeel, en hulle het die volgende groepe oorweeg:
- Visse: Die kenners het die uitwerking van die geraas op visse as laag tot matig gegradeer, afhangende van die spesie en die ligging. Sommige visse kan dalk wegbeweeg van die geraas of hul gedrag verander, maar dit is onwaarskynlik dat hulle fisiese skade of bevolkingsveranderinge sal ly.
- Seesoogdiere: Die kenners het die uitwerking van die geraas op seesoogdiere, soos walvisse en dolfyne, as matig tot laag gegradeer, afhangende van die spesie en die ligging. Sommige seesoogdiere kan dalk wegbeweeg van die geraas of hul gedrag verander, en hulle kan ook fisiese skade of bevolkingsveranderinge ly as hulle baie naby aan die boot is of baie sensitief vir die geraas is. Sommige seesoogdiere kan ook meer deur die geraas geraak word, want hulle gebruik klank baie om te kommunikeer, te navigeer of om hul kos te vind.
- Skilpaaie: Die kenners het die uitwerking van die geraas op skilpaaie as laag tot matig beoordeel, afhangend van die spesie en die ligging. Sommige skilpaaie kan wegbeweeg van die geraas of hul gedrag verander, maar dit is onwaarskynlik dat hulle fisiese skade of bevolkingsveranderinge sal ly. Sommige skilpaaie kan ook minder deur die geraas geraak word, want hulle het minder sensitiewe ore en hulle spandeer minder tyd in die water.
- Seevoëls: Die kenners het die uitwerking van die geraas op seevoëls as laag gegradeer, want dit is onwaarskynlik dat hulle die geraas sal hoor of daardeur geraak word. Seevoëls het meer sensitiewe ore vir lug as vir water, en hulle spandeer meer tyd op die oppervlak of in die lug as onder die water.
- Vissers: Die kenners het die uitwerking van die geraas op vissers as laag tot matig gegradeer, afhangende van die tipe en ligging van visvang. Sommige vissers kan

geïrriteerd of versteur word deur die studie, of sukkel om vis te vang. Sommige vissers sal dalk ook hul visvangplanne of -roetes moet verander om die boot of die geraas te vermy.


- Kusgemeenskappe: Die kenners het die uitwerking van die geraas op kusgemeenskappe as laag gegradeer. Kusgemeenskappe kan ook 'n spesiale verbintenis met die see hê as gevolg van hul kultuur en geskiedenis, maar dit is onwaarskynlik dat die geraas hul kultuur en erfenis sal beïnvloed.

VOORGESTELDE BESTUUR EN VERSAGTING.

Die kenners het bevind dat die studie nie veel skade aan die omgewing of die mense sal veroorsaak nie, solank Searcher sekere reëls volg om hulle te beskerm. Sommige van hierdie reëls is:

- Moenie die studie doen op plekke waar daar spesiale diere of gebiede is wat beskerm moet word nie.
- Gebruik spesiale gereedskap om na diere in die water te luister en stop die studie as hulle te naby aan die boot is of as hulle seergekry of deur die klankgolwe geraak word.
- Gebruik die laagste moontlike klankvlak vir die studie en maak seker die klankgolwe gaan meestal af en nie sywaarts nie.
- Gebruik spesiale boeie wat nie skilpaaie sal seermaak nie en vermy die gebruik van streamers wat vloeistof binne het wat kan lek.
- Moenie die studie doen in die maande wanneer die vissers die meeste vis vang nie, soos Junie en Julie.
- Vertel die vissers en ander mense wat die see gebruik wanneer en waar hulle die studie doen en bly in kontak met hulle tydens die studie.
- Sorg dat iemand op die boot wat is met die vissers kan praat en hulle kan help as hulle enige probleme of klagtes het as gevolg van die studie.
- Werk saam met die gemeenskappe en die wetenskaplikes om meer te wete te kom oor hoe die visse en ander diere op die studie reageer en hoe om dit in die toekoms beter te doen.
- Werk saam met die gemeenskappe om maniere te vind om 'n positiewe bydrae tot hulle te maak.
- Die kenners het ook bevind dat die studie onbeplande risiko's of ongelukke kan inhou, soos as die boot olie mors of toerusting in die water verloor. Hierdie risiko's of ongelukke is baie laag, want die boot en die toerusting word goed onderhou en bestuur deur opgeleide en ervare personeel. Die boot en die toerusting het ook veiligheidskenmerke en noodplanne om die risiko's of ongelukke te voorkom of te verminder.

Die kenners beveel aan dat Searcher moet toegelaat word om die studie te doen as hulle hierdie reëls volg en die mense en omgewing respekteer.



APPLICATION PROCESS FOR THE PROPOSED SEARCHER SEISMIC RECONNAISSANCE BASIC ASSESSMENT

NON-TECHNICAL SUMMARY:

I-Searcher Geodata UK (Ltd) (i-Searcher) ufuna ukwenza uhlobo olukhethekileyo lwesifundo elwandle, olubizwa ngokuba yi-seismic survey. Oku kuthetha ukuba basebenzisa inqanawa enezixhobo ezikhethekileyo ukuthumela amaza esandi emanzini nakumhlaba ophantsi kwamanzi. Amaza esandi abuyela umva aze abaxelele ukuba kusenokubakho ioli okanye irhasi phantsi komhlaba. I-Searcher ifake isicelo semvume yokwenza olu phononongo kwindawo enkulu kulwandle oluse Ntshona yoMzantsi Afrika.

U-Searcher uqashe u-EIMS njengeNgcaphephe yoHlobo lwezeNdalo nokusiNgqongileyo (EAP) ezimeleyo ukuze ijonge ukuba ingaba esisifundo/le-projekthi icetywayo ingonakalisa indalo esingqongileyo okanye ichaphazele abantu abahlala kufutshane nabasebenza ngolwandle. I-EIMS ibhale ingxelo ebizwa ngokuba yi-Environmental Basic Assessment Report (BAR)/ Ingxelo yoHlobo lwezeNdalo nokusiNgqongileyo eluhlobo lwe-BAR, apho ichaze into abayenzileyo kunye nento abayifumeneyo. Esi sishwankathelo, sisishwankathelo esifutshane nesilula se-BAR, esibhalelwe abantu abangezongcali kwisayensi okanye kwezobunjinieli. Isishwankathelo senzelwe ukunceda abantu baqonde ukuba uphononongo lungantoni, kutheni lubalulekile, kwaye zeziphi iingenelo ezinokubakho kunye neengozi zokulwenza.

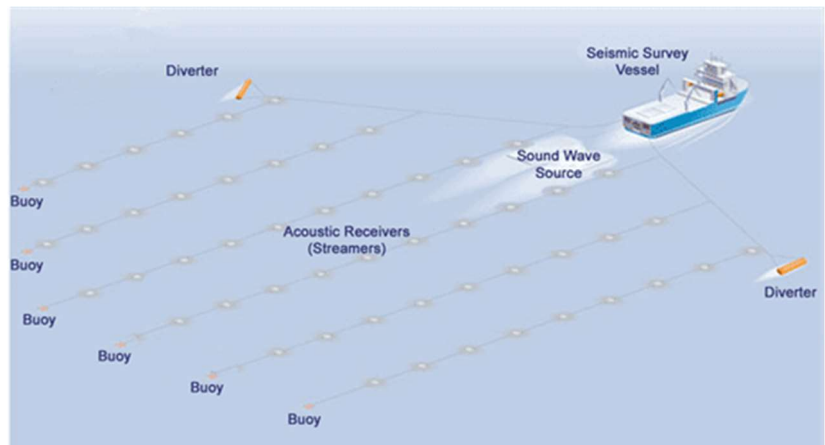
Isishwankathelo sineezihloko ezintathu eziphambili:

- Isihloko sokuqala sichaza ukuba yintoni na uphononongo, indawo oluya kuqhutyelwa kuyo, ixesha lokwenzeka kwayo, nokuba ngubani obandakanyekayo.
- Isihloko sesibini sicacisa indlela uphononongo olunokuchaphazela ngayo okusingqongileyo, ngakumbi izilwanyana ezihlala emanzini, njengentlanzi, iminenga (whales), amahlengesi (dolphins), amafudo neentaka zolwandle. Ikwachaza nokuba uphononongo lunokubachaphazela njani abantu ababambisa iintlanzi/abalobayo ukuze baphile okanye batye, kunye nabantu abanoxibelelwano olukhethekileyo nolwandle ngenxa yenkcubeko nembali yabo.
- Isihloko sesithathu sidwelisa imithetho ekufuneka i-Searcher iyilandele ukukhusela okusingqongileyo kunye nabantu, kwaye baya kwenza ntoni xa kukho into engahambi kakuhle, njengaxa isikhephe sichithe ioli okanye siphulukane nezixhobo ezithile emanzini.

Esi sishwankathelo asiloxwebhu olupheleleyo okanye lokugqibela. Lusekelwe kwingxelo yoHlobo lwezeNdalo nokusiNgqongileyo. Ukuba ufuna iinkcukacha ezithe vetshe ngawo nawuphi na umba othile kwesi sishwankathelo, nceda ubhekisele kwi-BAR.

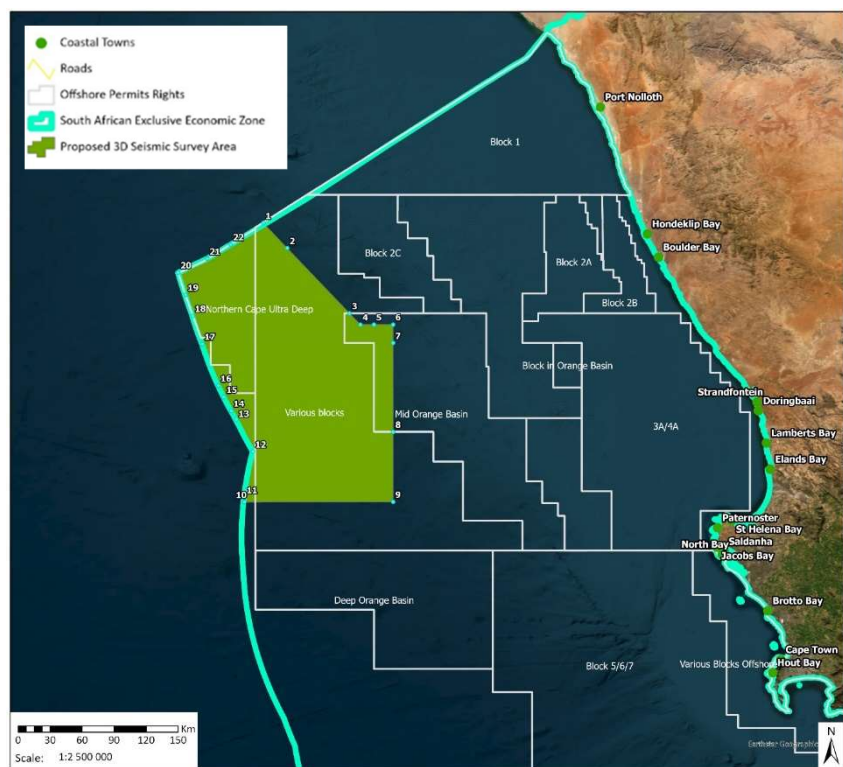
YINTONI , PHI , NINI KWAYE NGUBANI?

Olu phando lubizwa ngokuba yi-Seismic Survey. Yindlela yokukhangela ubukho be-oli okanye irhasi phantsi komhlaba elwandle. Ukwenza oluphando, i-Searcher iya kusebenzisa isikhophe esinezixhobo ezikhethekileyo eziyakuthumela amaza esandi emanzini nasemhlabeni phantsi kwamanzi. Amaza esandi aya kuhamba emanzini nasemhlabeni aze abuyele kwesi



sikhophe sophando. Izixhobo ezisesikhopheni ziya kurekhoda amaza esandi zize zenze umfanekiso wangaphantsi komhlaba. Umfanekiso uya kubonisa ukuba kukho naziphi na iindawo apho ioli okanye irhasi inokuhlala okanye ifumaneka khona. Umfanekiso awuyi kubonisa ngokuthe ngqo ubungakanani be-oli okanye irhasi ekhoyo, okanye ubu lula okanye ubunzima bokufilkelela kuyo nokuyikhupha. Ukuze kufunyaniswe oko, izifundo ezongezelelweyo kunye novavanyo kuya kufuneka ukuba lwenziwe kamva.

Uphononongo luya kuqhutyelwa kwindawo eselwandle, malunga neekhilomitha ezingama-220 ukusuka kunxweme loMzantsi Afrika kweyona ndawo ikufutshane. Indawo yophononongo ecetyiweyo ibekwe kwiOrange Basin kwaye ithatha malunga nama-30,000 eekhilomitha zesikwere. Amanzi akulo mmandla anzulu kakhulu, phakathi kwe-1,000 kunye ne-3,500 yeemitha. Lo mmandla uyinxalenye yoMmandla woQoqosho oKhethekileyo waseMzantsi Afrika (i-EEZ), nto leyo ethetha ukuba uMzantsi Afrika unelungelo lokuphonononga



nokusebenzisa ubutyebi bendalo emanzini naphantsi komhlaba.

Uphononongo luya kwenzeka ngokukhawuleza ukuba iimvume ezifanelekileyo zinikezelwe- mhlawumbi kwikota yokuqala ka-2025. Ixesha lophononongo liya kuxhomekeka kwimozulu kunye nokufumaneka kwesikhophe kunye nezixhobo. Uphononongo luya kuqhutywa isithuba esi malunga neenyanga ezine, kodwa akuyi kuphononongwa yonke imihla.

Uphononongo luya kwenziwa yi-Searcher, inkampani egxile ekwenzeni uphando lwe-Seismic kwiilabathi jikelele. I-Searcher inamava kunye nobuchule bokwenza uphando lwe-Seismic, kwaye balandela ezona ndlela kunye nemigangatho ephakamileyo yolushishino. I-Searcher iya kudinga imvume kurhulumente

woMzantsi Afrika ukuze enze olu phando (eyaziwa ngokuba yiReconnaissance Permit), kwaye kufuneka banikeze ngengxelo kurhulumente ngenkqubela kunye neziphumo zabo.

I-Searcher iqeshe i-EIMS njenge-EAP ukuze ihlole ifuthe elinokuthi libekho kwindalo nokusingqongileyo ngenxa yale-projekthi icetywayo. I-EIMS ibhale ingxelo yoHlobo lwezeNdalo nokusiNgqongileyo eluhlobo lwe-BAR. Inkqubo yoHlobo lwezeNdalo nlokusiNgqongileyo yinkqubo yokufumanisa kunye nokunika ingxelo malunga nokuba i-projekthi inokuchaphazela njani indalo nokusingqongileyo kunye nabantu abasebenza ngolwandle kune nabahlala kufuphi nolwandle. Iingcaphephe eziphuma kumacandelo ahlukeneyo, afana nebhayoloji yasolwandle (marine biology), ukuloba (fisheries), inzululwazi yezentlalo (social sciences), kunye namafa emveli (cultural heritage). Iingcali zizimele, kwaye zilandela imigaqo kunye nezikhokelo zomthetho waseMzantsi Afrika.

INGABA UPHANDO OKANYE UPHONONONGO LUNOKUYICHAPHAZELA NJANI INDALO ESINGQONGILEYO?

Isihloko sesibini sesishwankathelo sidwelisa iindlela uphononongo olunokuthi luchaphazele ngayo okusingqongileyo, ngakumbi izilwanyana ezihlala emanzini, njengentlanzi, iminenga, amahlengesi, amafudo, neentaka zolwandle. Ikwachaza nokuba uphononongo lunokubachaphazela njani abantu ababambisa iintlanzi ukuze baphile okanye batye, kunye nabantu abanoxibelelwano olukhethekileyo nolwandle ngenxa yenkcubeko nembali yabo.

Eyona ndlela ingundoqo oluphononongo lunokuthi luchaphazele okusingqongileyo kunye nabantu kukwenza ingxolo. Isandi samaza esithunyelwa sisikhephe emanzini nasemhlabeni singxola kakhulu, yaye sinokuviwa zizilwanyana ezisemanzini. Ingxolo isenokuzothusa okanye izicaphukise izilwanyana, okanye yenze kube nzima ukuba zivane okanye zifumane ukutya kwazo. Ingxolo isenokuphazamisana nezandi zendalo ezisetyenziswa zizilwanyana xa zinxibelelana, zihamba, okanye zisiva oko kusingqongileyo.

Iingcali zajonge indlela ingxolo enokuthi ichaphazele ngayo iintlobo ezahlukeneyo zezilwanyana kunye nabantu, zafumanisa ukuba iziphumo ziya kwahluka ngokuxhomekeke kwizinto ezininzi, ezifana nomgama osuka kwisikhephe, ubunzulu bamanzi, ubuntununtu beendlebe, ukuziphatha kunye nemikhwa yezilwanyana, kunye nengxolo yokusingqongileyo. Iingcali zasebenzisa eyona datha ikhoyo kunye neendlela zokuqikelela iziphumo, kodwa zavuma kwakhona ukuba kukho ukungaqiniseki kunye nezikhewu kulwazi, kwaye uphando olongezelelweyo luyafuneka ukuqonda imiphumo engcono.

Iingcali zafumanisa ukuba ingxolo inokuba nezi ziphumo zilandelayo kwizilwanyana nakubantu:

- Ingxolo inokubangela ingozi kwizilwanyana, njengomonakalo weendlebe, amalungu, okanye izicubu zomzimba.
- Ingxolo inokubangela utshintsho kwindlela yokuziphatha kwezilwanyana, njengokusuka ziye kude nengxolo, ukutshintsha kwesantya okanye indlela eya ngakulo, ukuyeka imisebenzi yazo yesiqhelo, okanye ukuba siphaphame ngakumbi okanye uxinzelelo. Inqanaba lengxolo liphezulu ngokwaneleyo ukubangela ukucaphuka okanye ukuphazamiseka, kwaye izilwanyana zinokuzama ukuyibaleka ingxolo okanye ukumelana nayo. Iingcali zifumene ubungqina obuthile bokutshintsha kwindlela yokuziphatha okubangelwa luphando lweSeismic kwezinye iindawo ehlabathini, kodwa zafumanisa ukuba olo tshintsho lwaludla ngokuba lolwexeshana kwaye kwaye alubikho lukhulu, kwaye izilwanyana zabuyela kwindlela yazo yesiqhelo emva kokuba ingxolo imile okanye ihambe. Uphononongo lufutshane kwaye lugubungela indawo encinci kwaye ngoko ke akunakwenzeka ukuba libe nefuthe elikhulu kwizilwanyane.
- Iingcali zikwajonge ukuba ingxolo inokuchaphazela njani na amaqela ahlukeneyo ezilwanyana, kwaye zafumanisa ukuba iziphumo ziya kwahluka ngokuxhomekeke kwiimpawu kunye neemeko zazo. Iingcali zisebenzise isikali esisezantsi, esiphakathi, esiphakamileyo, kunye nesiphezulu kakhulu ukukala iziphumo, kwaye bathathela ingqalelo la maqela alandelayo:
 - Iintlanzi: Iingcali zilinganise iziphumo zengxolo kwiintlanzi zafumanisa ukuba ziphantsi ukuya phakathi, kuxhomekeka kwiintlobo kunye nendawo. Ezinye iintlanzi zinokusuka

kude nengxolo okanye zitshintshe indlela eziziphatha ngayo, kodwa azifane zibe nokwenzakala emzimbeni okanye utshintsho kwezokuhlala.

- Izilwanyana ezincancisayo zaselwandle: lingcali zilinganise iziphumo zengxolo kwizilwanyana zaselwandle, njengeminenga kunye namahlengesi, zafumanisa ukuba eziziphumo ziya kuba phakathi ukuya kwezi phantsi, ngokuxhomekeke kuhlobo kunye nendawo. Ezinye izilwanyana zaselwandle zinokusuka kude nengxolo okanye zitshintshe indlela eziziphatha ngayo, kwaye zisenokwenzakala ngokwasemzimbeni okanye utshintsho kwezokuhlala (population) ukuba zikufuphi kakhulu nesikhephe okanye zinovelwano kakhulu kwingxolo. Ezinye izilwanyana ezincancisayo zinokuchaphazeleka ngakumbi yingxolo, kuba zisebenzisa isandi kakhulu ukunxibelelana, ukuhambahamba, okanye ukufumana ukutya kwazo.
- Iimfudo: lingcali zilinganise iziphumo zengxolo kwii-mfudo njengeziphantsi ukuya kweziphakathi, kuxhomekeke kwiintlobo kunye nendawo. Olunye ufudo lunokusuka luye kude nengxolo okanye lutshintsho indlela eliziphatha ngayo, kodwa akufane kwenzeke ukuba lube nokwenzakala emzimbeni okanye utshintsho kweze ntlalo. Amanye amafudo asenokuchatshazelwa kancinci yingxolo, kuba aneendlebe ezingekho buthathaka kwaye achitha ixesha elincinci emanzini.
- Iintaka zaselwandle: lingcali zilinganisele iziphumo zengxolo kwiintaka zaselwandle njengephantsi, kuba azifane ziyiva ingxolo okanye zichatshazelwe yiyo. Iintaka zaselwandle zineendlebe ezingevayo emanzini, kwaye zichitha ixesha elininzi phezu komhlaba okanye emoyeni kunaphantsi kwamanzi.
- Abalobi: lingcali zilinganise iziphumo zengxolo kubalobi njengeziphantsi ukuya kweziphakathi, ngokuxhomekeke kuhlobo nendawo yokuloba. Abanye abalobi banokucatshukiswa okanye baphazanyiswe luphononongo, okanye babe nobunzima bokubambisa iintlanzi. Abanye abalobi kusenokufuneka batshintsho izicwangciso okanye iindlela zabo zokuloba ukuze baphephe isikhephe okanye ingxolo.
- Uluntu oluselunxwemeni: lingcali zilinganise iziphumo zengxolo kubantu abahlala ngaselunxwemeni njengeziphantsi. Uluntu oluselunxwemeni lunokuba nonxibelelwano olukhethekileyo nolwandle ngenxa yenkcubeko nembali, kodwa ingxolo ayinakuchaphazela inkcubeko kunye nelifa lemveli.

ULAWULO OLUCETYISIWEYO KUNYE NOKUNCITSHISWA.

lingcali zafumanisa ukuba uphononongo alunakwenza monakalo omkhulu kwindalo okanye ebantwini, ukuba nje i-Searcher ilandela imithetho ethile ukubakhusela. Eminye yale migaqo yile:

- Sukwenza uphononongo kwiindawo apho kukho izilwanyana ezikhethekileyo okanye iindawo ezifuna ukukhuselwa.
- Sebenzisa izixhobo ezikhethekileyo zokumamela izilwanyana ezisemanzini kwaye umise isifundo ukuba zisondele kakhulu kwisikhephe okanye ukuba kukhangeleka ngathi zichatshazelwa ngamaza omsindo.
- Sebenzisa elona nqanaba lesandi lisezantsi linokwenzeka kuphononongo kwaye uqinisekise ukuba amaza esandi ayehla kakhulu, angayi emacaleni.
- Sebenzisa ii-buoy ezikhethekileyo ezingayi kulimaza iimfudo kwaye bangasebenzisi imijelo enolwelo olungaphakathi olunokuvuza.
- Sukwenza uphononongo kwiinyanga apho abalobi beloba ezona ntlanzi zininzi, njengoJuni, noJulayi.
- Xelela abalobi nabanye abantu abasebenzisa ulwandle ukuba benza nini kwaye phi uphononongo kwaye uhlale unxibelelana nabo ngexesha lophando.
- Yiba nomntu osesikhepheni onokuthetha nabalobi kwaye abancede ukuba banazo naziphi na iingxaki okanye izikhalazo ngenxa lophononongo/hlolo.

- Sebenza noluntu kunye noosonzululwazi ukufunda ngakumbi malunga nendlela intlanzi kunye nezinye izilwanyana ezisabela ngayo kuphononongo kunye nendlela yokwenza ngcono kwixesha elizayo.
- Sebenza noluntu ukufumana iindlela zokwenza igalelo elakhayo kubo.
- Iingcali zikwafumanise ukuba uphononongo lunokuba nemingcipheko engacwangciswa okanye iingozi, njengokuba isikhephe sinokuchitha ioyile okanye siphulukane nezixhobo ezithile emanzini. Le mingcipheko okanye iingozi kunqabile kakhulu ukuba zenzeke, kuba isikhephe kunye nezixhobo zigcinwa kakuhle kwaye ziqhutywa ngabasebenzi abaqeqeshiweyo nabanamava. Isikhephe kunye nezixhobo nazo zineempawu zokhuseleko kunye nezicwangciso zikaxakeka zokuthintela okanye ukunciphisa iingozi okanye iingozi.

Iingcali zicinga ukuba iSearcher kufuneka ivunyelwe ukuba yenze uphononongo/uphando ukuba ilandela le mithetho kwaye ihlonipha okusingqongileyo kunye nabantu.