



## environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

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### **Chief Directorate: Integrated Environmental Authorisations**

#### **Request for pre-application meeting**

The information below is required to assist the Department to process your request for a pre-application meeting. All fields are compulsory. Please note that the proposed date and time will be confirmed prior to the meeting. This form must be submitted prior to lodging an application where a pre-application meeting is required. This form must be submitted prior to the lodging of an application and at least one (1) month prior to the requested meeting date. Note that the EAP is required to submit minutes of the meeting to the Department for approval as per the timeframes agreed to in the meeting. The Department reserves the right to refuse the pre application meeting based on the information provided in this request.

Any queries related to this form may be addressed to [eiaadmin@environment.gov.za](mailto:eiaadmin@environment.gov.za)

Please submit the completed signed form in one of the following ways:

(1) **Post:**

The Director: Integrated Environmental Authorisations  
Department of Environmental Affairs  
Private Bag X447  
Pretoria  
0001

(2) **Hand Deliver:**

**Department of Environmental Affairs**  
Environment House  
473 Steve Biko Road  
Arcadia  
Pretoria

(3) **E-mail:**

[EIAAdmin@environment.gov.za](mailto:EIAAdmin@environment.gov.za)

## APPLICANT AND EAP INFORMATION

Company Name	Openserve	
Applicant Name	Jacques Van Der Walt	
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Fax Number	N/A	Email: <a href="mailto:JacquesVDW@openserve.co.za">JacquesVDW@openserve.co.za</a>

EAP	ACER (Africa) Environmental Consultants	
Contact Person	Giles John Churchill	
Postal Address	P.O.Box 503, Mtunzini	
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## MEETING DETAILS

Purpose of the meeting request	Pre-Application Meeting		
Applicant Category	Application by Parastatal		
	Organ of State		
	Private Individual/Parties		
Application type	Application for EA	Application for integrated EA	
Preferred meeting date and time	Provide three suggested dates and times (note that the Department requires at least a month due to logistical arrangements)		
1	23 April 2019	11 am	
2	24 April 2019	11 am	
3	25 April 2019	11 am	
Duration of the meeting	1 – 1.5 hours		
Estimated number of people attending meeting	5 people (Please note some people will be flying in from England for this meeting)		

Please attach a proposed agenda as **Appendix 1**. If the Applicant or EAP intends to discuss several projects in one meeting, an agenda must be drafted for each proposed project and the project details for each project. Please note that a detailed agenda is required.

## PROJECT DETAIL

Project Description	<p>The section of the EQUIANO Cable system which forms part of this environmental impact assessment includes the section of cable from where it enters South Africa's EEZ (200 nautical miles from the sea shore) through South Africa's territorial waters (12 nautical miles from the sea shore) and onto land where it will tie into the existing SAT-2 Beach Man Hole. From the beach man hole the terrestrial cable alignment will follow existing cable sleeves buried when the SAT-2 system was installed to the existing Cable Landing Station (CLS) in Melkbosstrand. As such, the project description given below incorporates the materials comprising the EQUIANO Cable System and the methods to be used to install the cable system in the marine and terrestrial environments.</p> <p>The EQUIANO Cable System is comprised of the following project components from where it enters South Africa's EEZ until it reaches the existing CLS site in Melkbosstrand:</p> <ul style="list-style-type: none"><li><input type="checkbox"/> Marine Fibre Optic Cable (marine environment to the Beach Man Hole).</li><li><input type="checkbox"/> Terrestrial Fibre Optic Cable (Beach Man Hole to the CLS site in Melkbosstrand)</li></ul> <p><b>Marine Fibre Optic Cable</b></p> <p>The proposed cable route, approximately 11,500km long, will run down the West Coast of Africa in deep water (generally parallel to the coastline) and approach South African coastal waters from the north (i.e. from Namibian waters). Offshore, the cable is installed by a purpose-built cable-laying ship. Consistent with industry practice, the unarmoured cable will rest on the seabed in water depths greater than 1,500 m, where the risk of inadvertent damage from human activities is negligible.</p> <p>As the cable route changes direction to approach the coastline of Melkbosstrand, the cable will be buried beneath the sandy seabed of these shallower marine waters. This is typically achieved with the use of a specially designed plough which is submerged onto the seabed by the cable laying ship. The cable is then fed from the ship to the plough which effectively buries the cable to a depth of approximately 1 - 1.5 metres. This burial is intended to provide protection to the cable from the hazards posed by ships' anchors, fishing activities and the like.</p> <p>The EQUIANO Cable System will be installed using a purpose-built cable ship fully equipped with all the necessary equipment, tools and facilities to safely handle and install, join, test, and power the submerged plant including simultaneous lay and plough burial. The vessel will have sufficient power and dynamic positioning capability to carry out the installation in the expected weather and current conditions. During cable laying an automatic log of all critical operational parameters will be kept including navigational data, speed, tension, slack, cable counter and plough</p>
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data.

#### RC and PLGR

PLGR is required for all areas with planned burial down to 1000-1500 m water depth prior to cable installation.

This process will remove all debris on seabed surface (e.g. old fishing net, rope/wire, anchor chain) that may obstruct the ploughing process.

The PLGR vessel will operate as close to shore as possible and out to the extent of Plough burial depth. Divers will remove debris near shore or avoid same by doing minor adjustment to route in the near shore area.

Route clearance (RC) and Pre-Lay Grapnel Run (PLGR) operations will be conducted prior to the laying and burial operations along those sections of the route where burial is to be performed to ensure that, as far as practically possible, the burial operation will not be hindered or the cable and burial equipment damaged.

RC will be performed at specific locations, in areas with planned burial where old Out-of-Service cables are known to cross the cable route. The vessel will remove a suitable section of this old cable to ensure safe ploughing.

The cable ends of any cut out-of-service cables will be laid onto the seabed and weighted, in accordance with ICPC recommendations.

A Pre-Lay Grapnel Run (PLGR) will be performed prior to the main lay operation and will be carried out along the proposed cable route where burial is required. The PLGR operation will be to industry standards employing towed grapnels; the type of grapnel being determined by the nature of the seabed.

The objective of the PLGR operation is the clearance of any seabed debris, for example wires or hawsers, fishing equipment etc., which may have been deposited along the route. Any debris recovered during these operations would be discharged ashore on completion of the operations and disposed of in accordance with local regulations.

PLGR operations may normally be carried out by a vessel of opportunity specifically fitted out with winches and grapnels and capable of sustaining good slow speed positional control. The vessel will be equipped with navigation and positioning system to the same specification as the main lay vessel.

As an alternative and depending on operational logistics, alternative vessel availability, alternative vessel suitability, local rules - the main lay vessel may perform the RC and the PLGR operation.

### **Cable Landing at the Beach**

The cable ship will take up position in Dynamic Position (DP) mode between 12-and 15 m depth contour and at a safe distance from coastline. No anchoring will be used.

The cable landing operation will normally be done within a normal working day, starting at first daylight.

A floating hauling line will be run from shore to the cable ship to haul the cable ashore. The ship will simultaneously pay out the cable, allowing it to be pulled ashore. As the cable is paid out from the cable ship, floats will be attached (usually every 3 to 5 m).

Hauling operations will continue until sufficient cable is ashore to reach the BMH and all the remaining shore-end cable onboard the ship is paid overboard. The final pulling from the shore will straighten the cable out.

Once the cable end is secured ashore, it will be tested. As soon as the tests are completed, divers will be instructed to sink and position the cable on the seabed. The floats will be cut away progressively from the shore line towards the cable ship. Before cutting each float, the divers will manually, or with the assistance of a small boat, position the cable so it falls into its desired target location.

The divers will confirm the cable is lying flat on the seabed in an acceptable manner and position, and where possible may manually reposition the cable, if required.

After the cable is placed on the seabed, the cable end, currently on the beach, will be installed in the BMH.

### **Surface Laying Operations**

Surface laying implies that the cable will be laid on the surface of the seabed. The objective is to install the cable as close as possible to the planned route with the correct amount of cable slack to enable the cable to conform to the contours of the seabed.

The surface lay in water depth of more than 1000 m will normally be performed at a speed of 4 knot or around an average of 168 km per day, subject to weather and current.

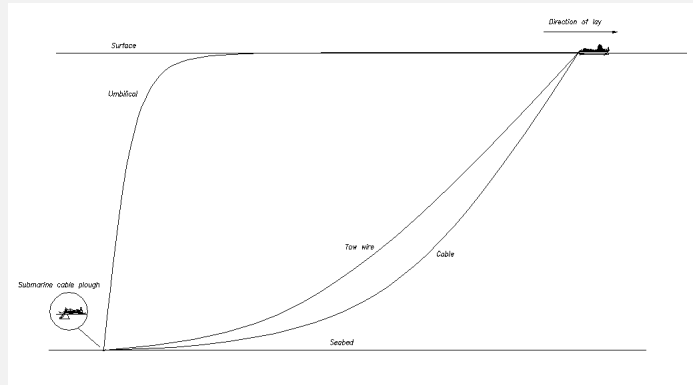
The surface lay and touchdown positioning is based mathematical modelling which is normally used as the industry standard.

### **Plough Burial Operations**

For the Equiano Cable System, the planned burial on the South African shelf will be from a depth of 1 m from the Low Water Mark (LWM) of the sea at Melkbosstrand to the 1500 m depth contour.

Ploughing will be performed from around 15 m contour out to 1500 m water depth contour where burial is possible, and seabed will allow safe operation of plough. Seabed type, up, down and side slopes will rule where ploughing can be safely performed.

The plough is towed in a nearly straight line behind the vessel, except at alter course positions. Normally acoustic positioning is used to position plough track.



The plough position behind the vessel is calculated based on:

- Acoustic positioning (HPR) – slant range accuracy is better than 1 % under normal conditions, assuming constant sound velocity in water column.

#### **Post Lay Inspection and Burial (PLIB)**

Post Lay Inspection (PLI) will be carried out to validate plough burial data where required up to the agreed maximum length of the route where plough burial is planned. Visual inspection will be subject to visibility of the water at the time of inspection. Otherwise “inspection” will be based on cable tracking sensors and forward-looking sonar.

Post Lay Burial (PLB) operations will be performed in planned plough buried areas at the following locations:

- at shore ends around the point of plough launch/recovery
- initial, intermediate and final splices
- crossings of in-service power and telecommunications cables and pipelines
- branching units
- unplanned plough skips
- areas where seabed slopes are not suited for ploughing and jetting burial is possible

#### **Beach Man Hole**

Once the fibre optic cable has made landfall and been buried through the beach section of the route the cable will be anchored at the existing SAT-2 Beach Man Hole (BMH).

#### **Terrestrial Cable**

From the BMH the land cable will be fed through existing sleeves (pipes) which run from the Beach Man Hole to the CLS site in Melkbosstrand.

#### **Project implementation period**

The project installation period for all components of the proposed development is not expected to exceed 6 months until completion.

Indicate if any screening has taken place on site	The EAP has been to site and is familiar with the location of the SAT-2 beach man hole and recently completed the EIA for the ACE Cable System which landed at Dynefontein approximately 2 km away from the proposed Sat-2 beach man hole.
Physical Address where the development will take place	Melkbosstrand Beach
Farm name(s)/ Erf No	Unknown at this stage. The Department of Public Works has jurisdiction over the beach and foreshore area at Melkbosstrand.
Local Municipality	City of Cape Town
District Municipality	City of Cape Town
Reason for applying with DEA as the competent authority (in terms of Section 24C of NEMA)	The project involves the landing of a submarine telecommunications cable originating in Europe and Terminating in South Africa. As the project infrastructure crosses international borders, the competent authority is the DEA.

**PROVIDE A DETAILED DESCRIPTION OF POTENTIALLY LISTED ACTIVITIES THAT IS OR MAY BE APPLICABLE TO THE PROJECT**

Listed activity as described in GN R. 983, GN R. 984 and GN R.985	Description of project activity that may trigger the listed activity
<p><u>Activity 15 of Listing Notice 1 (No. R. 327 of 2017)</u></p> <p><u>The development of structures in the coastal public property where the development footprint is bigger than 50 square metres, excluding -</u></p> <ul style="list-style-type: none"> <li>(i) the development of structures within existing ports or harbours that will not increase the development footprint of the port or harbour;</li> <li>(ii) the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;</li> <li>(iii) the development of temporary structures within the beach zone where such structures will be removed within 6 weeks of the commencement of development and where coral or indigenous vegetation will not be cleared; or</li> <li>(iv) activities listed in activity 14 in Listing Notice 2 of 2014, in which case that activity applies.</li> </ul>	<p>The project will entail the landing of a marine telecommunications cable at Melkbosstrand Beach. This will entail the digging of a trench down the beach (coastal public property) into the intertidal zone and the installation of the telecommunications cable.</p>
<p><u>Activity 17 of Listing Notice 1 (No. R. 327 of 2017)</u></p> <p>Development-</p> <ul style="list-style-type: none"> <li>a. <u>in the sea;</u></li> <li>b. <u>in an estuary;</u></li> <li>c. <u>within the littoral active zone;</u></li> <li>d. <u>in front of a development setback; or</u></li> <li>e. <u>if no development setback exists, within a distance of 100 metres inland of the</u></li> </ul>	<p>The project will entail the landing of a marine telecommunications cable at Melkbosstrand Beach. This will entail the digging of a trench down the beach into the intertidal zone and the installation of the telecommunications cable.</p>

<p><u>high- water mark of the sea or an estuary, whichever is the greater;</u> in respect of-</p> <ul style="list-style-type: none"> <li>i. fixed or floating jetties and slipways;</li> <li>ii. tidal pools;</li> <li>iii. embankments;</li> <li>iv. rock revetments or stabilising structures including stabilising walls; or</li> <li>v. <u>infrastructure with a development footprint of 50 square metres or more -</u></li> </ul> <p>but excluding-</p> <p>(aa) the development of infrastructure and structures within existing ports or harbours that will not increase the development footprint of the port or harbour;</p> <p>(bb) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;</p> <p>(cc) the development of temporary infrastructure or structures where such structures will be removed within 6 weeks of the commencement of development and where coral or indigenous vegetation will not be cleared; or</p> <p>(dd) where such development occurs within an urban area.</p>	
<p><u>Activity 18 of Listing Notice 1 (No. R. 327 of 2017)</u></p> <p><u>The planting of vegetation or placing of any material on dunes or exposed sand surfaces of more than 10 square metres, within the littoral active zone, for the purpose of preventing the free movement of sand, erosion or accretion, excluding where -</u></p> <ul style="list-style-type: none"> <li>i. <u>the planting of vegetation or placement of material relates to restoration and maintenance of indigenous coastal vegetation undertaken in accordance with a maintenance management plan;</u> or</li> <li>i. (ii) such planting of vegetation or placing of material will occur behind a development setback.</li> </ul>	<p>The project will entail the rehabilitation of the shoreline on Melkbosstrand beach where construction activities associated with the laying of the underground telecommunications cable will disturb vegetation on the shoreline. As such, this listed activity is triggered</p>
<p><u>Activity 19 of Listing Notice 1 (No. R. 327 of 2017)</u></p> <p><u>The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse;</u></p> <p>but excluding where such infilling, depositing, dredging, excavation, removal or moving-</p> <ul style="list-style-type: none"> <li>(a) will occur behind a development setback;</li> <li>(b) is for maintenance purposes undertaken in accordance with a maintenance</li> </ul>	<p>The project will entail the excavation and deposition of more than 10 m<sup>3</sup> of material within a 100 m of the high-water mark of the sea when trenching for, and backfilling of, the marine telecommunications cable takes place as such, this listed activity is triggered.</p>



<p>management plan;</p> <p>(c) falls within the ambit of activity 21 in this Notice, in which case that activity applies;</p> <p>(d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or</p> <p>(e) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.</p>	
<p><b>Activity Numbers</b></p>	<p><b>Relevant Listed Activities as set out in Listing Notice 2 (GN No. R. 325) and reasons why they are triggered</b></p>
<p><u>Activity 14 of Listing Notice 2 (No. R. 325 of 2017)</u></p> <p>The development and related operation of-</p> <p>(i) an island;</p> <p>(ii) <u>an anchored platform</u>; or</p> <p>(iii) <u>any other structure or infrastructure – on, below or along the sea bed</u>;</p> <p>excluding -</p> <p>(a) development of facilities, infrastructure or structures for aquaculture purposes; or</p> <p>(b) the development of temporary structures or infrastructure where such structures will be removed within 6 weeks of the commencement of development and where coral or indigenous vegetation will not be cleared.</p>	<p>The proposed development triggers this listed activity as the Equiano Cable System will be placed on the sea bed once it enters the marine environment. In shallow waters (less than 1,500 m in depth) the cable will be buried under the sea bed to provide extra protection to the cable system.</p>
<p><u>Activity 26 of Listing Notice 2 (No. R. 325 of 2017)</u></p> <p>Development--</p> <p>i. <u>in the sea</u>;</p> <p>ii. in an estuary;</p> <p>iii. <u>within the littoral active zone</u>;</p> <p>iv. in front of a development setback; or</p> <p>v. <u>if no development setback exists, within a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever is the greater</u>;</p> <p>in respect of –</p> <p>a) facilities associated with the arrival and departure of vessels and the handling of cargo;</p> <p>b) piers;</p> <p>c) <u>inter- and sub-tidal structures for entrapment of sand</u>;</p> <p>d) breakwater structures;</p>	<p>Although unlikely to be triggered this listed activity has been included as the proposed trench for the marine cable may result in the entrapment of sand within the inter- and sub-tidal zones. In addition, the trench created to bury the cable may be construed as an underwater channel.</p>

<p>e) coastal marinas; f) coastal harbours or ports; g) tunnels; or h) <u>underwater channels</u>;</p> <p>but excluding the development of structures within existing ports or harbours that will not increase the development footprint of the port or harbour.</p>	
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**ADDITIONAL INFORMATION IF ANY (ATTACH IF SEPARATE DOCUMENTS):**

**Please see the following documents attached:**

- DEA Screening Report**
- Screening Report Map**

**APPENDIX 1  
PROPOSED AGENDA**

<b>Item No</b>	<b>Agenda item</b>
1	Welcome and introductions
2	Project description
3	Discussion around listed activities
4	Proposed specialist studies
5	EIA programme
6	Proposed public participation process
7	Meeting closure

## APPENDIX 2 PROPOSED PROJECT LAYOUT

