YOU ARE HEREBY INVITED TO BID FOR THE FOLLOWING SPECIFIED SUPPLY REQUIREMENTS

<table>
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<tr>
<th>BID NUMBER:</th>
<th>NRF/SAEON/01/2015</th>
<th>CLOSING DATE:</th>
<th>18 September 2015</th>
<th>CLOSING TIME</th>
<th>11:00</th>
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**BID DESCRIPTION**

APPOINTMENT OF A SERVICE PROVIDER TO SUPPLY SPECIALISED MARINE ENGINEERING GOODS AND SERVICES FOR A FIVE YEAR PERIOD TO SUPPORT THE NATIONAL RESEARCH FOUNDATION’S RESEARCH ACTIVITIES THROUGH ITS SAEON AND SAIAB BUSINESS UNITS.

The selected bidder is required to sign with the National Research Foundation a contract or contract form – SBD7 which is not part of this procurement invitation.

Preferential Procurement System applicable (points for price : points for procurement preference): **90:10**.

<table>
<thead>
<tr>
<th>Proof of functionality presentation is required (see section 4.2)</th>
<th>Compulsory</th>
<th>Date and Time:</th>
<th>Date and time will be communicated to responsive bidders</th>
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<td>Location:</td>
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EITHER PHYSICALLY OR BY COURIER
SAIAB office: Reception Desk
SAIAB,
18 Somerset Street,
Grahamstown
6139
South Africa

Bidders are required to deliver Bids to the correct address timeously. If the Bid is delivered late to the NRF address, it is disqualified.

All Bids must be submitted on the official forms in this invitation (not to be re-typed) with additional information supplied on attached supporting schedules.

This Bid is subject to the Preferential Procurement Policy Framework Act and its 2011 Regulations, the General Conditions of Contract (NRF website) and Special Conditions of Contract as stipulated in this invitation.

ANY ENQUIRIES REGARDING THE BIDDING PROCEDURE DIRECTED TO:

Contact Person: Cindy Hlanze
Tel: 012 3497720
Email: cindy@saeon.ac.za

FOR TECHNICAL QUERIES CONTACT:

Contact Person: Sean Bailey or Anthony Bernard
Tel: 046 622 9899
Email: sean@saeon.ac.za or ant@saeon.ac.za

NAME OF BIDDER

REPRESENTED BY

POSTAL ADDRESS
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### TYPE OF COMPANY/FIRM [Tick applicable box]

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<th>One person business/sole proprietor</th>
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<td>Company</td>
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<td>(Pty) Limited</td>
<td>Other</td>
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### COMPANY CLASSIFICATION [Tick applicable box]

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<tr>
<td>Professional Service Provider</td>
<td>Other service providers e.g. transporter, etc.</td>
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Has an original and valid tax clearance certificate been submitted?  
[Tick Applicable Box]  
Yes ☐  No ☐

Has a Preference Claim form claiming your Preference Points (SBD6.1) been submitted (a B-BBEE status level verification certificate must support preference points claimed)  
[Tick Applicable Box]  
Yes ☐  No ☐

If Yes, who was the B-BBEE certificate issued by [Tick Applicable Box]  
- An accounting officer as contemplated in the Close Corporation Act (CCA) ☐  
- A verification agency accredited by the South African Accreditation System (SANAS) ☐  
- A registered auditor ☐
Are you the accredited representative in South Africa for the goods/services/works offered? If Yes, please enclose proof. Yes ☐ No ☐

Is the Bid Pack split into “Technical Competence”; Technical Initial Projects and “Financial” sections? Yes ☐ No ☐

Are certified copies of Certificate of Incorporation (as per entity type) enclosed? Yes ☐ No ☐

**MANDATORY RETURNABLE DOCUMENTS**

1. This signed proposal

2. A quote for the initial set of instruments specified in this document

3. Visual Evidence of previous work done
   - List of sites where similar engineering work was done and permission for the Evaluation Committee to inspect the quality of the engineering and build

4. Copies of competence certification and professional associations

5. Signed standard bidding documents attached to the proposal with original Tax clearance certificate and BBBEE certificate included

6. At least four examples of marine engineering instruments designed and where used with references from the users of the system. These should be demonstrated at the proof of functionality presentation
1. National Research Foundation and its Business Units

The National Research Foundation (“NRF”) is a juristic person established in terms of the National Research Foundation Act, Act 23 of 1998 and a Schedule 3A Public Entity in terms of the Public Finance Management Act. The NRF is the government’s national agency responsible for promoting and supporting research and human capital development through funding, the provision of National Research Facilities and science outreach platforms and programs to the broader community in all fields of science and technology, including natural science, engineering, social science and humanities.

2. Context for the Requirement for High Quality Engineering Services on an ad hoc basis

The NRF business units SAEON and SAIAB frequently require quality engineering services for the manufacture and maintenance of scientific measurement instruments utilized for scientific purposes. These instruments are utilized under water for extended periods of time hence high quality and excellent design are of critical importance.

Examples of such equipment are:

1. Shallow water Acoustic Doppler Current Profiler (ADCP) moorings,
2. Remote benthic survey systems (Jump Cameras),
3. Baited Remote Underwater Stereo-Video systems (stereo-BRUVs)
4. Diver Operated Stereo-Video systems (stereo-DOVs)
5. Shallow and deep Underwater Temperature Recorded (UTR) moorings

With these instruments being used for scientific purposes it follows that a certain degree of precision is required in their setup and deployment, *inter alia*, housing depth ratings, camera specifications, camera mounting precision, inner net diameters, flow meter positioning.

High quality materials and construction is paramount for all equipment as these instruments are deployed in harsh environments -such as the ocean floor- for long periods of time and are therefore susceptible to corrosion and wear.

In-house capability to efficiently perform routine and unforeseen maintenance is essential to maintain equipment reliability.

THE REQUIRED ENGINEERING SERVICES ARE STRUCTURED ON:

1. IMMEDIATE ENGINEERING SERVICES (THE ITEMS INCLUDED IN THE INITIAL PURCHASE OF THE CONTRACT – SECTION 10), AND
2. FUTURE ENGINEERING SERVICES REQUIRED DURING THE DURATION OF THIS CONTRACT.

The future engineering services include both foreseen and unforeseen work. The nature of the unforeseen work cannot be determined up front. The nature of foreseen work is that these are planned as part of the NRF’s operational planning and only issued once the funding is provided through the National Treasury’s medium term expenditure framework system. All work is only issued to the selected bidder once funding has been confirmed for the projects. The specifications of the engineering requirements are not restricted to the items included in the initial purchase.

As such the total cost of the contract cannot be determined up front. This is classified as a variable framework contract by the national treasury. The financial selection of the selected bidder will be made on the basis of the financial bids received for the initial purchase.

3. Engineering and Maintenance Services required Requirement for Engineering Services on an ad hoc basis

The NRF’s is seeking to appoint an engineering manufacturer to engineer scientific instruments in accordance with SAIAB and SAEON Elwandle Node operational requirements as and when these are required. The service provider will be required to supply engineering services and advice for the design, engineering and manufacturing of the instruments and the commissioning testing. The service provider will be required to provide support services inclusive of routine maintenance, repairs, modification and enhancement services.

3.2. Engineering design, engineering and manufacture Services

The bidder is to provide the full extent of what services that they can provide, evidence of the skills and competence in accordance with international standards. Specific reference must be made to the bidders ability to design, troubleshoot, manufacture and test underwater scientific research equipment, for example, self-contained underwater camera systems, self-contained underwater lights, marine-grade stainless steel moorings and frames, davit arm and crane systems. In most cases, all equipment needs to be repeatedly to the same specifications to allow for trouble free in-water instrument servicing and replacement. Examples of these scientific equipment should be demonstrated at the proof of functionality demonstration.

3.3. After-sales Maintenance Services, Spares, Support

a) The service provider will be required to conduct complete maintenance services of all equipment on an annual basis for the five year duration of the contract. This service will at minimum include:
   a. Repair and/or replace and/or refurbish all components of the various research equipment that will suffer from corrosion, wear, damage and loss under typical and repeated operational
conditions.

b) As and when necessary the service provider prioritizes and conducts unforeseen services and maintenance of equipment.

c) The service provider provides assistance to the NRF with trouble shooting regarding the design and use of the provided equipment.

d) The service provider provides assistance to the NRF with product development to optimize research capabilities.

e) Where the service provider is not the manufacturer of the final equipment, the service provider must provide contract between SAEON and the product manufacturer for issues relating to product malfunctioning, services and product warranties.

4. Selection and Awarding of Contract

As this Bid is for a specialised marine engineering contract, the selection criteria will concentrate on the bidders engineering competence and quality, with the bidders evaluated technically on their competence and skills present and as well on their response to the initial set of instruments required as set out in this document. Furthermore, the bidders ability to provide the required aftersales support within a timely fashion will weigh heavily in the selection process.

4.2. Stage 1 – Technical Qualifications

Bidders are evaluated against their competence, evidence of work and aftersales services executed for other customers and their response on the initial set of instruments specified.

The evaluation stage includes a site visit to evaluate the bidder’s offered proof of functionality. Functionality incorporates an assessment of the bidders training, skill, experience and capacity to engineer and source the required marine research equipment at the specified level of quality and within required timeframes.

Evaluation is made in accordance to evaluation criteria and the scoring set published in this document (Section 12, Part A - C).

4.3. Stage 2 – Awarding of the Contract

Bidders are compared on a fair and equal basis taking into account all aspects of the proposals.

The award criteria are:

Price – As the contract is for a five year period, the initial set of instruments specified in this document serve as the fair and equal price comparison model between bidders' financial offers with the lowest priced Bid receiving the highest price score as set out in the 2011 Preference Regulations. The price model includes the hourly labour rates for work.
Preference - preference points as claimed in the preference claim form (with supporting certified BBBEE certificate) are added to the price ranking scores and the highest combined score is nominated for the contract award.

Administration – Where bidders are recommended for the contract, bidders are validated as having supplied the relevant administrative documentation, especially the Tax Certificate, prior to the signing of the contract (SBD7) by both parties.

Contract: Bidders and the NRF sign a contract setting out all of the terms set out in this document or SBD7 Form

4.4. Installation / Delivery / Logistics Specification

a) For the initial set of instruments specified in this document the complete order must be delivered to SAIAB (address above) in Grahamstown within 4 months of the contract being signed, and the delivery cost must be included in the quote.
b) All future purchase orders raised will be for delivery to the address above unless specified otherwise in writing on the relevant purchase order issued.

4.5. Quality Requirements including applicable standards

a) All supplied equipment must meet the requirements provided in the specifications issued for each piece of research equipment.
b) All supplied equipment must serve their research purpose in the field. This is tested as part of the commissioning procedure.
c) All underwater housings require pressure test certificates to validate their depth rating.
d) Where specific material quality grades have been requested, certificates stating these must be issued as proof.
e) The service provider provides a minimum of one year warranty period for the custom made items and specifies what is warranted.
f) Where manufacturer's warranties and guarantees flow through to the constructed equipment, these must be stipulated and indication must be given as to how these will be applied.
g) The service provider must produce equipment that adheres to SANS and/or international standards.
h) Future potential purchase orders will state with their attached specifications the relevant standards applicable to that piece of equipment.

4.6. Local Location

a) The service provider is required to be based in Port Elizabeth Eastern Cape of South Africa to facilitate product development and equipment maintenance and purchases during the entire period
of the contract.

b) If no suitable service providers are identified in the Eastern Cape then service providers outside the Eastern Cape, but within South Africa, will be considered. Such service providers need to provide their methodology that they will follow to support the NRF’s operations in the Eastern Cape and indicate any associated costs with such support.

4.7. **Local Content Requirements for Designated and Non-Designated Sectors**

a) The service provider is required to comply with the Local Content requirements as published by the Department of Trade and Industry and on the National Treasury Website if applicable to the research equipment being constructed.

4.8. **Evidence of Supply Capacity and Capability (Technical Merit)**

As the first part of the technical evaluation is focused on bidders technical competence and capability, Bidders are required to provide a profile of themselves for evaluation of their capacity to supply the required equipment including resources including details of agency or distribution agreements that they hold as well as details of equipment that they manufacture or support.

Bidders are required to provide three (3) written references from previous clients in which the clients declare the following:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Below Expectations</th>
<th>Meets Expectations</th>
<th>Above Expectations</th>
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<tbody>
<tr>
<td>What equipment was built and what standard achieved against the set requirements. For each equipment a separate statement is required</td>
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<td>Quality of construction and manufacture as evidence through use of the equipment</td>
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<td>Design input – quality and value added</td>
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<td>Turn around/completion times</td>
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<td>Quality and efficiency of aftersales services</td>
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5. **Contract Period**

The contract is for five years and will cover engineering work as and when required by the NRF or any one of its internal business units.

Contract is with immediate effect upon the signing of the Contract form (SBD7) by the recommended bidder and the NRF and filed with both parties.

6. **Contract Management**

This contract is a variable framework contract signed between the selected supply provider and the NRF. A framework contract is employed to set out clearly that the bid and the resultant contract act as a master agreement structure, where the finer details relating to each procurement are described/set out in the issued purchase order.

The contract is framework as it includes all potential work required by the NRF as set out in the framework procedure in this document. This is a VARIABLE framework contract hence the actual amount (the end value of the contract) will only be determined when the contract completes in five years’ time.

The framework clause requires that for each potential work required, the relevant internal business unit of the NRF will issue a detailed specification which will state the percentage completeness of that design specification. Each potential work request follows the process of a detailed quotation of the supply required; evaluation of the supply quotation received; where necessary, request further detail; where necessary, design issues clarification or proposed solution; negotiate upon value of supply quoted and the issue of an official Purchase Order for the agreed supply prior to the commencement of such supply.

As this is a framework contract, the nature and quantity of supplies are not determinable at the commencement of this contract unless specified and variable delivered quantity where the exact supplies are specified at the commencement of this contract or relate to research equipment built under this contract.
7. Supply Performance Validation Prior to Invoicing

Each purchase order delivery will be inspected and validated against the agreed specifications and quality levels. Both the contractor and the NRF complete the certificate of delivery/installation/progress milestone/commissioning which is forward with the later issue of the invoice.

The service provider must adhere to the Quality Requirements specified with each instrument purchase order (due to the variable nature of the different instruments) including applicable standards stipulated in section 4.5 of this document.

8. Payment Intervals

The NRF undertakes to pay invoices supported by the signed performance validation documentation in full within thirty (30) days from the date the invoice is received.

No invoices for outstanding deliverables or for any unproductive or duplicated time spent by the service provider will be validated for payment. The NRF does not accept predating of invoices.

9. Initial Equipment Required Under The Proposed Contract

9.1. Stereo-BRUVs

Stereo-BRUVs are remotely deployed onto the sea floor and are linked to the surface with a rope and buoy mooring system. They are used to record the composition, abundance and size of fish living on the benthic habitats. The systems consist of 2 video camcorders in housings that are mounted 75 cm apart within a protective frame. The frame consists of bent and welded 12mm stainless steel poles (See supplementary PDF: “stereo-BRUV frame specifications”), with a central baseplate that holds the mounted cameras and light. The baseplate is the most integral component as this needs to be strong enough to resist bending or twisting. Any movement would result in changes in the position of the cameras, leading to errors in size measurements. On the baseplate, the housings are mounted and inwardly converged at an angle of 7 degrees to provide an overlapping field of view from the two cameras. This overlapping field of view allows for the size of fish visible in the synchronised video footage to be measured using specialised software (EventMeasure: www.seagis.com.au). The EventMeasure software requires the mounted cameras to be calibrated in the position that they are mounted inside the housing and on the baseplate using a program called CAL (www.seagis.com.au). Once calibrated, the positions of the cameras relative to the housing lens, and the housing relative to the baseplate are not allowed to change otherwise the calibration parameters are no longer valid and the process must be repeated. Extending 1.5m perpendicularly from the centre of the baseplate is a bait arm that is used to attract fish into the cameras field of view. A blue underwater light, capable of illuminating up to 5m in front of the camera with a minimum spread of 100º from the light, is positioned in between the stereo-cameras to allow work in dark environments.
The heavy-duty stereo-BRUVs are for work of larger vessels or in more extreme conditions (e.g. high currents and greater depths) where the extra weight and greater depth ratings are required for effective sampling. These systems are always retrieved using a winch.

The lightweight stereo-BRUVs are for work in more benign conditions (e.g. bays and estuaries), in sensitive habitats (e.g coral reefs), and off small vessels where the systems can be retrieved by hand.

![Stereo-BRUVs](image)

**Figure 1:** Example of a heavy-duty stereo-BRUVs. The right picture shows the system without the leg-extensions, ballast weights and light, while all of these are included in the left picture.

### 9.2. Stereo-Jump Camera

Stereo-Jump Camera’s consist of a combination of: (1) a downward facing camera that takes photographs (photo-quadrats) of the sea floor and (2) a pair of forward facing stereo-cameras that records video footage of the habitat complexity. The downward facing camera is used calculate frequency occurrence of benthic organisms, while the stereo-cameras are used to quantify upright growth and habitat complexity. Both the downward facing and the stereo-camera are accompanied by white underwater lights for working in dark environments. The stereo-camera setup is similar to that described above for the stereo-BRUVs, except that the cameras are mounted 50cm apart. All housings are protected within a stainless steel structure with extendable legs to raise or lower the system from the seafloor.
Figure 2: Example of a Jump Camera with the downward facing camera and side mounted lights. The selected service provider will be required to adapt this design to incorporate a forward facing stereo-camera and light setup. Full details are provided below.

9.3. **Shallow water ADCP Moorings**

Shallow water ADCP’s are deployed on the seabed at a depth of up to 30m. The instrument has four angled beams and needs to be positioned with these beams facing upward to measure current vectors throughout the water column. The ADCP moorings comprise of a stainless steel base-frame onto which two concrete-filled PVC tubes are attached. Four stainless steel pillars rise up 500mm from the base-frame and support the ADCP mounting bracket. This bracket cradles the instrument off the seabed and with its “head” in the upright position. The ADCP mounting brackets are susceptible to severe galvanic corrosion because of the instruments electromagnetic field and therefore need to be manufactured from moulded polyethylene.
9.4. **UTR Moorings (Shallow & Deep)**

Underwater Temperature Recorder (UTR) Moorings are lines that are anchored to the seabed with a series of UTR’s attached at various depths and which are buoyed up by means of an uncompressible subsurface float. The deep UTR moorings are attached to the anchor strop with an acoustic release which, when given the command, erodes the attachment point and the float brings the UTR line to the surface.

The shallow UTR moorings require stainless steel spindles for securing and attaching the subsurface float to the line.

The deep UTR moorings require longer spindles for the same purpose.

10. **Specification**

10.1. **Heavy-duty Stereo-BRUVs**

We wish to purchase 5 complete heavy-duty stereo-BRUVs. To manufacture the 5 systems the exact specifications and quantities are provided in detail below. Additional spares are stated as required.

10.1.1. Heavy-duty Stereo-BRUVs framework (5 Sets)

a) Marine grade stainless steel frame built according to specifications provided in supplementary PDF: **SBRUV frame specifications**. Each complete frame must come with:

i. 1 x Top section
ii. 1 x Bottom section
iii. 4 x leg Extension pins
iv. 1 x Diode arm
v. 1 x Baseplate that attaches within the Top section for mounting cameras and light. The baseplate must be sufficiently strong not to bend or twist when under pressure.
vi. 3 x housing buckets for attaching the camera and light housings to the baseplate
vii. 3 x Protective covering to separate the housings from the buckets (only necessary if housings and frame are made from different material) (see 3.1.2.11.)
viii. 6 x Stainless steel hose clamps of correct size to clamp camera and light housings to the housing buckets (see 3.1.2.9.)
ix. 4 x PVC bait arms
x. 4 x PVC Bait containers
xi. R-clips to connect the Top section and Bottom section (# as required)
-xii. R-clips to connect the Diode arm to the Baseplate and the PVC bait arm to the diode arm (# as required)
xiii. Bolts to attach the Baseplate to the Top section (# as required)
xiv. 32 kg of additional ballast weight in 2kg (4) and 4kg (6) units that can be added and removed from stereo-BRUUV system as required

10.1.2. Camera equipment and accessories for Heavy-duty stereo-BRUVs (10 Sets)

a) 1 x Sony HRD-CX330 handycam
b) 2 x Sony NP FV100 battery
c) 1 x Sony BC TRV battery charger
d) 6 x 16 GB mini-SD card (class 10 or higher)
e) 1 x multi CARD READER USB 3.0 (backwards compatible with USB2)
f) 0.2 x THREE PORT USB 3.0 HUB (backwards compatible with USB2)

10.1.3. Waterproof and shock-resistant carry cases (1 Set)

a) 1 x Medium sized (minimum size = 430x300x175mm) waterproof and shock resistant case
b) 1 x large sized (minimum size = 560x450x200) waterproof and shock resistant case

10.1.4. Underwater housings for Sony HDR-CX330 (10 Units)

a) Constructed from either stainless steel (grade = 316 or higher) or aluminium (Marine grade 6061 T6 or 6082) and cylindrical in shape with one glass port on the front.
b) The glass port is the only opening to the housings and must be connected to the housings with sturdy and lockable stainless steel clips.
c) When the glass port is mounted to the housing body the design must not allow for a gap that can change size depending on the pressure and compression of the O-ring as this would change the relative position of the cameras and compromise the calibration that is typically done at 2m depth.
d) The housing must be rated to $\geq 500\text{m}$ depth.

e) Constructed to house Sony HDR-CX330 camcorder with extended battery pack (Sony NP FV100).
   Please note that these cameras will be provided by the contractor. In addition due to high turnover in the availability of camera models the exact model may change, however it will stay within the HDR-CX range.

f) The housing needs to be appropriately sized with respect to the size of the camera.
   i. To fit within the frame, the outer diameter height of the housing needs to be less than 20cm in diameter.
   ii. To fit within the frame, the outer length of the camera housing must be less than 35cm.

g) Camera needs to be mounted to the lens of the housing in a manner that:
   i. Eliminates ANY movement (i.e. rotation, twisting or vibration) of the camera while mounted, and
   ii. Allows the battery and SD cards to be removed and replaced while mounted,
   iii. The view from the camera lens must not be obstructed by the housing

h) The housing needs no external buttons or penetrations.
   i) The housing must be attached to the stereo-BRUV frame in a fashion that eliminates any movement but at the same time allows the user to easily remove the housing (e.g. stainless steel hose clamps)

j) The housing must come with a protective covering for the glass port for transport and storage.

k) If the housing is constructed from a material that will corrode or oxidise when attached to the stereo-BRUVs frame then the housing must come with a mechanism to reduce oxidisation and/or corrosion while still adhering to the design specifications above.

l) Each housing must be pressure tested to the required depth and come with a depth rating certificate.

10.1.5. Blue underwater lighting system for heavy-duty stereo-BRUVs (5 units)

a) The LED lighting system will be required to illuminate a minimum distance of 5m from the stereo-BRUVs with a beam angle between 100-120 degrees from the centre of the stereo-BRUVs.

b) The light system must consist of an LED panel consisting of 8 blue Cree® XLamp® XP-E LEDs to standardize with existing light systems.

c) The housing for the lights must be rated to $\geq 500\text{m}$.

d) The lights must make use of a rechargeable battery system, and batteries must fit within the housings.

e) The battery system needs to be rechargeable and power the lights at full power for a minimum of 4 hours (e.g. two stereo-BRUVs deployment).

f) If necessary additional batteries need to be provided so that each light can be redeployed 6 times during a day.

g) The batteries need to come with bulk charging hubs.

h) The lighting system must consist of one single light that can be centrally mounted on the baseplate of the stereo-BRUVs frame, rather than multiple smaller lights spread out over the frame.
10.1.6. Mooring system for heavy-duty stereo-BRUVs (5 Sets)

a) 1 x 10m section of 12mm Dynema GP12.
b) 1 x 40m sections of 5mm Dynema GP12.
c) 1 x 60m sections of 5mm Dynema GP12.
d) 1 x 100m sections of 5mm Dynema GP12.
e) 1 x 150m sections of 5mm Dynema GP12.
f) 1 x 300m sections of 5mm Dynema GP12.
g) 1 x 500m section of 5mm Dynema GP12.
h) 2 x Polyform Fender F6.
i) 1 x Polyform Fender F5.
j) 2 x Polyform Buoy A3.
k) 1 x 200-220L openhead LDPE (or suitably thick HDPE) drums with screw-lid.
l) 2 x NamPak Agri Crate (Product: A772)

10.1.7. Heavy-duty Stereo-BRUVs SPARES (1 Set)

a) 2 x Spare Heavy-duty Stereo-BRUVs framework.
b) 3 x Spare Heavy-duty Stereo-BRUVs Bottom sections.
c) 3 x Spare Heavy-duty Stereo-BRUVs diode arms.
d) 1 x Sony HRD-CX330 handycam.
e) 2 x Sony NP FV100 battery.
f) 1 x Sony BC TRV battery charger.
g) 6 x 16 GB mini-SD card (class 10 or higher).
h) 5 x Underwater housings for Sony HDR-CX330.
i) 6 x Blue underwater lighting system for heavy-duty stereo-BRUVs.

10.2. Lightweight Stereo-BRUVs

We wish to purchase 1 lightweight stereo-BRUVs built according the above designs but with lightweight material to enable hand retrieval of systems from small boats. One complete system (consisting of stereo-BRUVs frame, underwater light and underwater housing) must weigh less than or equal to 20kg and come with the option to add additional ballast if required.

The service provider is expected to consult with the contractor and submit designs for review and approval. If the designs do not meet the criteria for stereo-video data collection (e.g. the position of the cameras is not fixed once mounted in the housings and attached to the stereo-BRUVs frame) or the systems are not lightweight the service provider will be deemed unsuitable for the contract.

Specific requirements include:
10.2.1. Lightweight stereo-BRUVs frame (1 unit)

a) The lightweight stereo-BRUVs frame must be based on the design principles used for the heavy-duty stereo-BRUVs frame with the following difference permitted:

   i. The stereo-BRUVs frame can be made from a lighter weight material and be more minimalist in design.

   ii. Importantly any design modifications must not allow the relative position of the cameras to move in any way once attached to the baseplate and calibrated.

   iii. The lightweight stereo-BRUVs frame must come with 10 kg (5 x 2kg weight) of additional ballast weight designed to be attached to the light-weight stereo-BRUVs frame

10.2.2. Camera equipment and accessories for lightweight stereo-BRUVs (1 Set)

a) 3 x Sony Action Camera FDR-X1000V 4K

b) 12 x Sony - NP-BX1/M8 Rechargeable Lithium-Ion Battery Pack (3.6V, 1240mAh)

c) 6 x Sony - BCTRX Battery Charger

d) 24 x 32 GB micro-SD card (class 10 or higher)

e) 3 x multi CARD READER USB 3.0 (backwards compatible with USB2)

f) 1 x Three PORT USB 3.0 HUB (backwards compatible with USB2)

g) 2 x Medium sized (minimum size = 430x300x175mm) waterproof and shock resistant case

10.2.3. Underwater housings for Sony Action Camera FDR-X1000V 4K (2 Units)

a) The housings must be based on the design principles used for the Sony HDR-CX330 housings (see 3.1.2.) with the following differences permitted:

   i. Material is not restricted to stainless steel or aluminium, but it must be suitably robust.

   ii. The housing must be rated to ≥ 120m depth.

   iii. Constructed to house Sony Action Camera FDR-X1000V 4K. Due to high turnover in the availability of camera models the exact model may change, however it will stay within the Sony Action Camera range.

10.2.4. Underwater lighting system for lightweight stereo-BRUVs (1 Units)

a) The lighting system must be based on the design principles used for the heavy-duty stereo-BRUVs (see 3.1.3) with the following exceptions permitted:

   i. The housing for the lights must be rated to ≥ 120m depth

10.2.5. Mooring system for lightweight stereo-BRUVs (1 Set)

a) 1 x 10m length of 8mm Dynema GP12.

b) 1 x 40m length of 5mm Dynema GP12.

c) 1 x 60m length of 5mm Dynema GP12.
d) 1 x 100m length of 5mm Dynema GP12.

e) 1 x 150m length of 5mm Dynema GP12.

f) 1 x 200m length of 5mm Dynema GP12.

g) 1 x Polyform Fender F5.

h) 1 x Polyform Buoy A3

i) 1 x NamPak Agri Crate (Product: A772)

10.3. **Stereo-Jump Camera**

We wish to purchase one **Stereo-Jump Camera** built according to the following specifications:

10.3.1. Stereo-Jump Camera framework (1 Units)

a) Marine grade stainless steel frame to be designed by the service provider following the design specifications listed below.

b) The frame must come with:
   
   i. Protective top section within which the lights and cameras are mounted.
   ii. Bottom section consisting of solid 20mm diameter stainless steel hoop with an internal area of 1/3m$^2$.
   iii. The top section must be able to slide over the bottom section to allow the height of the cameras from the seafloor to be adjusted.
   iv. Attachment points for lifting rope must be added to the main-body.
   v. Attachment point within the protective top section for the forward facing stereo-camera baseplate and light. The attachment point must include a mechanism that allows the angle of the baseplate to be adjusted to increase the amount of seafloor in the field of view.
   vi. Attachment point within the protective top section for the downward facing camera and light.
   vii. The stereo-Jump camera must be able to operate with the stereo-cameras and downward facing cameras at the same time or with each camera individually.

c) Stereo-camera baseplate:
   
   i. The baseplate must be designed following the same criteria as for the stereo-BRUVs baseplate to ensure that the position of the cameras does not move.
   ii. However, here the baseplate only needs to separate the cameras by 50cm.
   iii. Overall the system must weigh ≤ 30kg without any additional ballast weight added.
   iv. 20 kg of ballast weight (4 x 5kg) must be provided to increase the weight of the stereo-Jump Camera.

10.3.2. Camera equipment and accessories for stereo-Jump Camera (1 Set)

a) 4 x GoPro Hero4

b) 16 x GoPro - Rechargeable Battery for HERO4

c) 8 x GoPro - Dual Battery Charger with Battery for HERO4
d) 24 x 32 GB micro-SD card (class 10 or higher)
e) 3 x multi CARD READER USB 3.0 (backwards compatible with USB2)
f) 1 x Three PORT USB 3.0 HUB (backwards compatible with USB2)
g) 1 x Medium sized (minimum size = 430x300x175mm) waterproof and shock resistant case
h) 1 x large sized (minimum size = 560x450x200) waterproof and shock resistant case

10.3.3. Underwater housings for GoPro Hero4 (3 Units)

a) The GoPro Hero4 will be used for both the downward facing photographic camera and the forward facing stereo-video cameras.

b) The housings must be designed according to the specification criteria provided for the Underwater housings for Sony HDR-CX330 (see 3.1.2.) with the following exceptions:
   i. The housing must be constructed to house a GoPro Hero4 with extended battery pack.
   ii. NB. Because of the wide-angle of the GoPro camera extra caution must be taken to ensure the lens of the housing is not be visible in the video footage and photographs from the GoPro Hero4 when the camera is set at its widest angle of view.

c) The GoPro Hero4 will be used for both the downward facing photographic camera and the forward facing stereo-video cameras.

10.3.4. White underwater lighting system for downward facing camera (1 Units)

a) The lighting system will be required to illuminate a minimum area of 1m² from a height of c.50cm from the bottom.

b) The light system must use the Outdoor-White Cree® XLamp® XP-E LEDs to standardize with existing light systems.

c) The housing for the lights must be rated to a minimum depth of 500m.

d) The lights must make use of a rechargeable battery system, and batteries must fit within the housings.

e) The lights need to come with a mechanism for attaching within the stereo-Jump Camera frame.

f) The battery system needs to be rechargeable and power the lights at full power for a minimum of 4 hours.

g) If necessary additional batteries need to be provided so that each light can be redeployed 3 times during a day.

h) The batteries need to come with bulk charging hubs.
i) Multiple lights can be used to create a sufficient even spread of light from the lighting system.

10.3.5. White Underwater lighting system for forward facing stereo-cameras (1 Units)

a) The lighting system will be required to illuminate a minimum distance of 5m in front of the stereo-Jump Camera with a beam angle between 100-120 degrees from the light source.

b) The light system must consist of an LED panel consisting of 8 Outdoor-White Cree® XLamp® XP-E LEDs to standardize with existing light systems.

c) The housing for the lights must be rated to a minimum depth of 500m.
d) The lights must make use of a rechargeable battery system, and batteries must fit within the housings.
e) The lights need to come with a mechanism for attaching onto the stereo-camera baseplate (see 3.3.2.1.).
f) The battery system needs to be rechargeable and power the lights at full power for a minimum of 4 hours.
g) If necessary additional batteries need to be provided so that each light can be redeployed 3 times during a day.
h) The batteries need to come with bulk charging hubs.

10.3.6. Mooring system for lightweight stereo-BRUVs (1 Set)

a) 1 x 120m sections of 5mm Dynema GP12.
b) 1 x 240m sections of 5mm Dynema GP12.
c) 2 x Polyform Fender F5.
d) 2 x Polyform Buoy A3
e) 1 x NamPak Agri Crate (Product: A772)

10.4. Field maintenance kit

10.4.1. We wish to purchase 4 field maintenance kits:

a) 2 x Heavy duty stereo-BRUVs service kits.
b) 1 x Lightweight stereo-BRUVs service kits.
c) 1 x stereo-Jump Camera service kits.

10.4.1.1. Each kit must contain:

i. Two set of all the tools lubricants and greases required to assemble, maintain and service all the components of the equipment supplied while in the field.
ii. Spares for items that can perish, strip, break or be lost must be provided so as to be able to replace all these items on one stereo-BRUVs.

10.5. ADCP moorings

Specification drawings have been appended to this document.

10.5.1. We wish to purchase four shallow water ADCP moorings built to the following specifications:

a) All steel must be 316 grade stainless-steel
b) Main framework must be made from 50mm x 6mm angle iron. Frame width (1000mm) and length (1080mm)
c) Tower risers (470mm) must be made from 30mm solid round bar with rod ends machined M16 (at both ends, male and female)

d) All stiffeners on main framework and top framework (tower brace) must be 50mm x 6mm flat bar

e) PVC pipes for concrete filling must be 250mm diameter and at least 900mm in length.

f) Centre bars (through concrete anchors) must be 50mm x 6mm angle iron with mounting holes to match framework

g) ADCP mounting bracket must comprise of two matching halves of moulded polyethylene with mounting holes to match the top framework (tower brace).

10.6. **UTR float spindles**

We wish to purchase eight shallow water UTR spindles and eight deep water spindles built to the following specifications:

10.6.1. Shallow

a) All steel must be 316 grade stainless steel (s/s)

b) Spindle must be made of 12mm solid round bar with a bent and welded circular loop (70mm OD) at one end and M12 thread machined on the other end. The space between the eye and the start of the thread must be 360mm. The thread must be machined 50mm long with a 4mm hole to accommodate a 3mm s/s split-pin (to be supplied) drilled 10mm from the end.

c) The eye must be a 12mm s/s nut with a 70mm (OD) circular loop welded to the nut at 90 degrees (to make an eye-bolt).

d) A 60mm s/s flat washer with a 12mm centre hole must be supplied

e) A 12mm s/s thimble must be supplied and attached to attached to the welded circular loop of the round bar spindle.

10.6.2. Deep

a) All steel must be 316 grade stainless steel (s/s)

b) Spindle must be made of 12mm solid round bar with a bent and welded circular loop (70mm OD) at one end and M12 thread machined on the other end. The space between the eye and the start of the thread must be 720mm. The thread must be machined 50mm long with a 4mm hole to accommodate a 3mm s/s split-pin (to be supplied) drilled 10mm from the end.

c) The eye must be a 12mm s/s nut with a 70mm (OD) circular loop welded to the nut at 90 degrees (to make an eye-bolt).

d) A 60mm s/s flat washer with a 12mm centre hole must be supplied

e) A 12mm s/s thimble must be supplied and attached to attached to the welded circular loop of the round bar spindle.
10.7. **General engineering requirements**

Railway line, purchased in 1m lengths is used for anchoring all moorings. On occasion, these railway line segments need to be cut and / or drilled and / or welded or modified for use as anchors in estuaries or coastal gullies. Estimated maximum work is 20 x 1m lengths of rail cut / drilled / welded / modified per year for the duration of the contract.

10.8. **After-sales Maintenance Services, Spares, Support**

a) The service provider will be required to conduct complete maintenance services of all equipment on an annual basis for the five year duration of the contract. This service will at minimum include:

   a. Repair and/or replace and/or refurbish all components of the heavy-duty and lightweight stereo-BRUVs and stereo-Jump Camera that will suffer from wear, damage and loss under typical and repeated operational conditions, for example: replace o-rings, re-anodize housings, replace scratched lenses.

   b. Repair and/or replacement of corroded spindles, spindle components (flat washers, split pins, eye-bolts, thimbles), moorings (UTR and ADCP), mooring brackets and mooring components (tower braces, risers, etc.)

   c. This cost must be included in the quote.

b) As and when necessary the service provider will be required to conduct unforeseen services and maintenance of equipment. For this, a quote will be requested as required.

c) The service provider will be required to assist the contractor with trouble shooting regarding the design and use of the provided equipment.

d) The service provider will be expected to assist the contractor with product development to optimise research capabilities.

e) If the service provider is not the manufacturer of the equipment, the service provider must be able to provide a link between SAEON and the product manufacturer for issues relating to product malfunctioning, services and product warranties.

10.9. **Foreseen requirements/purchases during the period of the contract:**

a) The following downstream purchases are expected during the course of the five year contract:

   i. 2 x Complete Heavy-duty stereo-BRUVs per year from 2016 (excluding spares as indicated above)

   ii. 1 x Complete lightweight stereo-BRUVs per year from 2016
iii. 1 x Complete stereo-Jump Camera every two years from 2017
iv. 2 x Shallow ADCP moorings per year from 2017
v. 4 x Shallow UTR Float Spindles per year from 2017
vi. 4 x Deep UTR Float Spindles per year from 2017
vii. General Engineering Requirements (section 10.7) over the entire contract period

b) Downstream purchases within the contract period will be dependent on availability of funding and research need.
c) THIS INFORMATION IS PROVIDED AS ADVANCE INDICATION OF FURTHER EQUIPMENTS NEEDS THAT MAY ENSUE UNDER THIS CONTRACT AND WILL NOT BE CONSIDERED IN THE TECHNICAL AND FINANCIAL EVALUATION OF THIS DOCUMENT

11. **Qualifying Thresholds for Selection (Stage 1) Evaluation**

Bids are scored utilising the following scoring systems:

<table>
<thead>
<tr>
<th>No Information to make assessment</th>
<th>Poor</th>
<th>Average</th>
<th>Meets Requirements</th>
<th>Exceeds Requirements</th>
</tr>
</thead>
</table>

Scoring less than the minimum threshold set for each criterion are marked as failed.

Bidders that do not qualify in stage 1 are not considered in stage 2 – awarding.

12. **Stage 1 - Selection on Specifications, Capabilities and Capacities**

Items within each Part (A to D) of the contract selection criteria are weighted (%) according to their importance within the Part. As such, the total score will be out of 400, and this will be divided by 4 (four) to get the total weighting. Where relevant, the minimum score threshold for the different Parts has been indicated. If a minimum score threshold is not met for any of the items within the different Parts (A-D) the overall bid will be disqualified.

<table>
<thead>
<tr>
<th>SELECTION CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO.</td>
</tr>
<tr>
<td>PART A – EVALUATION OF TECHNICAL AND PROJECT MANAGEMENT COMPETENCE</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>NO.</th>
<th>ELEMENT</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Evaluation of previous work in terms of manufacturing quality</td>
<td>30%</td>
</tr>
<tr>
<td>2</td>
<td>Evaluation of service provider’s ability to provide or guarantee unforeseen aftersales service and support</td>
<td>20%</td>
</tr>
<tr>
<td>3</td>
<td>Evaluate schedule and design of annual services for equipment</td>
<td>15%</td>
</tr>
<tr>
<td>4</td>
<td>Evaluation of service provider’s experience, training and qualifications</td>
<td>10%</td>
</tr>
<tr>
<td>5</td>
<td>Evaluation to what standards does the supplier produce its work</td>
<td>25%</td>
</tr>
</tbody>
</table>

**PART B – EVALUATION OF TECHNICAL COMPETENCE THROUGH SITE VISIT**

<table>
<thead>
<tr>
<th>NO.</th>
<th>ELEMENT</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Were samples of work provided for review</td>
<td>30%</td>
</tr>
<tr>
<td>7</td>
<td>Evaluate quality of work presented</td>
<td>40%</td>
</tr>
<tr>
<td>8</td>
<td>Evaluate quality of premises inspected</td>
<td>4%</td>
</tr>
<tr>
<td>9</td>
<td>Evaluate housekeeping observed at premises</td>
<td>10%</td>
</tr>
<tr>
<td>10</td>
<td>Evaluate design tools and facilities at the premises</td>
<td>16%</td>
</tr>
</tbody>
</table>

**PART C – MEASUREMENT OF COMPANY AND SERVICE PROVIDED**

<table>
<thead>
<tr>
<th>NO.</th>
<th>ELEMENT</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>The service provider must be able to guarantee unforeseen aftersales service and support (section 4.8 b-e).</td>
<td>50%</td>
</tr>
<tr>
<td>12</td>
<td>Evaluate the service provider’s project / timing plan to ensure that each equipment can be delivered to SAIAB (address above) in Grahamstown within 6 months of the individual equipment purchase order being issued</td>
<td>50%</td>
</tr>
<tr>
<td>13</td>
<td>The service provider is required to be based in Port Elizabeth</td>
<td>GO/NO GO</td>
</tr>
</tbody>
</table>
Eastern Cape of South Africa to facilitate product development and equipment maintenance and and purchases during the period of the contract (section 4.6)

**PART D – MEASUREMENT OF ENGINEERING COMPETENCE AGAINST THE SPECIFICATIONS OF THE INITIAL EQUIPMENT REQUIRED** (Minimum qualifying score = 3). In part D all items are equally weighted with a minimum qualifying score for each of 3.

<table>
<thead>
<tr>
<th>NO.</th>
<th>ELEMENT</th>
<th>WEIGHT</th>
<th>SCORE (3-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>5 x Heavy-duty stereo-BRUVs built according to the specifications described in sections 4.1.1 to 4.1.6 of this document.</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>1 x Set of spare Heavy-duty stereo-BRUVs components as indicated in section 4.1.7 of this document</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>1 x Lightweight stereo-BRUVs built according to the specifications described in section 4.2 of this document.</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>1 x stereo-Jump Cameras built according to the specifications described in section 4.3 of this document.</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>4 x Field maintenance kits containing at minimum the items specified in section 4.4 of this document</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Manufacture and supply of four (4) complete shallow water ADCP moorings as per diagram/s and specification in section 4.5.</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Manufacture and supply of eight (8) shallow UTR Float spindles (section 4.6.2) and eight (8) deep UTR Float spindles as per specification in section 4.6.3</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

**13. Pricing Schedule for the Duration of the Contract** *(Standard Bidding Document 3.1)*

**NOTE:** The prices below are for pricing evaluation of each bid for selecting the service provider.

Final prices are per the equipment purchase orders issued as and when required per the
contractual procedure set out in this document

The initial equipment purchase order components are included and indicated as such to allow for a fair price evaluation.

**NOTE**
Only firm prices will be accepted for this first requirement. The price quoted is fully inclusive of all costs and taxes. No changes or extensions or additional ad hoc costs are accepted once the contract has been awarded. The same applies to each subsequent purchase order issued under the terms of this contract.

Detailed information is optional and is provided as annexures to the details provided below.

Bid price in South African currency, foreign exchange risk is for the account of the Bidder.

Pricing is subject to the addition of Preference Points as stipulated in the section below - Standard Bidding Document 6.1 Preference claim form

<table>
<thead>
<tr>
<th>OFFER TO BE VALID FOR</th>
<th>150 days</th>
<th>FROM THE CLOSING DATE OF BID</th>
</tr>
</thead>
</table>

**BID PRICE IN RSA CURRENCY (ALL APPLICABLE TAXES INCLUDED)**

<table>
<thead>
<tr>
<th>ITEM NO</th>
<th>QUANTITY</th>
<th>DESCRIPTION OF SUPPLIES</th>
<th>RATE/UNIT PRICE (per unit of measure)</th>
<th>BID/QUOTE PRICE</th>
</tr>
</thead>
</table>

**Immediate equipment requirements**

(Purchase Order will be issued on receipt of the signed contract or SBD 7)

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>Heavy-duty stereo-BRUVs built according to the specifications described in sections 10.1.1 to 10.1.6 of this document.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>Spare Heavy-duty stereo-BRUVs components as indicated in section 10.1.7 of this document</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>Lightweight stereo-BRUVs built according to the specifications described in section 10.2 of this document.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
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<td>-----------------------------</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>Stereo-Jump Cameras built according to the specifications described in section 10.3 of this document.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>Field maintenance kits containing at minimum the items specified in section 10.4 of this document</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>Manufacture and supply of shallow water ADCP moorings (complete) as in section 10.5.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>Manufacture and supply of shallow water UTR Float spindles (complete) (section 10.6.1).</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>Manufacture and supply of deep water UTR Float spindles (complete) (section 4.6.2).</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td>Annual equipment service (section 10.8, a) from second year of contract for the above equipment.</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL**

<table>
<thead>
<tr>
<th>B-BBEE STATUS LEVEL OF CONTRIBUTION Per SBD 6.1 below</th>
<th>Level</th>
<th>Preference Points Claimed</th>
</tr>
</thead>
</table>

Are detailed price schedules attached? Yes ☑ No ☐

Does the offer comply with the specification(s)? Yes ☑ No ☐

If the offer does not comply to specification, indicate deviation(s) in a separate attached schedule.
14.  **PREFERENCE POINTS CLAIM FORM (STANDARD BIDDING DOCUMENT 6.1)**

**POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTION**

In terms of Regulation 5 (2) and 6 (2) of the Preferential Procurement Regulations, preference points must be awarded to a Bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

<table>
<thead>
<tr>
<th>B-BBEE Status Level of Contributor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>(90/10 system)</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>(80/20 system)</td>
<td>20</td>
<td>18</td>
<td>16</td>
<td>12</td>
<td>8</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

**B-BBEE STATUS LEVEL OF CONTRIBUTION CLAIMED IN TERMS OF THE ABOVE TABLE:**

\[
\text{Quantity} \times \text{(points per level)} = \text{maximum of 10 or 20 points}
\]

(Points claimed must be in accordance with the table reflected above and must be substantiated by means of a B-BBEE certificate issued by a Verification Agency accredited by SANAS or a Registered Auditor approved by IRBA or an Accounting Officer as contemplated in the CCA).

**SUB-CONTRACTING**

Will any portion of the contract be sub-contracted?  

Yes [ ]  No [ ]

If Yes, indicate:

(i) What percentage of the contract will be subcontracted?  

% 

(ii) The name of the sub-contractor? 


(iii) The B-BBEE status level of the sub-contractor? 


(iv) Whether the sub-contractor is an EME?  

Yes [ ]  No [ ]

I/we, the undersigned, who is/are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBEE status level of contribution of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I/we acknowledge that:

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a. The information furnished is true and correct;
b. The preference points claimed are in accordance with the General Conditions as indicated in Paragraph 1 of this form.
c. In the event of a contract being awarded as a result of points claimed as shown above, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
d. If the B-BBEE status level of contribution has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
   i. Disqualify the Bidder from the bidding process;
   ii. Recover costs, losses or damages it has incurred or suffered as a result of that Bidder’s conduct;
   iii. Cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
   iv. Restrict the Bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, from obtaining business from any organ of state for a period not exceeding ten (10) years, after the audi alteram partem (hear the other side) rule has been applied; and forward the matter for criminal prosecution.
e. A Bidder will not be awarded points for B-BBEE status level if it is indicated in the Bid documents that such a Bidder intends sub-contracting more than 25% of the value of the contract to any other enterprise that does not qualify for at least the points that such a Bidder qualifies for, unless the intended sub-contractor is an EME that has the capability and ability to execute the sub-contract.
f. A Bidder awarded a contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the Bidder concerned, unless the contract is sub-contracted to an EME that has the capability and ability to execute the sub-contract.

15. **The NRF’s Conditions of Contract**

a) NATIONAL TREASURY GENERAL CONDITIONS OF CONTRACT

General Conditions of Contract, as issued by National Treasury, are part of this contractual agreement and are made available on the NRF Website (www.nrf.ac.za Click on “Bids” and select “Call for Bids”).

The Conditions of Contract stipulated in this Bid invitation form part of the Conditions of Contract applying to this document.
b) BID RESPONSE PREPARATION COSTS

The NRF is **NOT** liable for any costs incurred by a bidder in the process of responding to this Bid, including on-site presentations and the proposal a service provider may make and/or submit.

c) CANCELLATION PRIOR TO AWARDING

The NRF has the right to withdraw and cancel the Bid.

d) COLLUSION, FRAUD AND CORRUPTION

Any effort by Bidder/s to influence Bid evaluation, Bid comparisons or Bid award decisions in any manner may result in the rejection of the Bid concerned.

e) CONFIDENTIALITY

The successful Bidder agrees to sign a general confidentiality agreement with the NRF.

f) VALIDITY PERIOD

The Bid has a validity period of 150 days from date of closure of the Bid.

g) VALIDATION OF SUBMITTED DOCUMENTATION

The NRF has the right to have any documentation submitted by the Bidders inspected by another technical body or organisation.

h) PRESENTATIONS AND PROOF OF FUNCTIONALITY

The NRF has the right to call interviews/presentations/pitching sessions as well as proof of concept sessions with short-listed service providers before the final selection is done.

i) INTELLECTUAL PROPERTY PROVIDED IN THE BID INVITATION

All the information contained in this document is intended solely for the purposes of assisting Bidders to prepare their Bids. Any use of the information contained herein for other purpose than those stated in this document is prohibited.

The ownership and intellectual property rights of all designs, specifications, programming code and all other documentation provided by the NRF to the Bidder, both successful and unsuccessful, remain the property of the NRF.

j) INTELLECTUAL PROPERTY CONTAINED IN THE DELIVERABLES

The ownership and intellectual property rights of all designs, specifications, programming
code and all other documentation required as part of the delivery to the NRF reside with the NRF.

16. **SUPPLIER DUE DILIGENCE**

16.2. **DECLARATION OF INTEREST (STANDARD BIDDING DOCUMENT 4)**

Any legal person, including persons employed by the State¹, or persons having a kinship with persons employed by the State, including a blood relationship, may make an offer or offers in terms of this invitation to Bid (includes an advertised competitive Bid, a limited Bid, a proposal or written price quotation). In view of possible allegations of favouritism, should the resulting Bid, or part thereof, be awarded to persons employed by the State, or to persons connected with or related to them, it is required that the Bidder or his/her authorised representative, declare his/her position in relation to the evaluating/adjudicating authority where:

The Bidder is employed by the State; and/or

The legal person on whose behalf the Bidding Document is signed, has a relationship with persons/s person who is/are involved in the evaluation and or adjudication of the Bid(s), or where it is known that such a relationship exists between the person or persons for or on whose behalf the declarant acts and persons who are involved with the evaluation and/or adjudication of the Bid.

In order to give effect to the above, the following questionnaire must be completed and submitted with this Bid.

Full Name of Bidder or his/her representative: ………………………………………………………………

Identity Number: ……………………………………………………………………………………………

Position occupied in the Company (director, trustee, shareholder², member): …………………………………………………………………………………………………………………

Registration number of company, enterprise, close corporation, partnership agreement or trust: …………………………………………………………………………………………………

Tax Reference Number: ………………………………………………………………………………………

VAT Registration Number:
The names of all directors/trustees/shareholders/members, their individual identity numbers, tax reference numbers and, if applicable, employee/PERSAL numbers must be indicated in a separate schedule including the following questions:

Schedule attached with the above details for all directors/members/shareholders  Yes ☐ No ☐

Are you or any person connected with the Bidder presently employed by the state? If so, furnish the following particulars  Yes ☐ No ☐ in an attached schedule:

Name of person/ director/ trustee/ shareholder/member:

Name of state institution at which you or the person connected to the Bidder is employed

Position occupied in the state institution

Any other particulars:

If you are presently employed by the State, did you obtain the appropriate authority to undertake remunerative work outside employment in the public sector? If Yes, did you attach proof of such authority to the Bid document? If No, furnish reasons for non-submission of such proof as an attached schedule  Yes ☐ No ☐

(Note: Failure to submit proof of such authority, where applicable, may result in the disqualification of the Bid.)

Did you or your spouse or any of the company’s directors/trustees/shareholders/members or their spouses conduct business with the State in the previous twelve months? If so, furnish particulars as an attached schedule  Yes ☐ No ☐

Do you, or any person connected with the Bidder, have any relationship (family, friend, other) with a person employed by the State and who may be involved with the evaluation and or adjudication of this Bid? If so, furnish particulars as an
Are you, or any person connected with the Bidder, aware of any relationship (family, friend, other) between any other Bidder and any person employed by the State who may be involved with the evaluation and or adjudication of this Bid? If so, furnish particulars as an attached schedule:

Yes ☐ No ☐

Do you or any of the directors/trustees/shareholders/members of the company have any interest in any other related companies whether or not they are bidding for this contract? If so, furnish particulars as an attached schedule:

Yes ☐ No ☐

### 16.3. DECLARATION OF BIDDER’S PAST SCM PRACTICES
*(STANDARD BIDDING DOCUMENT 8)*

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the Bidder or any of its directors listed on the National Treasury’s Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? If Yes, furnish particulars as an attached schedule:</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Is the Bidder or any of its directors listed on the Register for Tender Defaulters in terms of Section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? If Yes, furnish particulars as an attached schedule:</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Was the Bidder or any of its directors convicted by a court of law (including a court outside of the Republic of South Africa) for fraud or corruption during the past five years? If Yes, furnish particulars as an attached schedule:</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Was any contract between the Bidder and any organ of state terminated during the past five years on account of failure to perform on or comply with the contract? If Yes, furnish particulars as an attached schedule:</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

The Database of Restricted Suppliers and Register for Tender Defaulters resides on the National Treasury’s website (www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the attached schedule.
**16.4. CERTIFICATE OF INDEPENDENT BID DETERMINATION**  
*(STANDARD BIDDING DOCUMENT 9)*

I, the undersigned, in submitting this Bid in response to the invitation for the Bid made by the **NATIONAL RESEARCH FOUNDATION**, do hereby make the following statements that I certify to be true and complete in every respect:

| I have read and I understand the contents of this Certificate; |
| I understand that the Bid will be disqualified if this Certificate is found not to be true and complete in every respect; |
| I am authorised by the Bidder to sign this Certificate, and to submit the Bid, on behalf of the Bidder; |
| Each person whose signature appears on the Bid has been authorised by the Bidder to determine the terms of, and to sign, the Bid on behalf of the Bidder; |
| For the purposes of this Certificate and the accompanying Bid, I understand that the word “competitor” shall include any individual or organisation, other than the Bidder, whether or not affiliated with the Bidder, who: |

| Has been requested to submit a Bid in response to this Bid invitation; |
| Could potentially submit a Bid in response to this Bid invitation, based on their qualifications, abilities or experience; and |
| Provides the same goods and services as the Bidder and/or is in the same line of business as the Bidder |

The Bidder has arrived at the accompanying Bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium will not be construed as collusive bidding.

In particular, without limiting the generality of paragraphs above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
| Prices; |
| Geographical area where product or service will be rendered (market allocation); |
| Methods, factors or formulas used to calculate prices; |
| The intention or decision to submit or not to submit, a Bid; |
| The submission of a Bid which does not meet the specifications and conditions of the Bid; or |
| Bidding with the intention not to win the Bid. |

In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this Bid invitation relates.

The terms of this Bid have not been, and will not be, disclosed by the Bidder, directly or indirectly, to any competitor, prior to the date and time of the official Bid opening or of the awarding of the contract.

I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to Bids and contracts, Bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of Section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation

³ Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

### 17. INVITATION TO BID (SBD 1) SIGNATURE PAGE

I hereby undertake to supply all or any of the goods and/or works described in the attached bidding documents to the NATIONAL RESEARCH FOUNDATION in accordance with the requirements and specifications stipulated in this Bid document at the price/s quoted. My offer/s remains binding upon me and open for acceptance by the purchaser during the validity period indicated and calculated from the closing time of Bid.

The following documents shall be deemed to form and be read and construed as part of this agreement.

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even where integrated in this document:

<table>
<thead>
<tr>
<th>Invitation to Bid (SBD1)</th>
<th>Technical Specification(s);</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bidder’s responses to technical specifications, capability requirements and capacity as attached to this document</td>
<td></td>
</tr>
<tr>
<td>Pricing Schedule(s) (SBD3);</td>
<td>Tax Clearance Certificate</td>
</tr>
<tr>
<td>Preference claims for Broad Based Black Economic Empowerment Status Level of Contribution in terms of the Preferential Procurement Regulations 2011 (SBD6.1);</td>
<td></td>
</tr>
<tr>
<td>Declaration of Interest (SBD4);</td>
<td>Declaration of Bidder’s past SCM practices (SBD8);</td>
</tr>
<tr>
<td>Certificate of Independent Bid Determination (SBD9)</td>
<td>General Conditions of Contract</td>
</tr>
</tbody>
</table>

I confirm that I have satisfied myself as to the correctness and validity of my Bid; that the price(s) and rate(s) quoted cover all the goods and/or works specified in the bidding documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.

I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this agreement as the principal liable for the due fulfilment of this contract.

I declare that I have had no participation in any collusive practices with any Bidder or any other person regarding this or any other Bid.

I certify that the information furnished in these declarations (SBD4, SBD6.1, SBD 6.2 where applicable, SBD8, SBD9) is correct and I accept that the state including the NRF may reject the Bid or act against me should these declarations prove to be false.

I confirm that I am duly authorised to sign this contract.

<table>
<thead>
<tr>
<th>NAME (PRINT)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CAPACITY</td>
<td></td>
</tr>
<tr>
<td>SIGNATURE</td>
<td></td>
</tr>
<tr>
<td>NAME OF FIRM</td>
<td></td>
</tr>
<tr>
<td>DATE</td>
<td></td>
</tr>
</tbody>
</table>

WITNESSES

1 ______________________________  
2 ______________________________

Date ______________________________
The following page is the template to be used for the Customer Satisfaction / Reference letters. Please submit this template, with your details on the first two lines, to 3 of your previous clients and submit their completed letters with your submission. Failure to do this may result in your bid being rejected.
**Customer Satisfaction / Reference Letter**

The National Research Foundation, through its National Facilities SAEON and SAIAB, wishes to procure specialized marine engineering equipment and services for a period of five years. We would appreciate your effort in completing the reference below based on your experience with:

Name of Supplier: __________________________  
Product purchased: __________________________

Completed by: ____________________________

Company Name: ____________________________

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Poor</th>
<th>Average</th>
<th>Meets Requirements</th>
<th>Exceeds Requirements</th>
<th>Exceeds Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professionalism</td>
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<tr>
<td>Interpersonal skills</td>
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<tr>
<td>Turn around / completion times</td>
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<tr>
<td>Satisfaction with services provided</td>
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<tr>
<td>Response times</td>
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<tr>
<td>Reliability of equipment</td>
<td></td>
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<tr>
<td>Would you use them again?</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

Overall Impression

Contact Number: ____________________________

Company Stamp