



**SARAO**  
South African Radio  
Astronomy Observatory

**INVITATION TO BID**  
**NRF SARAO STFR 001 2019**  
**SUPPLY AND DELIVERY OF A GPS SIGNAL EQUIPMENT**

**Bidder Name:**

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# INTRODUCTION

## INTRODUCTION TO THE NRF

The National Research Foundation Act, Act 19 of 2018, establishes the National Research Foundation (“NRF”) as the juristic legal entity that will contract with the awarded bidder. The NRF supports and promotes research and human capital development through funding, the provision of National Research Facilities and science outreach platforms and programmes to the broader community in all fields of science and technology, including natural science, engineering, social science and humanities. Please visit the NRF website (<https://www.nrf.ac.za>) for more information.

## INTRODUCTION TO THE BUSINESS UNIT

The South African Radio Astronomy Observatory (SARAO) is a National Facility of the National Research Foundation (NRF) housing and operating South Africa’s national radio telescope shared facilities including the MeerKAT and KAT-7 telescopes in the Karoo in the Northern Cape; the Hartebeesthoek Radio Astronomy Observatory (HartRAO) in Gauteng; and the African Very Long Baseline Interferometry (AVN) programme in nine African countries. SARAO manages the associated human capital development and commercialisation endeavours of government’s investment in astronomy. SARAO has offices based in Johannesburg and Cape Town, as well as the radio-protected Square Kilometre Array (SKA) host site in the Karoo, 90km from Carnarvon in the Northern Cape, which hosts the SKA mid-frequency telescopes, MeerKAT, and KAT-7 radio telescope installations, as well as a number of guest instruments, including the HERA telescope. Further information about SARAO can be found on [www.ska.ac.za](http://www.ska.ac.za) and [www.nrf.ac.za](http://www.nrf.ac.za).

## INTRODUCTION TO THE SKAO

The SKA Organisation has been established with its headquarters at Jodrell Bank in Manchester, United Kingdom. It has jointly awarded its Square Kilometre Array (SKA) to South Africa and its eight African partner countries together with Australia. The SKA will be Africa’s largest science project, acting as a hub for both local and international collaboration. The SKA Organisation is undertaking the following five key science projects:

- Probing the Dark Ages
- Galaxy Evolution
- The Origin and Evolution of Cosmic Magnetism
- Strong Field Tests of Gravity using Pulsars and Black Holes
- The Cradle of Life.

The first phase of the SKA1-MID project includes the addition of 133 antennas to the 64-dish MeerKAT radio telescope and the second phase of the project and will include up to 2 000 antennas distributed across South Africa and its eight African partner countries. SKA1-MID consists of:

- The existing MeerKAT phase of 64 antennae (precursor to the SKA) and the 133 antennae included in the current phase.
- A core area (approximately 2,5km in radius) which is land owned by the NRF and includes the MeerKAT radio telescope and will include approximately 75% of the antennae.
- Three spiral arms extending out from the core to for about 120km each.

Further information about SKAO can be found at [www.skatelescope.org](http://www.skatelescope.org).

## SARAO TIME AND FREQUENCY CALIBRATION

The SARAO Time and Frequency Division operate 2x Hydrogen Maser Clocks which provides reference signals as well as traceable Universal Coordinated Time (UTC) to the MeerKAT radio telescope. The timing offsets from UTC are measured using specialised dual-frequency GPS receivers. In order to maintain traceability to UTC and subsequently overall telescope timing, regular calibrations are required on all GPS receivers which entail the regular measurement of the internal receiver delays as well as the GPS antenna delays.

In order to accurately measure the delays of the GPS receiver and that of the antenna, a calibration setup, as described in this tender document, is needed. The precision measurement is not possible in any other way. This calibration setup will allow us to internally calibrate all TFS GPS receivers and antennas in a completely self-sufficient manner to <1ns uncertainty, which will enable TFS to meet the MeerKAT TFR specs, and also verify the TFR system for qualification. This will ensure that MeerKAT's timing data products is traceable to UTC time over the operational lifetime of the telescope which will greatly advance the pulsar science data product outputs, which is the project with the highest priority on MeerKAT science programs.

The setup will also enable further research work on precise GPS technology such as the GPS travelling calibrator, time transfer using precise point positioning (PPP) and possible spin-off work on simplified, well calibrated, timing nodes which can be used at SARAO, industry and government.

This apparatus will enable MeerKAT, to be the best in the world science instrument, for timing and transient measurement of radio waves, and will be a key enabler for South Africa to produce transformative science. There is as mentioned also socio-economic benefits in the forms of unique capability that will result in innovative new instrumentation, that could be commercialized as home-grown world class products. The industry and academia can also benefit from having this unique capability, which does not otherwise exist in the country. The cost is relatively low, due to some self-engineering from SARAO that is also involved in constructing the measurement setup with the components as specified in this tender.

## CONTEXT OF THIS PROCUREMENT NEED

The following items are required in order to create a setup which can be used to calibrate the GPS receivers and antennas:

1. Dual Frequency, multi-channel, GPS Simulator
2. Radio absorbing material for the construction of a small anechoic chamber, and
3. Passive GPS re-radiating antenna operating at the L1 and L2 frequency bands.
4. A precision double ridged horn antenna operating over the 0.8GHz to 5GHz band at minimum.

The detailed specifications for these components are listed in Part A.

<b>PRE-QUALIFICATION ELIGIBILITY CRITERIA</b>	
<b>SMME B-BBEE REQUIREMENT</b>	
1. Minimum status B-BBEE level required	N/A
A bidder failing to meet any of the stipulated pre-qualifying criteria is automatically disqualified.	

# PART A - CONTRACT

## EQUIPMENT AND SERVICE SPECIFICATION

### 1. GPS Simulator:

- 1.1 The supplier shall provide a multi-channel, dual frequency GPS simulator capable of generating L1 and L2 GPS signals through a single RF output connector.
- 1.2 The GPS simulator shall be able to support a minimum of 64 channels in a minimum of 4 frequency bands. Any of the channels shall be able to generate a GPS or GLONASS signals with a unique PRN code as well as derivative signals such as multipath or interference signals.
- 1.3 The GNSS simulator shall be capable of generating GPS or GLONASS signals in both the L1 and L2 frequency bands simultaneously.
- 1.4 The RF signal output connector shall be N-Type.
- 1.5 Spurious transmissions at the RF output shall be  $\leq 40$  dBc.
- 1.6 Harmonics produced at the RF output shall be  $\leq 40$  dBc.
- 1.7 The RF output power level shall be adjustable between -65 dBm and -150 dBm in 0.1 dB steps.
- 1.8 The RF output power level accuracy shall be better than  $\pm 1.0$  dB.
- 1.9 The GNSS simulator shall have an external reference input capable of receiving an external 10 MHz signal.
- 1.10 The external reference input connector shall be a BNC connector.
- 1.11 The GNSS simulator shall have a Pulse per Second (PPS) output connector producing +2V minimum output pulse into a 50 $\Omega$  load.
- 1.12 The PPS connector shall be a BNC connector.
- 1.13 A Calibration certificate shall be supplied with the GNSS simulator which indicates the PPS to GPS on-time point offset and its uncertainty. The timing offset and PPS signal from the GPS on-time point shall be characterised to better than 100 ps. The uncertainty of this measurement shall be  $\leq 300$ ps.
- 1.14 The internal timebase of the GPS simulator shall be an Oven Controlled Crystal Oscillator (OCXO). The ageing shall be better than  $5 \times 10^{-10}$  over 24 hours and better than  $5 \times 10^{-8}$  over 1 year. The short term Allan Deviation shall be better than  $5 \times 10^{-12}$  at 1 second.
- 1.15 The GPS simulator shall meet all performance specifications, as per this document, over an operating temperature range of 15°C to 25°C.
- 1.16 The GPS Simulator network interface shall be RJ-45 10/100 Base-T Ethernet or 10/100/1000 Base-T compliant.
- 1.17 It shall be possible to control the GPS simulator using SCPI type commands.
- 1.18 User and software manuals for the GNSS simulator shall be provided.
- 1.19 The GNSS simulator shall be compatible with South African 230V alternating current (AC) power with a frequency of 50 Hz.
- 1.20 The supplier shall provide a minimum of 2 years on-site warranty.
- 1.21 All hardware or software options required to meet the requirements as specified in this document shall be identified by the successful bidder and included as part of the tender response.
- 1.22 Software for controlling the unit and configuring different real-time scenarios with regards to satellite orbits and trajectories (position, velocity, acceleration, and heading) via user setup. This software shall be supplied together with the unit. The supplier shall provide a minimum of 2 perpetual licenses for this software package.
- 1.23 The software configuration shall enable the usage of the GPS simulator for also testing leap second scenarios.

### 2. Radio Absorbing Material:

- 2.1 The supplier shall provide 20 m<sup>2</sup> (squared metre) of foam type (non pyramidal) radio absorbing material not thicker than 120mm with a minimum absorption of 22 dB in the range of 1GHz to 2GHz.

3 **Antenna:**

- 3.1 The supplier shall provide a quantity of three (3) passive, GPS antennas for re-radiation of GPS L1 and L2 signals.
- 3.2 A passive antenna with VSWR <1.5:1 in L1 and L2 GPS frequency bands shall be supplied.
- 3.3 The antenna feedpoint input impedance shall be: 50  $\Omega$ .
- 3.4 The antenna shall be dual polarized or RHCP.
- 3.5 The antenna axial ratio < 2 dB @ elevations from 30 degrees to 90 angular degrees.
- 3.6 The antenna isotropic gain at 90-degree elevation shall be  $\geq$  to 0dBic.
- 3.7 The antenna connector shall be N-Type or TNC.

4 **Horn Antenna:**

- 4.1 The supplier shall provide 1x calibrated double ridge broadband horn antenna capable of operating from 0.8 GHz to 5 GHz.
- 4.2 A passive antenna with VSWR <1.5:1 in L1 and L2 GPS frequency bands shall be supplied.
- 4.3 The antenna feedpoint input impedance shall be: 50  $\Omega$ .
- 4.4 The maximum 3dB beamwidth E-plane shall be 90 degree to 10 degree.
- 4.5 The maximum 3dB beamwidth H-plane shall be 60 degree to 10 degree.
- 4.6 The antenna isotropic gain at L1 and L2 frequencies shall be  $\geq$  6 dBi.
- 4.7 The antenna connector shall be N-Type or TNC.

Notes:

- Examples of suitable antennas would be PCTEL GNSS-L125-PSTNC or the Pasternack PE51068.
- Typical example of a horn antenna is Schwarzbeck Mess-Electronik - BBHA9120A. TDK also produces possibly suitable horn antennas.
- Examples of suitable Radio Absorbing material is MYA-79 or C-RAM PIM 645.

## **CONTRACT PERIOD**

This is a once-off contract for supply and delivery.

## THE BIDDER SELECTION PROCESS

### **Stage 1 – Verification of the ability of a bidder to provide the services in accordance with specifications and conditions as set out in the bid documents.**

#### **Compliance to submission requirements**

Bidders warrant that they can provide the goods and/or services in accordance with the specifications and conditions set out in this bid document. Bidders warrant that their bid document has as a minimum the specified documents required to verify their ability to deliver the specifications and conditions as set out in the bid documents. SARAO's evaluation committee disqualifies bidders where they do not provide the required documents, marked as mandatory ('M'), to verify their ethical conduct, the delivery of the specification, and their contract execution during the period of the contract.

#### **Compliance to technical specifications**

SARAO's evaluation committee disqualifies bidders when they are not compliant with the technical specifications as demonstrated by their own submitted documents.

#### **Due Diligence Research**

SARAO confirms the recommended bidder(s)'s reference letters with referees to confirm the recommendation(s). Where circumstances justifies it, the SARAO conducts interviews with bidders for them to clarify their bid submission to the evaluation committee

### **Stage 2 – Price competition**

Compliant bidders from the previous stage compete against each other on price at the stated minimum threshold level. SARAO's evaluation committee compares each bidder's pricing quote on an equal and fair comparison basis equitable to all bidders, taking into account all aspects of the bid's pricing requirements. SARAO's evaluation committee ranks the qualifying bids on points scored on the basis of both Price and B-BBEE as indicated on SBD 6.1 in accordance with the PPPFA.

### **Stage 3 – Award and contract signing**

The bid evaluation committee recommends to its Delegated Authority the bidder with the highest combined score for the contract award subject to the final verification of the bidder's tax status as set out in the SBD 1 through the CSD and, for non-resident respondents, submits the SBD 1 questionnaire to obtain the Confirmation of Tax Obligations letter from the South Africa Revenue Services.

#### **Cancellation of the bid prior to award**

SARAO cancels this bid invitation prior to making an award where

- a) Due to changed circumstances there is no need for the specified procurement in the document, or
- b) No bids meet the minimum required specification, or a material irregularity occurred in the bid process, or
- c) Where the price is too low/high in comparison to the pre-bid defined market price range with no bidder prepared to negotiate the price into the determined market price range.

## EVALUATION OF BIDDER'S ABILITY TO DELIVER

Document description	Reference to bidder's document	Weight	Criteria (All criteria are weighted equally to each other)	Grading Scheme	Bid Section Reference	SCM Verification
Certified B-BBEE certificate		N/A	Has the bidder met the minimum B-BBEE Level?	N/A	Page 5	
Signed SBD 6.1		Optional	Is the bidder claiming preference point for the price competition?	Yes(1) / No(0)	Page 22 to 24	
Certified B-BBEE certificate						
Signed SBD 4		Mandatory	Do the bidder and its directors have any vested interest in government?	Yes(1) / No(0)	Page 21 to 22	
Signed SBD 8		Mandatory	Has the bidder declared any performance issues with government?	Yes(1) / No(0)	Page 24	
Signed SBD 9		Mandatory	Did the bidder independently determine its bid?	Yes(1) / No(0)	Page 24 to 25	
Signed SBD 3		Mandatory	Did the bidder submit its pricing schedule in a separate envelope?	Yes(1) / No(0)	Page 18	
Signed SBD 1		Mandatory	Has the bidder signed the SBD 1?	Yes(1) / No(0)	Page 27	

**Note - Bidders are required to submit evidence of their compliance with the requirements below –**

Document description	Reference to bidder's document	Weight	Criteria (All criteria are weighted equally to each other)	Grading Scheme	Bid Section Reference	BEC Verification
Data sheets - Simulator		Mandatory	Does the Simulator equipment meet the minimum GPS Simulator specification?	Yes(1) / No(0)	Section 1, Page 6	
Data sheets - Antenna		Mandatory	Does the antenna equipment meet the minimum Antenna specification?	Yes(1) / No(0)	Section 3, Page 7	

Data sheets – Radio Absorbing Material		Mandatory	Does the radio absorbing material equipment meet the minimum Radio Absorbing Material specification?	Yes(1) / No(0)	Section 2, Page 6	
Data sheets – Horn Antenna		Mandatory	Does the antenna equipment meet the minimum horn Antenna specification?	Yes(1) / No(0)	Section 4, Page 7	
Copy of the perpetual licence		Mandatory	Does the software system meet the minimum specification?	Yes(1) / No(0)	Section 1.21 and 1.22, Page 6	
Minimum of three (3) reference letters from clients to whom services have been provided within the last 5 years		Mandatory	Do the bidder's letters of reference demonstrate the bidder's ability to successfully provide services to, and support their clients?	Yes(1) / No(0)	Page 26	
Reference letters meet the minimum threshold of "Meets requirements"?		Mandatory	Does the due diligence conducted on written references and/or on contact details demonstrate that the bidder meets the minimum threshold?	Yes(1) / No(0)		

<b>BIDDER IS ABLE TO DELIVER THE SPECIFICATION?</b>	<b>YES - PASS TO PRICING</b>	<b>NO - DISQUALIFIED</b>
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## BIDDER NEEDS TO KNOW

### ACKNOWLEDGEMENT OF READING EACH PAGE

The bidder warrants by signature in this document that the bidder has read and accepts each page in this document including any annexures attached to this document.

### CENTRAL SUPPLIER DATABASE REGISTRATION

SARAO requests bidders to register on the Central Supplier Database and to include in their bid their Master Registration Number (Supplier Number) in order to enable SARAO to verify the supplier's tax status on the Central Supplier Database.

### CLARIFICATION

If the respondent wishes to clarify aspects of this request or the acquisition process, they write to the contact officials listed under the enquiries section above. SARAO distributes the response to a clarification request to all respondents that have communicated their intention to bid (i.e. briefing session attendance register) within two (2) working days of receipt of the query. SARAO does not provide the origin of the request to any party.

### RESPONSE PREPARATION COSTS

SARAO is not liable for any costs incurred by a bidder in the process of responding to this invitation, including on-site presentations.

### COUNTER PROPOSALS

No counter proposals are accepted.

### TWO ENVELOPE SYSTEM

SARAO, in the interests of transparent procurement, utilises the two-envelope system to minimise any form of price bias in the technical selection phase.

- a) All responses must be submitted in two sealed envelopes/boxes; the first envelop/box shall have the technical, compliance and BBBEE response and the second envelop/box shall only have the financial response. Bidders must ensure that they do not indicate any financial information in the first envelop/box.
- b) Bidders are required to package their response/Bid as follows:
  - **Envelope 1 part A: Bid Forms and Compliance Response**
  - **Envelope 1 part B: Technical Response (response to scope of work)**
  - **Envelope 2: Financial Quote**

### COLLUSION, FRAUD AND CORRUPTION

Any effort by the bidder to influence evaluation, comparisons, or award decisions in any manner will result in the rejection and disqualification of the bidder concerned.

### FRONTING

SARAO supports the spirit of broad-based black economic empowerment and recognises that achieving real empowerment is through individuals and businesses conducting themselves in accordance with the Constitution and in an honest, fair, equitable, transparent, and legally compliant manner. Against this background, SARAO condemns any form of fronting. SARAO's evaluation committee, in ensuring that bidders conduct themselves in an honest manner will, as part of their evaluation processes where applicable, conduct or initiate the necessary enquiries/investigations to determine the accuracy of the representation made in the bid documents. The onus is on the bidder to prove that fronting does not exist. Where SARAO's evaluation committee establishes a potential breach of this requirement, SARAO notifies the bidder of the potential breaches. Where the bidder fails to respond to the notification within a period of seven (7) days from date of notification, SARAO will invalidate the bid/contract. Such failure may result in the restriction of the bidder to conduct business with the public sector for a period not exceeding ten (10) years, in addition to any other remedies the NRF may have against the bidder concerned.

### DISCLAIMERS

SARAO has produced this document in good faith. The NRF, its agents, and its employees and associates do not warrant its accuracy or completeness. SARAO makes no representation, warranty, assurance, guarantee or endorsements to any provider/bidder concerning the document, whether with regard to its accuracy, completeness or otherwise. SARAO shall have no liability towards the responding service providers or any other party in connection

therewith.

## GENERAL DEFINITIONS

“B-BBEE” means broad-based black economic empowerment as defined in Section 1 of the Broad-Based Black Economic Empowerment Act;

“B-BBEE status level of contributor” means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment, issued in terms of Section 9(1) of the Broad-Based Black Economic Empowerment Act;

“Bid” means a written offer in a prescribed or stipulated form in response to an invitation by the National Research Foundation for the provision of goods or services, through price quotations, advertised competitive bidding processes or proposals;

“Broad-Based Black Economic Empowerment Act” means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);

“Contract” means the entire bid document inclusive of scope of work, specification, price conditions, price quote table, service delivery conditions, performance conditions with their key performance indicators, and general conditions when attached to the Standard Bidding Document 7 (SBD 7) which has been signed by the awarded bidder and the National Research Foundations;

“EME” means an Exempted Micro Enterprise in terms of a code of good practice on black economic empowerment issued in terms of Section 9 (1) of the Broad-Based Black Economic Empowerment Act;

“Functionality” means the ability of a bidder to provide goods and/or services in accordance with specifications as set out in these bid documents;

“Proof of B-BBEE status level of contributor” means:

- a. B-BBEE Status level certificate issued by an authorized body or person;
- b. A sworn affidavit as prescribed by the B-BBEE Codes of Good Practice;
- c. Any other requirement prescribed in terms of the B-BBEE Act.

“QSE” means a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of Section 9 (1) of the Broad-Based Black Economic Empowerment Act.

“Equipment” means the operational unit including spares, replacement components, consumables, sub-systems, firmware and software that delivers the specified output.

## GENERAL AND SPECIAL CONDITIONS OF CONTRACT

In this document words in the singular also mean in the plural and vice versa, words in the masculine mean in the feminine and neuter, words “department” means organs of state inclusive of public entities and vice versa, and the words “will/should” mean “must”.

The National Research Foundation cannot amend the National Treasury’s General Conditions of Contract (GCC). The National Research Foundation compiles separate Special Conditions of Contract (SCC) relevant to this bid where applicable supplementing the General Conditions of Contract. Where there is conflict, the provisions of the Special Conditions of Contract shall prevail.

<b>GCC 1</b>	<b>Definitions - The following terms shall be interpreted as indicated:</b>
1.1	“Closing time” means the date and hour specified in the bidding documents for the receipt of bids.
1.2	“Contract” means the written agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
1.3	“Contract price” means the price payable to the supplier under the contract for the full and proper performance of his contractual obligations.
1.4	“Corrupt practice” means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.
1.5	“Countervailing duties” are imposed in cases where an enterprise abroad is subsidized by its government and encouraged to market its products internationally.
1.6	“Country of origin” means the place where the goods were mined, grown, or produced, or from which the services are supplied. Goods produced when, through manufacturing, processing or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
1.7	“Day” means calendar day.
1.8	“Delivery” means delivery in compliance of the conditions of the contract or order.
1.9	“Delivery ex stock” means immediate delivery directly from stock actually on hand.
1.10	“Delivery into consignees store or to his site” means delivered and unloaded in the specified store or depot or on the specified site in compliance with the conditions of the contract or order, the supplier bearing all risks and charges involved until the supplies are so delivered and a valid receipt is obtained.
1.11	“Dumping” occurs when a private enterprise abroad market its goods on own initiative in the RSA at lower prices than that of the country of origin

	and which have the potential to harm the local industries in the RSA.
1.12	"Force majeure" means an event beyond the control of the supplier and not involving the supplier's fault or negligence and not foreseeable. Such events may include, but is not restricted to, acts of the purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
1.13	"Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any bidder, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the bidder of the benefits of free and open competition.
1.14	"GCC" mean the General Conditions of Contract.
1.15	"Goods" means all of the equipment, machinery, and/or other materials that the supplier is required to supply to the purchaser under the contract.
1.16	"Imported content" means that portion of the bidding price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or his subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs such as landing costs, dock dues, import duty, sales duty or other similar tax or duty at the South African place of entry as well as transportation and handling charges to the factory in the Republic where the supplies covered by the bid will be manufactured.
1.17	"Local content" means that portion of the bidding price, which is not included in the imported content if local manufacture does take place.
1.18	"Manufacture" means the production of products in a factory using labour, materials, components, and machinery and includes other related value-adding activities.
1.19	"Order" means an official written order issued for the supply of goods or works or the rendering of a service.
1.20	"Project site", where applicable, means the place indicated in bidding documents.
1.21	"Purchaser" means the organization purchasing the goods.
1.22	"Republic" means the Republic of South Africa.
1.23	"SCC" means the Special Conditions of Contract.
1.24	"Services" means those functional services ancillary to the supply of the goods, such as transportation and any other incidental services, such as installation, commissioning, provision of technical assistance, training, catering, gardening, security, maintenance and other such obligations of the supplier covered under the contract.
1.25	"Written" or "in writing" means handwritten in ink or any form of electronic or mechanical writing.
<b>GCC2</b>	<b>Application</b>
2.1	These general conditions are applicable to all bids, contracts and orders including bids for functional and professional services, sales, hiring, letting and the granting or acquiring of rights, but excluding immovable property, unless otherwise indicated in the bidding documents.
2.2	Where applicable, special conditions of contract are also laid down to cover specific supplies, services or works.
2.3	Where such special conditions of contract are in conflict with these general conditions, the special conditions shall apply.
<b>GCC 3</b>	<b>General</b>
3.1	Unless otherwise indicated in the bidding documents, the purchaser shall not be liable for any expense incurred in the preparation and submission of a bid. Where applicable a non-refundable fee for documents may be charged.
3.2	With certain exceptions (National Treasury's eTender website), invitations to bid are only published in the Government Tender Bulletin. The Government Tender Bulletin may be obtained directly from the Government Printer, Private Bag X85, Pretoria 0001, or accessed electronically from <a href="http://www.treasury.gov.za">www.treasury.gov.za</a>
<b>GCC 4</b>	<b>Standards</b>
4.1	The goods supplied shall conform to the standards mentioned in the bidding documents and specifications.
<b>GCC 5</b>	<b>Use of contract documents and information</b>
5.1	The supplier shall not, without the purchaser's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the supplier in the performance of the contract. Disclosure made to any such employed person is in confidence and shall extend only as far as may be necessary for purposes of such performance.
5.2	The supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC clause 5.1 except for purposes of performing the contract.
5.3	Any document, other than the contract itself mentioned in GCC clause 5.1 shall remain the property of the purchaser and shall be returned (all copies) to the purchaser on completion of the supplier's performance under the contract if so required by the purchaser.
5.4	The supplier shall permit the purchaser to inspect the supplier's records relating to the performance of the supplier and to have them audited by auditors appointed by the purchaser, if so required by the purchaser.
<b>GCC6</b>	<b>Patent rights</b>
6.1	The supplier shall indemnify the purchaser against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the goods or any part thereof by the purchaser.
<b>GCC7</b>	<b>Performance security</b>
7.1	Within thirty days (30) of receipt of the notification of contract award, the successful bidder shall furnish to the purchaser the performance security of the amount specified in SCC.
7.2	The proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete his obligations under the contract.
7.3	The performance security shall be denominated in the currency of the contract, or in a freely convertible currency acceptable to the purchaser and shall be in one of the following forms: 7.3.1 bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the purchaser's country or abroad, acceptable to the purchaser, in the form provided in the bidding documents or another form acceptable to the purchaser; or 7.3.2 cashier's or certified cheque.
7.4	The performance security will be discharged by the purchaser and returned to the supplier within thirty (30) days following the date of completion

	of the supplier's performance obligations under the contract, including any warranty obligations, unless otherwise specified in SCC.
<b>GCC8</b>	<b>Inspections, tests and analyses</b>
8.1	All pre-bidding testing will be for the account of the bidder.
8.2	If it is a bid condition that supplies to be produced or services to be rendered should at any stage during production or execution or on completion be subject to inspection, the premises of the bidder or contractor shall be open, at all reasonable hours, for inspection by a representative of the purchaser or an organization acting on behalf of the purchaser.
8.3	If there are no inspection requirements indicated in the bidding documents and no mention is made in the contract, but during the contract period, it is decided that inspections shall be carried out, the purchaser shall itself make the necessary arrangements, including payment arrangements with the testing authority concerned.
8.4	If the inspections, tests and analyses referred to in clauses 8.2 and 8.3 show the supplies to be in accordance with the contract requirements, the cost of the inspections, tests and analyses shall be defrayed by the purchaser.
8.5	Where the supplies or services referred to in clauses 8.2 and 8.3 do not comply with the contract requirements, irrespective of whether such supplies or services are accepted or not, the supplier shall defray the cost in connection with these inspections, tests, or analyses.
8.6	Supplies and services referred to in clauses 8.2 and 8.3 and which do not comply with the contract requirements may be rejected.
8.7	Any contract supplies may on or after delivery be inspected, tested or analysed and may be rejected if found not to comply with the requirements of the contract. Such rejected supplies are held at the cost and risk of the supplier who shall, when called upon, remove them immediately at his own cost and forthwith substitute them with supplies, which do comply with the requirements of the contract. Failing such removal the rejected supplies shall be returned at the suppliers cost and risk. Should the supplier fail to provide the substitute supplies forthwith, the purchaser may, without giving the supplier further opportunity to substitute the rejected supplies, purchase such supplies as may be necessary at the expense of the supplier.
8.8	The provisions of clauses 8.4 to 8.7 shall not prejudice the right of the purchaser to cancel the contract because of a breach of the conditions thereof, or to act in terms of Clause 23 of GCC.
<b>GCC9</b>	<b>Packing</b>
9.1	The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt, and precipitation during transit, and open storage. Packing, case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.
9.2	The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract, including additional requirements, if any, specified in SCC, and in any subsequent instructions ordered by the purchaser.
<b>GCC10</b>	<b>Delivery and Documentation</b>
10.1	Delivery of the goods shall be made by the supplier in accordance with the terms specified in the contract. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.
10.2	Documents submitted by the supplier specified in SCC.
<b>GCC11</b>	<b>Insurance</b>
11.1	The goods supplied under the contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in the SCC.
<b>GCC12</b>	<b>Transportation</b>
12.1	Should a price other than an all-inclusive delivered price be required, this shall be specified in the SCC.
<b>GCC13</b>	<b>Incidental services</b>
13.1	The supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC: 13.1.1 Performance or supervision of on-site assembly and/or commissioning of the supplied goods; 13.1.2 Furnishing of tools required for assembly and/or maintenance of the supplied goods; 13.1.3 Furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods; 13.1.4 Performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the parties, provided that this service shall not relieve the supplier of any warranty obligations under this contract; and 13.1.5 Training of the purchaser's personnel, at the supplier's plant and/or on-site, conducted in assembly, start-up, operation, maintenance, and/or repair of the supplied goods.
13.2	Prices charged by the supplier for incidental services, if not included in the contract price for the goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the supplier for similar services.
<b>GCC14</b>	<b>Spare parts</b>
14.1	As specified in SCC, the supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the supplier: 14.1.1 Such spare parts as the purchaser may elect to purchase from the supplier, provided that this election shall not relieve the supplier of any warranty obligations under the contract; and 14.1.2 In the event of termination of production of the spare parts: 14.1.2.1 Advance notification to the purchaser of the pending termination, in sufficient time to permit the purchaser to procure needed requirements; and 14.1.2.1 Following such termination, furnishing at no cost to the purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.
<b>GCC15</b>	<b>Warranty</b>
15.1	The supplier warrants that the goods supplied under the contract are new, unused, of the most recent or current models and that they incorporate all recent improvements in design and materials unless provided otherwise in the contract. The supplier further warrants that all goods supplied under this contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the purchaser's specifications) or from any act or omission of the supplier, that may develop under normal use of the supplied goods in the conditions

	prevailing in the country of final destination.
15.2	This warranty shall remain valid for twelve (12) months after the goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the contract, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise in SCC.
<b>SCC 15.2</b>	The warranty shall remain valid for twenty-four (24) months after the goods, or any portion thereof as the case may be, have been delivered to and accepted by SARAO.
15.3	The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.
15.4	Upon receipt of such notice, the supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective goods or parts thereof, without costs to the purchaser.
15.5	If the supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights, which the purchaser may have against the supplier under the contract.
<b>GCC16</b>	<b>Payment</b>
16.1	The method and conditions of payment to be made to the supplier under this contract shall be specified in SCC.
16.2	The supplier shall furnish the purchaser with an invoice accompanied by a copy of the delivery note and upon fulfilment of other obligations stipulated in the contract.
16.3	Payments shall be made promptly by the purchaser, but in no case later than thirty (30) days after submission of an invoice or claim by the supplier.
16.4	Payment will be made in Rand unless otherwise stipulated in SCC.
<b>GCC17</b>	<b>Prices</b>
17.1	Prices charged by the supplier for goods delivered and services performed under the contract shall not vary from the prices quoted by the supplier in his bid, with the exception of any price adjustments authorized in SCC or in the purchaser's request for bid validity extension, as the case may be.
<b>GCC18</b>	<b>Contract amendment</b>
18.1	No variation in or modification of the terms of the contract shall be made except by written amendment signed by the parties concerned.
<b>GCC19</b>	<b>Assignment</b>
19.1	The supplier shall not assign, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.
<b>GCC20</b>	<b>Subcontract</b>
20.1	The supplier shall notify the purchaser in writing of all subcontracts awarded under this contract if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the supplier from any liability or obligation under the contract
<b>GCC21</b>	<b>Delays in supplier's performance</b>
21.1	Delivery of the goods and performance of services shall be made by the supplier in accordance with the time schedule prescribed by the purchaser in the contract.
21.2	If at any time during performance of the contract, the supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the goods and performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, its likely duration, and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at his discretion extend the supplier's time for performance, with or without the imposition of penalties, in which case the extension shall be ratified by the parties by amendment of contract.
21.3	No provision in a contract shall be deemed to prohibit the obtaining of supplies or services from a national department, provincial department, or a local authority.
21.4	The right is reserved to procure outside of the contract small quantities or to have minor essential services executed if an emergency arises, the supplier's point of supply is not situated at or near the place where the supplies are required, or the supplier's services are not readily available.
21.5	Except as provided under GCC Clause 25, a delay by the supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of penalties, pursuant to GCC Clause 22, unless an extension of time is agreed upon pursuant to GCC Clause 21.2 without the application of penalties.
21.6	Upon any delay beyond the delivery period in the case of a supplies contract, the purchaser shall, without cancelling the contract, be entitled to purchase supplies of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any goods delivered later at the supplier's expense and risk, or to cancel the contract and buy such goods as may be required to complete the contract and without prejudice to his other rights, be entitled to claim damages from the supplier.
<b>GCC22</b>	<b>Penalties</b>
22.1	Subject to GCC Clause 25, if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, a sum calculated on the delivered price of the delayed goods or unperformed services using the current prime interest rate calculated for each day of the delay until actual delivery or performance. The purchaser may also consider termination of the contract pursuant to GCC Clause 23.
<b>GCC23</b>	<b>Termination for default</b>
23.1	The purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part: 23.1.1 If the supplier fails to deliver any or all of the goods within the period(s) specified in the contract, or within any extension thereof granted by the purchaser pursuant to GCC Clause 21.2; 23.1.2 If the supplier fails to perform any other obligation(s) under the contract; or 23.1.3 If the supplier, in the judgment of the purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the contract.
23.2	In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms and in such manner as it deems appropriate, goods, works or services similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods, works or services. However, the supplier shall continue performance of the contract to the extent not terminated.
23.3	Where the purchaser terminates the contract in whole or in part, the purchaser may decide to impose a restriction penalty on the supplier by prohibiting such supplier from doing business with the public sector for a period not exceeding 10 years.

23.4	If a purchaser intends imposing a restriction on a supplier or any person associated with the supplier, the supplier will be allowed a time period of not more than fourteen (14) days to provide reasons why the envisaged restriction should not be imposed. Should the supplier fail to respond within the stipulated fourteen (14) days the purchaser may regard the intended penalty as not objected against and may impose it on the supplier.
23.5	Any restriction imposed on any person by the Accounting Authority will, at the discretion of the Accounting Authority, also be applicable to any other enterprise or any partner, manager, director or other person who wholly or partly exercises or exercised or may exercise control over the enterprise of the first-mentioned person, and with which enterprise or person the first-mentioned person, is or was in the opinion of the Accounting Authority actively associated.
23.6	If a restriction is imposed, the purchaser must, within five (5) working days of such imposition, furnish the National Treasury, with the following information: 23.6.1 the name and address of the supplier and / or person restricted by the purchaser; 23.6.2 the date of commencement of the restriction 23.6.3 the period of restriction; and 23.6.4 the reasons for the restriction. These details will be loaded in the National Treasury's central database of suppliers or persons prohibited from doing business with the public sector.
23.7	If a court of law convicts a person of an offence as contemplated in sections 12 or 13 of the Prevention and Combating of Corrupt Activities Act, No. 12 of 2004, the court may also rule that such person's name be endorsed on the Register for Tender Defaulters. When a person's name has been endorsed on the Register, the person will be prohibited from doing business with the public sector for a period not less than five years and not more than ten (10) years. The National Treasury is empowered to determine the period of restriction and each case will be dealt with on its own merits. According to Section 32 of the Act the Register must be open to the public. The Register can be perused on the National Treasury website.
<b>GCC24</b>	<b>Anti-dumping and countervailing duties and rights</b>
24.1	When, after the date of bid, provisional payments are required, or anti-dumping or countervailing duties are imposed, or the amount of a provisional payment or anti-dumping or countervailing right is increased in respect of any dumped or subsidized import, the State is not liable for any amount so required or imposed, or for the amount of any such increase. When, after the said date, such a provisional payment is no longer required or any such anti-dumping or countervailing right is abolished, or where the amount of such provisional payment or any such right is reduced, any such favourable difference shall on demand be paid forthwith by the contractor to the State or the State may deduct such amounts from moneys (if any) which may otherwise be due to the contractor in regard to supplies or services which he delivered or rendered, or is to deliver or render in terms of the contract or any other contract or any other amount which may be due to him
<b>GCC25</b>	<b>Force Majeure</b>
25.1	Notwithstanding the provisions of GCC Clauses 22 and 23, the supplier shall not be liable for forfeiture of its performance security, damages, or termination for default if and to the extent that his delay in performance or other failure to perform his obligations under the contract is the result of an event of force majeure.
25.2	If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the force majeure event
<b>GCC26</b>	<b>Termination for insolvency</b>
26.1	The purchaser may at any time terminate the contract by giving written notice to the supplier if the supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.
<b>GCC27</b>	<b>Settlement of disputes</b>
27.1	If any dispute or difference of any kind whatsoever arises between the purchaser and the supplier in connection with or arising out of the contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.
27.2	If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the purchaser or the supplier may give notice to the other party of his intention to commence with mediation. No mediation in respect of this matter may be commenced unless such notice is given to the other party.
27.3	Should it not be possible to settle a dispute by means of mediation, it may be settled in a South African court of law.
27.4	Mediation proceedings shall be conducted in accordance with the rules of procedure specified in the SCC.
27.5	Notwithstanding any reference to mediation and/or court proceedings herein, 27.5.1 the parties shall continue to perform their respective obligations under the contract unless they otherwise agree; and 27.5.2 the purchaser shall pay the supplier any monies due the supplier.
<b>GCC28</b>	<b>Limitation of liability</b>
28.1	Except in cases of criminal negligence or wilful misconduct, and in the case of infringement pursuant to Clause 6; 28.1.1 the supplier shall not be liable to the purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the supplier to pay penalties and/or damages to the purchaser; and 28.1.2 the aggregate liability of the supplier to the purchaser, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.
<b>GCC29</b>	<b>Governing language</b>
29.1	The contract shall be written in English. All correspondence and other documents pertaining to the contract that is exchanged by the parties shall also be written in English.
<b>GCC30</b>	<b>Applicable law</b>
30.1	The contract shall be interpreted in accordance with South African laws, unless otherwise specified in SCC.
<b>GCC31</b>	<b>Notices</b>
31.1	Every written acceptance of a bid shall be posted to the supplier concerned by registered or certified mail and any other notice to him shall be

	posted by ordinary mail to the address furnished in his bid or to the address notified later by him in writing and such posting shall be deemed to be proper service of such notice.
31.2	The time mentioned in the contract documents for performing any act after such aforesaid notice has been given, shall be reckoned from the date of posting of such notice
<b>GCC32</b>	<b>Taxes and duties</b>
32.1	A foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the purchaser's country.
32.2	A local supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted goods to the purchaser.
32.3	No contract shall be concluded with any bidder whose tax matters are not in order. Prior to the award of a bid, the Department must be in possession of a tax clearance certificate, submitted by the bidder. This certificate must be an original issued by the South African Revenue Services
<b>GCC33</b>	<b>National Industrial Participation Programme</b>
33.1	The NIP Programme administered by the Department of Trade and Industry shall be applicable to all contracts that are subject to the NIP obligation.
<b>GCC34</b>	<b>Prohibition of restrictive practices</b>
34.1	In terms of Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, an agreement between, or concerted practice by, firms, or a decision by an association of firms, is prohibited if it is between parties in a horizontal relationship and if a bidder (s) is/are or a contractor(s) was/were involved in collusive bidding (or bid rigging).
34.2	If a bidder(s) or contractor(s), based on reasonable grounds or evidence obtained by the purchaser, has/have engaged in the restrictive practice referred to above, the purchaser may refer the matter to the Competition Commission for investigation and possible imposition of administrative penalties as contemplated in the Competition Act No. 89 of 1998.
34.3	If a bidder(s) or contractor(s), has/have been found guilty by the Competition Commission of the restrictive practice referred to above, the purchaser may, in addition and without prejudice to any other remedy provided for, invalidate the bid(s) for such item(s) offered, and/or terminate the contract in whole or part, and/or restrict the bidder(s) or contractor(s) from conducting business with the public sector for a period not exceeding ten (10) years and/or claim damages from the bidder(s) or contractor(s) concerned.

## PART B – PRICING

<b>PRICING CONDITIONS OF CONTRACT FOR THIS BID</b>	
Prices charged by the bidder for goods delivered and services performed under this contract shall not vary from the prices quoted by the bidder in the submitted bid with the exception of any price adjustments as authorised in the following price conditions.	
1.	<b>Compliant price calculation for price competition:</b> SARAO provides bidding estimates in the below Bid Price Schedule (SBD 3.2) to allow bidders to calculate an estimated total cost of ownership bid price that allows an equal comparison basis equitable to all bidders for award selection. By nature of this contract, the actual quantities are determined when placing each individual purchase order being issued under this contract.
2.	<b>Date of unit pricing:</b> All unit prices are quoted at the date of this bid.
3.	<b>Price Quotation Basis:</b> Unit prices are fully inclusive of all applicable taxes including 15% VAT, less all unconditional discounts, and all costs to deliver the services and/or goods to the specified price delivery point.
4.	<b>Quantity estimation:</b> The price schedule itemises quantities per annum. Where uncertainty of quantity, a minimum of one unit has been stated. Actual quantities are confirmed on the issued purchase orders
5.	<b>Quantity adjustments:</b> SARAO management of this project is dependent on available funding which drives the actual quantities that will be procured under this contract.
6.	<b>Contract Price:</b> The cumulative value of all purchase orders issued and paid for is the total value of the signed contract at the completion date of the contract, not the competition bid price.
7.	<b>Value Added Tax:</b> Pricing will be adjusted for any variation in the in Value Added Tax rate as gazetted.
8.	<b>Incidental services and spares not listed:</b> Pricing is agreed and confirmed by issue of a signed purchase order
9.	<b>Price Adjustment Rules:</b> SARAO will consider unit price variations in accordance with these rules: The appointed bidder provides detail reasons for the submitted price variations substantiated by evidence. For unit pricing from the OEM, the price must be stated in the OEM's currency with detail reasons for the price variation. For the agency's unit pricing, the price must be stated in rands with detail local reasons for the price variation. SARAO will negotiate on the submitted price variations. SARAO reserves the right to obtain

	three price quotes from the market to verify the submitted price variations are within such identified market price ranges.
10.	<b>Price adjustment dates:</b> Price adjustments excluding currency variations are allowed only at end of calendar year.
12.	<b>Contract Price Management during the contract:</b> SARAO issues written purchase orders authorising the deliverables of this contract as appendums to this contract. The purchase orders stipulate quantity, work description, delivery date, and the unit price in accordance with this contract. The NRF, when issuing the written purchase order, guarantees that the funding is available for the value of that purchase order.
14.	<b>Price Delivery Points are:</b> Reception, Old Times Media Building, 2 Fir Street, Black River Park North Entrance, Observatory, 7925, Cape Town
15.	<b>Application of Preference Points:</b> Pricing is subject to the addition of Preference Points where bidders have submitted a completed Standard Bidding Document 6.1 Preference claim form.

<h2 style="margin: 0;">BID PRICE SCHEDULE (SBD 3.2)</h2> <p style="margin: 0;">Submit pricing in separate envelope (stand-alone)</p>
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No	QTY	DESCRIPTION	UNIT PRICE	TOTAL (INCLUDEs VAT of 15%)
1	20m <sup>2</sup>	Radio Absorbing Material		
2	3	GPS Re-Radiating Antenna		
3	1	Horn Antenna		
4	1	GPS Simulator		
5	1	GPS Simulator Option – Calibration of PPS to GPS-on-point offset.		
6	1	GPS Simulator Option - GLONASS		
7	2	GPS Simulator Option - Scenario Generation Software		
8	1	GPS Simulator Option – L2		
<b>TOTAL BID PRICE INCLUSIVE OF 15% VAT</b>			R	

# PART C - RETURNS

<b>INVITATION TO BID (SBD 1)</b>			
<b>Bid number</b>		NRF SARAO STFR 001 2019	
<b>Closing date and time</b>		20 JANUARY 2020 at 11:00 AM	
The NRF recognises the date and time as recorded on its systems for closure purposes.			
<b>HIGH LEVEL SUMMARY OF BID REQUIREMENTS</b>			
SUPPLY AND DELIVERY OF A GPS SIGNAL SYSTEM			
<b>Number of ORIGINAL bid documents for contract signing</b>			2
<b>Number of EVALUATION copies (Mark pages as "Evaluation Copy" and number all pages sequentially):</b>		Two (2) SETS PDF document on a flash drive	
<b>TWO ENVELOPE SYSTEM</b>		YES	
<b>PRICE VALIDITY PERIOD FROM DATE OF CLOSURE</b>		One hundred and fifty (150) days	
<b>Bidding procedure enquiries are directed in writing to:</b>		<b>Technical information queries are directed in writing to:</b>	
Section	SCM	Section	Contract management
Contact person	Nolwazi Mthembu	Contact person	Johan Burger
E-mail address	<a href="mailto:nmthembu@ska.ac.za">nmthembu@ska.ac.za</a>	E-mail address	<a href="mailto:jburger@ska.ac.za">jburger@ska.ac.za</a>

<b>SUPPLIER INFORMATION</b>			
<b>Name Of Bidder</b>			
<b>Postal Address</b>			
<b>Street Address</b>			
<b>Telephone Number</b>			
Code		Number	
<b>Cell Phone Number</b>			
Code		Number	
<b>Facsimile Number</b>			
Code		Number	
<b>E-Mail Address</b>			

<b>VAT Registration Number</b>					
<b>Tax Compliance Status</b>	Tax Compliance System PIN		<b>OR</b>	Central Supplier Database No.	MAAA
<b>B-BBEE Status Level Verification Certificate</b>	Tick Applicable Box. <input type="checkbox"/> Yes <input type="checkbox"/> No		<b>B-BBEE Status Level Sworn Affidavit</b>	Tick Applicable Box. <input type="checkbox"/> Yes <input type="checkbox"/> No	
<b>[A B-BBEE status level verification certificate/sworn affidavit (for EMEs &amp; QSEs) must be submitted in order to qualify for preference points for B-BBEE – also refer to the SBD 6.1]</b>					
<b>Are you the accredited representative in South Africa for the goods/services/works offered?</b>		<input type="checkbox"/> Yes <input type="checkbox"/> No [If yes enclose proof]	<b>Are you a foreign-based supplier for the goods/services/works offered?</b>		<input type="checkbox"/> Yes <input type="checkbox"/> No [If yes, answer the questionnaire below]
Is the entity a resident of the Republic of South Africa (RSA)?					<input type="checkbox"/> Yes <input type="checkbox"/> No
Does the entity have a branch in the RSA?					<input type="checkbox"/> Yes <input type="checkbox"/> No
Does the entity have a permanent establishment in the RSA?					<input type="checkbox"/> Yes <input type="checkbox"/> No
Does the entity have any source of income in the RSA?					<input type="checkbox"/> Yes <input type="checkbox"/> No
Is the entity liable in the RSA for any form of taxation?					<input type="checkbox"/> Yes <input type="checkbox"/> No
If the answer is “No” to all of the above, then it is not a requirement to register for a tax compliance status system pin code from the South African Revenue Service (SARS).					
<b>BID SUBMISSION</b>					
1.	Bids must be delivered by the stipulated time to the correct address. Late bid will not be accepted for consideration.				
2.	All bids must be submitted on the officially provided forms provided – (not to be re-typed) or in the manner prescribed in the bid document.				
3.	This bid is subject to the specifications and special conditions of contract pertaining to this bid, the Preferential Procurement Policy Framework Act, 2000 and the Preferential Procurement Regulations, 2017, the General Conditions of Contract (GCC), and any other legislative requirements if applicable to this bid. These are included in this document thereby forming the contract between the NRF and the appointed/awarded bidder.				
4.	The successful bidder will be required to fill in and sign the contract signature form (SBD7) for this contract.				
<b>TAX COMPLIANCE REQUIREMENTS</b>					
1.	Bidder must ensure compliance with their tax obligations.				
2.	Where the bidder is registered on the Central Supplier Database (CSD), a CSD number must be provided				
3.	Bidders are required to submit their unique personal identification number (PIN) issued by SARS to enable the organ of state to verify the taxpayer’s profile and tax status. Application for tax compliance status (TCS) pin is made via e-filing through the SARS website <a href="http://www.sars.gov.za">www.sars.gov.za</a> .				
4.	Bidders may also submit a printed TCS certificate together with the bid, available via e-filing through the SARS website <a href="http://www.sars.gov.za">www.sars.gov.za</a> .				
5.	In bids where consortia/ joint ventures/ sub-contractors are involved, each party must submit a separate TCS certificate/PIN/CSD number.				
6.	No bids will be considered from persons in the service of the state, companies with directors who are persons in the service of the state, or close corporations with members’ persons in the service of the state.				

## SBD 4 - DECLARATION OF INTEREST WITH GOVERNMENT

Any legal person, including persons employed by the State (meaning any national or provincial department; national or provincial public entity; or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No. 1 of 1999); any municipality or municipal entity; provincial legislature; National Assembly or the National Council of Provinces; or National Parliament), 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:

- a. The Bidder is employed by the State; and/or
- b. 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, shareholder, member):

Registration number of company, enterprise, close corporation, partnership agreement:

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

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

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?  Yes  No

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

(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 including any business units of the National Research Foundation in the previous twelve (12) months?  Yes  No

If so, furnish particulars as an attached schedule	
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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If so, furnish particulars as an attached schedule	
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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If so, furnish particulars as an attached schedule	

## SBD 6.1 - PREFERENCE POINTS CLAIMED

**NB: BEFORE COMPLETING THIS FORM, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS, AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017.**

### 1. GENERAL CONDITIONS

1.1. The following preference point systems are applicable to all bids:

- 1.1.1. the 80/20 system for requirements with a Rand value of up to R 50 000 000 (all applicable taxes included); and
- 1.1.2. The 90/10 system for requirements with a Rand value above R 50 000 000 (all applicable taxes included)

The maximum points for this bid are allocated as follows:	<b>POINTS</b>
<b>PRICE</b>	80
<b>B-BBEE STATUS LEVEL OF CONTRIBUTION</b>	20
<b>TOTAL POINTS FOR PRICE AND B-BBEE MUST NOT EXCEED</b>	100

1.2. Failure on the part of a bidder to submit proof of B-BBEE Status level of contributor together with the bid will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

1.3. The purchaser reserves the right to require either of a bidder, before a bid is adjudicated or at any time subsequently, to substantiate any claim concerning preferences, in any manner required by the purchaser.

### 1.4. POINTS AWARDED FOR PRICE

THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

<b>80/20 :</b>	$P_s = 80 \left( 1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$	OR	<b>90/10 :</b>	$P_s = 90 \left( 1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$
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Where  $P_s$  = Points scored for price of bid under consideration  
 $P_t$  = Price of bid under consideration  
 $P_{\min}$  = Price of lowest acceptable bid

### 2. POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTOR

In terms of Regulation 6 (2) and 7 (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:

B-BBEE Status Level of Contributor	1	2	3	4	5	6	7	8	Non-compliant contributor 0
<b>Number of points (90/10 system)</b>	10	9	6	5	4	3	2	1	
<b>Number of points (80/20 system)</b>	20	18	14	12	8	6	4	2	

### 3. BID DECLARATION

Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:

**B-BBEE STATUS LEVEL OF CONTRIBUTOR CLAIMED IN TERMS OF PARAGRAPHS 1 AND 2**

B-BBEE Status Level of Contributor: = ..... (maximum of 10 or 20 points)

(Points claimed in respect of Paragraph 3 must be in accordance with the table reflected in Paragraph 2 and must be substantiated by relevant proof of B-BBEE status level of contributor.

**SUB-CONTRACTING**

Will any portion of the contract be sub-contracted?

(Tick applicable box)

YES		NO	
-----	--	----	--

If yes, indicate:

1. What percentage of the contract will be subcontracted.....%
2. The name of the sub-contractor.....
3. The B-BBEE status level of the sub-contractor.....
4. Whether the sub-contractor is an EME or QSE

(Tick applicable box)

YES		NO	
-----	--	----	--

Specify, by ticking the appropriate box, if subcontracting with an enterprise in terms of Preferential Procurement Regulations, 2017:

Designated Group: An EME or QSE which is at last 51% owned by:	EME	QSE
	√	√
<b>Black people</b>		
<b>Black people who are youth</b>		
<b>Black people who are women</b>		
<b>Black people with disabilities</b>		
<b>Black people living in rural or underdeveloped areas or townships</b>		
<b>Cooperative owned by black people</b>		
<b>Black people who are military veterans</b>		
<b>OR</b>		
<b>Any EME</b>		
<b>Any QSE</b>		

**DECLARATION WITH REGARD TO COMPANY/FIRM**

Name of company/firm: .....

VAT registration number: .....

Company registration number:.....

**TYPE OF COMPANY/ FIRM**

- Partnership/Joint Venture/Consortium
- One person business/sole proprietor
- Close corporation
- Company
- (Pty) Limited

[TICK APPLICABLE BOX]

DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

.....  
 .....

**COMPANY CLASSIFICATION**

- Manufacturer

- Supplier
- Professional service provider
- Other service providers, e.g. transporter, etc.

[TICK APPLICABLE BOX]

Total number of years the company/firm has been in business: .....

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 contributor indicated in Paragraphs 1 and 3 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I/we acknowledge that:

1. The information furnished is true and correct;
2. The preference points claimed are in accordance with the General Conditions as indicated in Paragraph 1 of this form;
3. In the event of a contract being awarded as a result of points claimed as shown in Paragraphs 1 and 3, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
4. If the B-BBEE status level of contributor 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 –
  - (a) disqualify the person from the bidding process;
  - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
  - (c) 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;
  - (d) recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury 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
  - (e) Forward the matter for criminal prosecution.

### SBD 8 - DECLARATION OF BIDDER'S PAST SCM PRACTICES

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:	<input type="checkbox"/> Yes <input type="checkbox"/> No
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:	<input type="checkbox"/> Yes <input type="checkbox"/> No
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:	<input type="checkbox"/> Yes <input type="checkbox"/> No
Was any contract between the Bidder and any NRF terminated during the past five years because of failure to perform on or comply with the contract? If Yes, furnish particulars as an attached schedule:	<input type="checkbox"/> Yes <input type="checkbox"/> No
The Database of Restricted Suppliers and Register for Tender Defaulters resides on the National Treasury's website ( <a href="http://www.treasury.gov.za">www.treasury.gov.za</a> ) and can be accessed by clicking on its link at the bottom of the home page.	

### SBD 9: CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the signatory to this document, 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;

<p>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;</p>
<p>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:</p> <ol style="list-style-type: none"> <li>Has been requested to submit a Bid in response to this Bid invitation;</li> <li>Could potentially submit a Bid in response to this Bid invitation, based on their qualifications, abilities or experience; and</li> <li>Provides the same goods and services as the Bidder and/or is in the same line of business as the Bidder</li> </ol>
<p>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 (meaning an association of persons for combining their expertise, property, capital, efforts, skill, and knowledge in an activity for the execution of the bid) will not be construed as collusive bidding.</p>
<p>In particular, without limiting the generality of paragraphs above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:</p> <ol style="list-style-type: none"> <li>Prices;</li> <li>Geographical area where product or service will be rendered (market allocation);</li> <li>Methods, factors or formulas used to calculate prices;</li> <li>The intention or decision to submit or not to submit, a Bid;</li> <li>The submission of a Bid which does not meet the specifications and conditions of the Bid; or</li> <li>Bidding with the intention not to win the Bid.</li> </ol>
<p>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.</p>
<p>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 the bid or to the signing of the contract.</p>
<p>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</p>

## REFERENCE LETTER FORMAT FOR BIDDER

<b>Referee Legal Name:</b>			
<b>Company:</b>			
<b>Bid Number:</b>	NRF SARAO STFR 001 2019		
<b>Bid Description:</b> SUPPLY AND DELIVERY OF A GPS SIGNAL EQUIPMENT			
Describe the service/work the above bidder provided to you below			
Criteria/Risks	Below requirements	Meets requirements	Exceeds requirements
Professionalism in dealing with service provider; was service provider helpful, always available to assist			
Delivery of goods – Was the good delivered timeously, undamaged from original packaging			
Turnaround time when service repair calls logged			
Satisfaction with support rendered; did it solve the problem experienced			
Overall Impression	Other comments		
Approximate value of contract			
Would you use the provider again?			<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>Completed by:</b>			
<b>Signature:</b>			
<b>Company Name:</b>			
<b>Contact Telephone Number:</b>			
<b>Date:</b>			

## ANNEXURES – ATTACHED AT END OF DOCUMENT

Annexure Number	Annexure Title

### BID SIGNATURE (SBD 1)

I hereby undertake to supply all or any of the goods, works, and services described in this procurement invitation to the NRF in accordance with the requirements and specifications stipulated in this Bid Invitation document at the price/s quoted. I confirm that I have satisfied myself as to the correctness and validity of my offer/bid in response to this Invitation, cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk. My offer remains binding upon me and open for acceptance by the NRF during the validity period indicated and calculated from the closing time of Bid Invitation. I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me in terms of this Bid Invitation as the principal liable for the due fulfilment of the subsequent contract if awarded to me.

I declare that during the bidding period did not have access to any NRF proprietary information or any other matter that may have unfairly placed our bid in a preferential position in relation to any of the other bidder(s).

I confirm that I am duly authorised to sign this offer/ bid response.

**NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.**

**SIGNATURE OF BIDDER:**

**CAPACITY UNDER WHICH THIS BID IS SIGNED** (Proof of authority must be submitted e.g. company resolution)