



**National
Research
Foundation**

INVITATION TO BID

Procurement of a service provider for the supply, delivery, calibration and technical support of various meteorological equipment, components and spare parts as well as technician training for a period of 5 years		
Bidder Name:		
Number:	NRF/SAEON EFTE/58/2022-23 B	
Closing Date	02 May 2024	
Closing Time:	11:00 am	
Compulsory Briefing Session Link:	MET Equipment Compulsory briefing session https://meet.google.com/kgm-btnt-hmp	
Date	19 April 2024	
Time:	11:00AM	
Contact Person:	Nosipho Nyauza	
Electronic Bid Submission Email Address	Size of the email (document): 20MB tenders@saeon.nrf.ac.za	
Bids Naming	Split documents into: 1. Technical offering 2. Pricing/quote - password protected	
Enquiries are directed in writing to:		
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INTRODUCTION

INTRODUCTION TO THE NRF

The National Research Foundation Act as amended, Act 19 of 2018, establishes the National Research Foundation (“NRF”) as the juristic legal entity that will contract with the awarded bidder. Please visit the NRF website (<https://www.nrf.ac.za>) for more information.

BACKGROUND TO SAEON

The South African Environmental Observation Network (SAEON) is a business unit of the National Research Foundation (NRF). SAEON is a multi-disciplinary organization which promotes and supports research through funding, human resources development and provision of necessary facilities to facilitate the creation of knowledge, innovation, and development in all fields of research, including indigenous knowledge, and thereby to contribute to the improvement of the quality of life of all the people of the republic and Southern Africa. Further information about SAEON can be found on www.saeon.ac.za

THE NEED FOR THIS PROCUREMENT WITHIN SAEON

Meteorological observation is a core function of SAEON’s observation network that involves all terrestrial and coastal Nodes. SAEON has a need to maintain its current network of weather stations as well as plan ahead for future needs and expansion. The development of three new long-term research infrastructures, which form part of SAEON, namely the Shallow Marine & Coastal Research Infrastructure (SMCRI), the Expanded Freshwater and Terrestrial Observation Network (EFTEON) and the South African Polar Research Infrastructure (SAPRI) require significant investment in equipment, training and calibration in the field of meteorological observation.

SAEON seeks a long-term partner for parts supply, technical support and technician training.

THE REQUIREMENTS OF THIS BID

SAEON requires the following goods and services from a supplier over a five-year period with the option to extend by a further two years

- New instruments/components that allows us to meet targets for new weather station installations
- New spare parts for ongoing servicing, maintenance and repairs
- Professional training by qualified in-house staff or instrument manufacturers for our technicians and scientists
- Professional technical support by qualified in-house staff (via phone, WhatsApp, email and in person when necessary)
- Calibration equipment and services

- Delivery of orders countrywide (see destination list under specifications)

PART A – BID REQUIREMENTS

EQUIPMENT AND/OR SERVICES REQUIREMENT SPECIFICATIONS

SAEON intends to service our existing climate monitoring network and assemble new customised weather stations by drawing on a catalogue of components as set out below. **For quoting purposes it is required that bidders list ALL components including service components/consumables as outlined in OEM instrument manuals for each of the items listed below.** Due to the fact that service components differ according to instruments offered by bidders, it is impossible for SAEON to stipulate a complete list of service components a priori. We have provided an annexure for bidders to provide these details.

It should however be noted that all sensors offered must be able to integrate with SAEON's existing infrastructure (based on Campbell Scientific CR1000, CR1000X and CR300 data loggers) as well as any loggers offered by bidders.

For instruments, service components and training listed below bidders are required to be stockists and OEM certified/authorised for technical competency.

Bidders are required to supply an address where SAEON may visit your workshops to see stock and technical competence. Please insert that address on the lines below:

.....
.....

Please **submit a list of warranties offered** that covers each of the instruments which have a warranty specification below.

Please also ensure that you submit brochures and/or manuals and/or website links that cover each individual instrument for which technical specifications are listed below. Refer to the Evaluation Criteria list starting on Page 33 to see what is **MANDATORY**.

To ensure that SAEON can conduct a proper technical evaluation, please ensure that **ALL MANDATORY** specifications are supported by brochures and/or manuals and/or website links.

New instruments/components:

1. Rainfall/precipitation

Rainfall/precipitation gauges must have: Resolution <0.255 mm/tip

- Orifice (funnel) 14 cm or more
- Operating temperature range 0 to 50°C
- Accuracy better or equal to 1% in events up to 50 mm/hour
- Bird spikes (Only required for some localities included for estimate purposes)
- 4 m cable
- 1 year warranty minimum

2. Integrated air temperature and surface water vapour/humidity

Air temperature sensors must have:

- Operating range -40 to 60°C or wider
- Resolution 0.1°C (K) (GCOS std)
- Accuracy >0.4°C (between 5 to 40°C)
- Field replaceable sensor element
- 3 m cable
- 1 year warranty minimum

Surface water vapour/humidity sensors must have:

- Operating range 0-100%
- Resolution 1% RH (GCOS Std)
- Accuracy 3% at (10-90% range)
- Radiation shield to house the air temperature & humidity sensor(s) and mounting hardware
- 1 year warranty minimum

3. Wind speed and direction sensors

We require two types of wind sensor

3.1. High Velocity Anemometer & Wind Direction Sensor (Gill Windsonic 75 or equivalent) must have:

- Range 0-75 m/s
- Wind speed accuracy $\pm 2\%$ or better
- Threshold ≤ 0.5 m/s
- Wind direction Range 0-360°
- Resolution: 0.01m/s (speed); 1° (direction)
- Temperature Range: -30°C to 70°C
- Ability to withstand salt spray
- Sampling frequency: 0.25 - 4.00 Hz
- 1 year warranty minimum

3.2 Lower Velocity Anemometer & Wind Direction Sensor must have:

- Range 0-50 m/s
- Accuracy ± 0.5 m/s
- Threshold ≤ 0.5 m/s
- Wind direction Range 0-360°
- 1 year warranty minimum

4. Radiation sensors

4.1. Four component net radiometer - ISO 9060 - Class C must have:

- Composed of pyranometer pair for measuring incoming and outgoing shortwave radiation
- Composed of a pyrgeometer pair for measuring incoming and outgoing long wave radiation
- Short wave spectral range -0.3 to 2.8 μm
- Long wave spectral range -4.5 to 42 μm
- Sensitivity: 5 to 20 $\mu\text{V}/\text{W}/\text{m}^2$
- Temperature dependence of sensitivity (-10 to 40°C) <4 %
- Response time must be 19 seconds or quicker
- Non-linearity <1 %
- Operating temperature -40 to 80°C
- 1 year warranty minimum

4.2. Integrated net radiometer must have:

- Low maintenance requirements (lens cleaning only)
- Spectral range 0.2 to 100.0 μm
- Measurement Range: $\pm 2000 \text{ W m}^{-2}$
- Sensitivity 10 $\mu\text{V}/\text{W}/\text{m}^2$
- Response time <20 s
- Operational temperature range -30 to 70°C
- Integrated levelling bubble
- 1 year manufacturer's warranty minimum

4.3. Pyranometer - ISO 9060 - Class C must have:

- Spectral range 300 to 2800 nm
- Sensitivity: 10 to 32 $\mu\text{V}/\text{W}/\text{m}^2$
- Response time 20 s or less
- Temperature dependence of sensitivity (-10 to 40°C) <4 %
- Operational temperature range -40 to 80°C
- Maximum solar irradiance 2000 W/m^2
- Field of view 180°
- Integrated levelling bubble
- 1 year manufacturer's warranty minimum

4.4. Total UV Radiometer must have:

- Spectral range 280 to 400 nm
- Sensitivity: 300 - 500 $\mu\text{V}/\text{W}/\text{m}^2$
- Temperature response <-0.3% per °C
- Response time (95%) <1 s
- Maximum UVA/UVB irradiance 400 W/m^2
- Operational temperature range -40 to 80°C
- Field of view 180 °
- Integrated levelling bubble

- 1 year manufacturer's warranty minimum

4.5. Photosynthetically Active Radiation sensor:

- Uniform sensitivity at wavelengths between 400-700 nm
- Calibration: $\pm 5\%$ traceable to the U.S. National Institute of Standards and Technology (NIST)
- Sensitivity: 5 μA to 10 μA per 1,000 $\mu\text{mol s}^{-1} \text{m}^{-2}$
- Response Time: Less than 1 μs
- Temperature Dependence: $\pm 0.15\%$ per $^{\circ}\text{C}$ maximum
- Tilt: No error induced from orientation
- Operating Temperature Range: -40 to 65°C
- Relative Humidity Range: 0% to 100% RH, Non-Condensing
- 1 year manufacturer's warranty minimum

Radiation sensor hardware for levelling and mounting to cross arms for all radiation sensor types above

5. Air pressure sensor/Barometer (Vaisala PTB110 or equivalent):

- Range 650-1060 hPa or better
- Accuracy ± 0.4 hPa or better
- Operational temperature range -40 to 60°C
- NIST or SANAS traceable calibration certificate
- 1 year warranty minimum

6. Soil moisture sensors:

- Operate on time domain principle with sensitivity to dielectric permittivity
- Maximum rod/waveguide length: 30 cm
- Power consumption: Maximum of 70 mA when taking measurements and 50 μA when not
- Optional cable lengths up to 100 m or more
- Low variability between probes - less than 2% in saturated soil
- Precision $< 0.1\%$
- Accuracy $< 3\%$ error within the 5-50% volumetric water content range
- 1 year warranty minimum

7. Integrated soil moisture, soil temperature and soil electrical conductivity sensors:

Soil moisture specifications

- Moisture measurements must use time domain principle with sensitivity to dielectric permittivity
- Maximum rod/waveguide length: 15 cm
- Moisture range capability: 5-50% volumetric water content
- Precision $< 0.1\%$
- Accuracy $< 5\%$ error

Soil temperature specifications

- Measurement range of -10 to 70°C or wider
- Accuracy $< 1^{\circ}\text{C}$ error

- Precision <0.5°C error

Soil electrical conductivity specifications

- Bulk EC range: 0 to 8 dS m⁻¹
- Accuracy <5% error of readings greater than 1 dS m⁻¹
- Precision <1% error of bulk EC reading

General specifications:

- Optional cable lengths up to 100 m or more
- Interface using SDI-12 and/or Serial RS232
- Power consumption: Maximum of 50 mA when taking measurements and 150 µA when not (when powered by 12 Vdc)
- 1 year warranty minimum

8. Soil/ground level temperature sensors:

- Thermistor based design
- Measurement range of -50 to 70°C or wider
- Optional cable lengths up to 100 m or more
- Submersible to 10 m or more
- 1 year warranty minimum

9. Leaf wetness sensors:

- No calibration required
- Must be able to detect trace amounts of water or ice
- Operating Temperature Range –10 to 60 °C or wider
- Low power consumption (maximum of 8 mA at 5 Vdc)
- Optional cable lengths (minimum 5 m)
- 1 year manufacturer's warranty minimum

10. Data loggers:

General specifications for all data loggers:

- Operate on 12 Vdc power supply
- Suitable for extreme, dusty & humid environments
- Operating range of -30 to 65°C or wider
- Data logger clock, memory and programmes supported by independent onboard power supply to prevent loss during power failure
- Individually configurable/programmable input/output channels to accommodate custom weather station programmes
- Equipped with interfaces that allow data transmission with the aid of GSM, satellite and radio modems.
- Allow bi-directional communication with a laptop/tablet via USB, Mini USB, Micro USB or serial 9 pin RS232 port

10.1. Type 1 data loggers:

- Must be compatible with all sensors listed above
- Must have at least 16 single-ended / 8 differential (individually configured) inputs with the option of increasing number of channels with a multiplexer
- Equipped with 10 channels that can be configured as pulse counters
- Equipped with 4 voltage excitation channels
- Have at least 4 MB of battery backed up SRAM for CPU
- Have at least 70 MB flash memory, expandable.
- Equipped with microSD slot or other expanded storage potential
- Power consumption <60 mA at scan rate of 20 Hz with 12 Vdc
- Include a minimum of a 1 year manufacturer's warranty

10.2. Type 2 data loggers:

- Must have at least 6 single ended / 3 differential channels that can be individually configured as well as at least 8 pulse count channels, two voltage excitation ports and one switched 12 V port.
- Maximum power consumption of <25 mA at 12 Vdc
- 80 MB serial flash for CPU or more
- Must be compatible with wind, rain, temperature and humidity sensor as well as pressure transducer sensors (suitable for measures from SDI-12 sensors, pulse sensors and 4 to 20 mA sensors)
- Include a minimum of a 1 year manufacturer's warranty

11. Multiplexer/channel expansion module

- Must be compatible with type 1 and type 2 loggers mentioned above
- Must be compatible with thermocouples, soil moisture sensors, thermistors, potentiometers
- Able to accommodate up to 32 two wire single ended or differential sensors or 16 four wire sensors.
- Able to accommodate at least 35 soil moisture sensors when using common voltage supply
- Must consume less than 10 mA when active
- 1 year warranty minimum

12. Lightning sensors (Climavue 50 or similar)

Lightning sensors must form part of stand alone weather stations or be able to be incorporated in custom weather stations and meet the following specifications:

Lightning strike detection specifications

- Measurement range up to 65000
- Measurement resolution must be 1 strike
- Must have a detection rate >25% for strikes that are <10 kilometres away

Lighting distance specifications

- Must be able to detect lightning up to 40 km away
- Must be able to classify lightning in with 3 km distance resolution or better

- Must be compatible with Type 1 and Type 2 data loggers specified above

General specifications

- 1 year warranty.

13. Masts and tripods

SAEON requires tripod and straight pole type masts for weather stations. These should be listed separately but both options must meet the following criteria:

Please include specification and/or design drawings and/or web links that describe your offering as required for evaluation

13.1. Tripod masts and 13.2 Straight pole masts

- Must be lightweight (less than 30 kg)
- Must have a vertical load bearing capability of more than 50 kg
- Must be 3 m tall
- Must be equipped with lightning conductor, suitable ground cable and ground spike(s)
- Must include fixings/brackets to attach guy wires/ropes
- Must be capable of withstanding winds of up to 50 m/s when secured with guy wires
- Must be made of hard wearing, rust resistant material such as stainless steel (suitable for coastal environments with ocean spray)
- 1 year warranty minimum

14. Enclosures, cross arms & mounting hardware

- Enclosures should be lightweight, water tight (waterproof rating - IP66 and include wire glands to seal the enclosure) and large enough to accommodate the battery, logger, modem and wiring configurations offered
- Cross arms should be lightweight (ideally aluminium) and 1.5 - 2 meters long to accommodate radiation sensors and wind sensors at 2 m height above ground
- Mounting hardware for all sensors, cross arms, enclosures, solar panels and other ancillaries should be included to allow for secure attachment to the masts offered.

15. Communications systems

- Modems are required for GSN network connectivity as well as satellite connectivity
- Must include associated cables for logger attachment, modem configuration and signal strength testing
- Must include directional antennas with cables 5 -10 m in length
- Logger/modem setup must allow for communication with more than one server
- Logger/modem setup must be configurable to allow supplier's technical support team to connect to stations for assistance with troubleshooting
- 1 year warranty minimum

16. Power supply components

- 20 Watt solar panels are required
- Solar panels must have wiring 3 m in length
- Solar charge controllers/regulators that regulate charge to <16 V are required
- 12 Ah sealed rechargeable batteries
- 7 Ah - 9 Ah Lithium Iron Phosphate (LiFePo4) batteries

17. Other equipment not yet determined

There may be equipment that is needed but has not been identified in the listing above.

Should alternate or additional equipment be needed, this may be added to the scope of the contract after negotiations and a review of the reasonableness of the price offered.

Should the equipment be required through a third party, the partner may act as a procurement agent.

18. Training

SAEON Technical staff require professional training in the principles, operations, maintenance, calibration and troubleshooting of all equipment provided with this contract. Certification of levels of training completed is also required.

Trainer qualifications/experience:

To ensure quality of training, **it is MANDATORY (refer to evaluation criteria, page 36 & 37) for bidders to provide proof of OEM certification and experience of their trainer(s).**

Please submit proof of any/all OEM certification that has been done.

Please also include details of previous course(s) that the trainer has led on the topics required by SAEON and number of times the trainer has led a course within the last five years.

Training course contents/topics:

Training course topics and contents are listed below. Variations on the themes or different combinations of topics are acceptable and will be discussed with the successful bidder but **ALL topics MUST be covered.**

Annexure 3 is provided as a checklist for bidders to record what training their company offers.

The end result must be that designated staff are able to operate and maintain all of the instrumentation and data acquisition systems offered.

Bidders are required to **provide a rate per person per day** for introductory and advanced level training courses that cover the following components.

- Loggers and Data acquisition
 - Basic logger introduction (possibly combined with the basic Met instrument maintenance)
 - Logger requirements & maintenance
 - Basic logger programming/configuration for a weather station

- Wiring - sensor and loggers
 - Basic program editing
 - Data downloads/transfer
 - Troubleshooting common issues
- Advanced data logger applications
 - Advanced instrument control
 - Advanced programming - writing custom programmes
- Advanced data management applications
 - Automated data downloads
 - Communications between servers and field stations
 - Web interface development (where logger software allows)
- Meteorological Instrumentation
 - Basic meteorological instrument setup and maintenance
 - Tipping bucket rain gauge
 - Temperature/Relative humidity sensor
 - Wind sensors
 - Radiation sensors
 - Wiring considerations on site
 - Basic remote communications setup and testing
 - Power supply considerations
 - Troubleshooting common issues
 - Basic meteorological instrument problem identification, repair and calibration
 - Tipping bucket rain gauge
 - Temperature/Relative humidity sensor
 - Wind sensors
 - Radiation sensors
 - Remote communication
 - Power supply
 - Instrument wiring repairs/extensions
 - Advanced troubleshooting
 - Advanced remote communications troubleshooting
 - Advanced power supply troubleshooting

19. Calibration equipment

Specialist equipment for the calibration of some instruments is required as SAEON intends to perform certain calibration checks in-house. This includes the following:

19.1 Wind sensor calibration checks and calibration tools

- Calibration tools must be compatible with anemometer and wind vane type sensors (specified above)
- Anemometer minimum torque threshold verification tool
- Anemometer drive, allowing calibration at multiple speeds
- Wind vane torque threshold verification tool
- Wind vane alignment tool for verification of alignment in situ on the mast/tower
- Wind vane alignment tool for verification of alignment in a lab setting

19.2 Rain calibrator

- Must be capable of dripping a sample volume of water at a constant rate
- Must be capable of performing calibrations at rates up to 50mm/hour

○ Must be able to fit within the standard rain gauge orifice specified above
19.3 Portable Transfer Standard for Temperature, Pressure and Humidity, (such as the Vaisala PTB330TS or equivalent)

- Must be field portable and weigh less than 6.5 kg to allow easy transport by technicians on foot in rough terrain.
- Must be rugged/housed in a protective case
- Must be battery operated, rechargeable and have a battery life >10 hours during continuous use
- Must have a hand held indicator/screen for viewing real time measurement values in the field and also the ability to log and transfer data
- Must be capable of the following calibration standards:

Barometric pressure

- Range 650-1080 hPa (or wider)
- Accuracy across temperature operating range better than or equal to 0.15 hPa
- Repeatability of 0.05 hPa or better
- NIST or SANAS traceable (provision of NIST or SANAS calibration certificate)

Humidity

- Range 0-100% RH
- Accuracy better than or equal to 1% (0-90% range)
- Calibration uncertainty better than or equal to 1% (0-90% range)
- Response time <2 minutes

Temperature

- Range -10 to 40°C
- Accuracy better than 0.2°C (Range 10 to 40°C)
- Response time < 1 minute
- Calibration certificate traceable to NIST or SANAS accredited laboratory with applicable accreditation

20. Consumables/service components

Different components of a weather station and calibration instruments have different maintenance/service requirements. Without knowing exactly what instruments bidders will offer, it is impossible to describe service/consumable requirements in detail. **Bidders are therefore required to provide a list of consumables/service parts required for EACH COMPONENT/SENSOR/CALIBRATION TOOL where appropriate and quote on these in an itemised list.**

Annexure 1 is provided as a checklist for bidders to record parts, prices and links to supporting materials

Based on previous experience, this may include:

- Logger enclosure desiccant

- Radiation sensor desiccant
- Wind sensor bearings
- Anemometer cups
- Wind vanes
- Sensor elements (where these are field replaceable)
- Sensor filters
- Logger internal batteries
- Brackets & other hardware for attachment of sensors to crossarms/masts (**please list individually**)
- Consumables/filters/service parts for the temperature/humidity/pressure transfer standard kit
- Cabling for all offered instruments (**please list price per meter**)
- Drying cartridges for radiation and other sensors as required

Additional consumable items and service parts may be added to the list that is initially agreed in the contract subject to negotiation and verification that the prices are reasonable.

21. Software

Specialist software for the operation of a weather station network is required and must allow for the following:

- Data logger setup/configuration
- Generating custom programmes
- Viewing wiring instructions/diagrams
- Direct and remote connection and data downloading
- Basic review applications and graphing of data
- Scheduled data collection and allocation to a server
- Logger and communication diagnostics

Bidders should stipulate whether subscriptions and/or paid updates are involved and list the cost of these in the quote if applicable.

22. Technical support

Due to the complex technical nature of maintaining an instrument network, SAEON technical staff sometimes require assistance with setup, configuration and troubleshooting of weather station equipment. Remote working conditions mean that this often requires the ability for SAEON technicians to make a phone call or send a text message to a qualified technical support person (preferably the OEM or trained by the OEM where possible) and receive a response within an hour or two while our technicians are on site.

SAEON requires the following:

- Qualified technical support staff available by phone (contact details to be provided upon contract signature)
- Qualified technical support staff must be able to assist with:
 - Logger program setup and debugging
 - Custom wiring
 - Troubleshooting
 - Instrument damage evaluation and repairs

- In person training where necessary

SAEON is aware based on previous experience that free technical support from the OEM is the norm when instruments such as those listed above are purchased. **If this is NOT the case, or where bidders charge any additional fees for technical support, please list these in the pricing section. Note that SAEON reserves the right to seek technical support elsewhere.**

Bidders' technical support capability will be evaluated by reviewing case studies of support provided by the bidder.

Bidders must submit five case studies within the last three years where remote technical assistance was provided. Case studies will be reviewed as references and therefore must include:

- Name of company/customer
- Name of contact person to whom service was provided
- Current contact details of the customer (phone number and email)
- Date(s) of support provision
- Name and title/position of bidder's technical support staff member
- Technical support staff signature
- Brief description of the nature of the problem
- Outcome/result of the technical support intervention

A template for capturing bidder responses is provided as **Annexure 3**.

As part of the bid evaluation, SAEON may contact the companies/persons provided and conduct a customer satisfaction survey as follows:

- Customer satisfaction with outcome, score 1-5 (where 1 is poor and 5 is excellent)
- Customer satisfaction with response time, score 1-5 (where 1 is poor and 5 is excellent)

23. Delivery

- Delivery may be required to the following regions. The destinations will be made available upon placing of orders and may include locations within the following towns and cities:
 - Pietermaritzburg
 - St Lucia
 - Winterton
 - Skukuza
 - Phalaborwa
 - Acornhoek
 - Hoedspruit
 - Pretoria
 - Kimberley
 - Gqeberha
 - Cape Town
 - George

- Delivery may also be required in support of the South African Polar Research Infrastructure (SAPRI) consortium. This will be agreed on a transaction basis. At times, transport may be provided by SAEON or one of the consortium partners.
- Where transport is the responsibility of the service provider, costs will be listed as a line item on the invoice and incorporated in the total cost by the bidder.
- Orders may also occasionally be collected by SAEON if/when/where this is feasible at SAEON's discretion.

24. Incidental shipping services

Occasionally it may be required to ship components to OEMs overseas for repairs and/or calibration. The supplier, being an authorised distributor or subsidiary, is expected to facilitate these jobs and take care of international shipping. For this purpose bidders should include a line item for incidental expenses to the value of R300 000.00 for international shipping purposes over the duration of the contract.

BIDDER REQUIREMENTS

- 1 Provide detailed requirements to evaluate the bidder's ability to deliver on the bid.**
 - 1.1 Bidders must provide the requisite documents that substantiate their responses to these specifications.
- 2 Ethical requirements**
 - 2.1 The bidder must confirm that there are no interests with the NRF, has clean business practices, and has determined its bid independently from others as reflected on its submitted SBD 1, SBD 4, and SBD 6.1 forms.

CONTRACT PERIOD

The contractual period for this bid is five (5) years commencing from the date of final signature on the SBD 7 Contract Signing Form, with the option of an additional two (2) year extension

CONTRACT MANAGEMENT

- 1 Specify method of delivery and conditions for determining successful delivery after contract (SBD 7) is signed**
 - 1.1 The NRF appoints a contract manager and notifies the other party in writing of the name and contact details of the appointed contract manager. The contract manager will review service levels.
- 2 Contract Manager**
 - 2.1 The Contractor appoints a contract manager and notifies the other party in writing of the name and contact details of the appointed contract manager.

3 Contract Communication

- 3.1 The NRF communicates in writing including through email.
- 3.2 The NRF maintains all contract documentation, communications and correspondence, etc. for record purposes.
- 3.3 The NRF allocates the contract number with secondary reference numbers i.e. purchase order numbers and will inform the contractor of these numbers. The NRF will require any communication to contain the contract number.

4 Managing service levels

4.1 The service performance levels are:

Service Level	Performance Standard	Target
Delivery of correct items as per order	Recipients evaluate shipment against order within a month of delivery	100% correct
Technician training	Technician competency review by SAEON performance evaluations twice a year	Improved capacity and confidence. Technical performance meets job requirements. SAEON has cohort of technicians that are competent in working with the offered equipment
Technical support platforms 1	Response times to phone, text for urgent matters	100% response within 3 hours, in the hours of business on a business day
Technical support platforms 2	Response time to emails for non-urgent matters	100% response time within 2 business days
Technical support quality	Support levels reviewed by SAEON technicians	Problems resolved or workable plans developed in 90% of cases

4.2 Penalties

Service Level	Consequences or remedies
Delivery of correct items as per order	Supplier corrects mistakes at own cost (shipping incorrect parts back to supplier and correct parts to SAEON)
Technician training	Repeat training at own cost if majority of technicians express negative reviews about course content or quality
Technical support	Consideration of default in terms of GCC 23. Poor service record

platforms 1	considered for future tenders
Technical support platforms 2	Consideration of default in terms of GCC 23. Poor service record considered for future tenders
Technical support quality	Consideration of default in terms of GCC 23. Poor service record considered for future tenders

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.

GCC 1 Definitions - The following terms shall be interpreted as indicated:

- 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.

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- 1.8 "Delivery" means delivery in compliance with 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 markets its goods on its 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 are 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" means 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.

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- 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.
- GCC2 Application**
- 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.
- GCC 3 General**
- 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 www.treasury.gov.za
- GCC 4 Standards**
- 4.1 The goods supplied shall conform to the standards mentioned in the bidding documents and specifications.
- GCC 5 Use of contract documents and information**

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- 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.

SCC5 Copyright and Intellectual Property

A

Intellectual property refers to creation of the mind, such as inventions; literary and artistic works; designs; and symbols, names, images used in commerce; and includes copyright (a legal term describing the rights that creators have over their literary and artistic works including books, music, paintings, sculpture and films, to computer programs, databases, advertisements, maps and technical drawings); trademark (a legal term describing a sign capable of distinguishing the goods or services of one enterprise from those of other enterprises); and patents (a legal terms describing an exclusive right granted for an invention providing the patent owner with the right to decide how - or whether - the invention can be used by others).

Background intellectual property is defined as the intellectual property pertaining to this contract and created and owned by any of the contracted parties to this contract prior to the effective date of this contract.

Contract intellectual property is defined as intellectual property created by the parties to this contract for and in the execution of the contract.

All background intellectual property (existing prior to this contract) invests in and remains the sole property of the contracted parties to this contract. Both parties disclose openly such intellectual property ownership to the parties in writing at the commencement of this contract.

The contracted party grants the NRF a fully paid up, irrevocable, and non-exclusive licence to use its background intellectual property for the exploitation of this contract to enable the NRF to obtain the full benefit of the contracted deliverables for this contract.

The parties agree that all right, title, and interest in contract intellectual property created during the execution of this contract invests with the NRF unless where agreed in writing to a different allocation of the ownership of the contract intellectual property with such allocation being an

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append to this contract.

Both parties to this contract shall keep the intellectual property created during this contract confidential and shall fulfil its confidentiality obligations as set out in this document.

The contracted party agrees to assist the NRF in obtaining statutory protection for the contract intellectual property at the expense of the NRF wherever the NRF may choose to obtain such statutory protection.

The contracted party shall procure where necessary the signatures of its personnel for the assignment of its respective contract intellectual property to the NRF or as the NRF may direct, and to support the NRF or its nominee, in the prosecution and enforcement thereof in any country in the world.

The contracted party irrevocably appoints the NRF to be its true and lawful agent in its own name, to do such acts, deeds, and things and to execute deeds, documents, and forms that the NRF, in its discretion, requires in order to give effect to the terms of this clause.

SCC5 Confidentiality

B

The recipient of confidential information shall be careful and diligent as not to cause any unauthorised disclosure or use of the confidential information, in particular, during its involvement with the NRF and after termination of its involvement with the NRF, the recipient shall not:

- Disclose the confidential information, directly or indirectly, to any person or entity, without the NRF's prior written consent.
- Use, exploit or in any other manner whatsoever apply the confidential information for any other purpose whatsoever, other than for the execution of the contract and the delivery of the deliverables or
- Copy, reproduce, or otherwise publish confidentiality information except as strictly required for the execution of the contract.

The recipient shall ensure that any employees, agents, directors, contractors, service providers, and associates which may gain access to the confidential information are bound by agreement with the recipient both during the term of their associations with the recipient and after termination of their respective associations with the recipient, not to

- Disclose the confidential information to any third party, or
- Use the confidential information otherwise than as may be strictly necessary for the execution of the contract,
- The recipient shall take all such steps as may be reasonably necessary to prevent the confidential information from falling into the hands of any unauthorised third party.

The undertakings set out in this clause shall not apply to confidential information, which the recipient is able to prove:

- Was independently developed by the recipient prior to its involvement with the NRF or in the possession of the recipient prior to its involvement with the NRF;
- Is now or hereafter comes into the public domain other than by breach of this contract

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by the recipient;

- Was lawfully received by the recipient from a third party acting in good faith having a right of further disclosure and who do not derive the same directly or indirectly from the NRF, or
- Required by law to be disclosed by the recipient, but only to the extent of such order and the recipient shall inform the NRF of such requirement prior to any disclosure.

The recipient shall within one (1) month of receipt of a written request from the NRF to do so, return to the NRF all material embodiments, whether in documentary or electronic form, of the confidential information including but not limited to:

- All written disclosures received from the NRF;
- All written transcripts of confidential information disclosed verbally by the NRF; and
- All material embodiments of the contract intellectual property.

The recipient acknowledges that the confidential information made available solely for the execution of the contract and for no other purpose whatsoever and that the confidential information would not have been made available to the recipient, but for the obligations of confidentiality agreed to herein.

Except as expressly herein provided, this contract shall not be construed as granting or confirming, either expressly or impliedly any rights, licences or relationships by furnishing of confidential information by either party pursuant to this contract.

The recipient acknowledges that the unauthorised disclosure of confidential information may cause harm to the NRF. The recipient agrees that, in the event of a breach or threatened breach of confidentiality, the NRF is entitled to seek injunctive relief or specific performance, in order to obtain immediate remedies. Any such remedy shall be in addition to and not in lieu of any other remedies available at law, including monetary damages.

SCC5C Copyright and Intellectual Property

The third party hereby gives the NRF permission, in terms of the Protection of Private Information Act 4 of 2013, to process, collect, receive, record, organise, collate, store, update, modify, retrieve, alter, consult, use, disseminate, distribute, merge, link, erase or destroy personal information received. By submitting a bid, the third party gives its voluntary explicit consent to the terms of this special condition.

GCC6 Patent rights

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.

GCC7 Performance security

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

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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.

GCC8 Inspections, tests and analyses

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 organisation 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

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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.

GCC9 Packing

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.

SCC No special condition applicable, unless specified elsewhere in this document.

GCC10 Delivery and Documentation

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.

SCC No special condition applicable, unless specified elsewhere in this document.

GCC11 Insurance

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.

GCC12 Transportation

12.1 Should a price other than an all-inclusive delivered price be required, this shall be specified in the SCC.

SCC No special condition applicable, unless specified elsewhere in this document.

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GCC13 Incidental services

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.

SCC In the event that this document makes provision for such service elsewhere in this document, it is only valid if confirmed through the issue of a written purchase order that specifies, where applicable, quality, quantity, description, unit price, and delivery date.

GCC14 Spare parts

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.

SCC In the event that this document specifies provision of spare parts elsewhere, the term "may" in GCC14 is replaced by the term "shall", the supplier provides at commencement of the contract a list of spares, whether in stock or ordered in from the OEM, their lead times for delivery to NRF and their unit prices. The list is thereafter made available each time the list is amended, updated, or re-priced. The supplier undertakes to hold and/or make available an adequate supply of spares parts within reasonable periods upon receipt of purchase order issued by the purchaser in terms of the pricing mechanism in GCC17.

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GCC15 Warranty

15.1 The supplier warrants that the goods supplied under the contract are new, unused, or 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.

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.

SCC Where OEM warranties exceed that stipulated in the GCC, the OEM warranty applies

GCC16 Payment

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.

SCC Payment is made within 30 days after receipt of invoice or claim by the supplier to NRF which period is automatically extended by any delay occasioned by the supplier such as failure to supply a copy of the delivery note, if applicable; and/or failure to provide proof of fulfilment of other obligations stipulated in the contract

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GCC17 Prices

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 authorised in SCC or in the purchaser's request for bid validity extension, as the case may be.

SCC No additional special conditions other than stated in the price section in this document.

GCC18 Contract amendment

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.

GCC19 Assignment

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.

SCC Should the supplier assign in whole or in part, its obligations to perform under the contract, the NRF is unable to approve this as directed by National Treasury Instruction No 8 of 2022/2023 on the application of assignment and cession of contracts resulting from procurement.

Subcontracting components of this contract to third parties does not constitute assignment.

GCC20 Subcontract

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

GCC21 Delays in supplier's performance

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

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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.

GCC22 Penalties

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.

GCC23 Termination for default

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 judgement 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.

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- 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 offense 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.
- GCC24 Anti-dumping and countervailing duties and rights
- 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 subsidised 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
- GCC25 Force Majeure

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- 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
- GCC26 Termination for insolvency
- 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.
- GCC27 Settlement of disputes
- 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.
- GCC28 Limitation of liability
- 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

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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.

GCC29 Governing language

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.

GCC30 Applicable law

30.1 The contract shall be interpreted in accordance with South African laws, unless otherwise specified in SCC.

GCC31 Notices

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

GCC32 Taxes and duties

32.1 A foreign supplier shall be entirely responsible for all taxes, stamp duties, licence fees, and other such levies imposed outside the purchaser's country.

32.2 A local supplier shall be entirely responsible for all taxes, duties, licence 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

GCC33 National Industrial Participation Programme

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.

GCC34 Prohibition of restrictive practices

34.1 In terms of Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, an

GENERAL AND SPECIAL CONDITIONS OF CONTRACT

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.

34.3¹ 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.

¹ Research

EVALUATION CRITERIA FOR THE BID

Document description	Reference to bidder's document	Weight	Criteria (All criteria are weighted equally to each other)	Grading Scheme	Bid Section Reference
Attendance of compulsory briefing session		Mandatory	Bidder must attend the compulsory briefing session	GO/NO GO	Page 1
Signed SBD 4		Mandatory	Bidder's disclosure	GO/NO GO	Pages 51-53
Signed SBD 6.1		Mandatory	Is the bidder claiming preference points?	GO/NO GO	Pages 54-58
A valid B-BBEE certificate or sworn affidavit		Optional	If the bidder is claiming points for Specific Goals, did the bidder submit a valid B-BBEE certificate or sworn affidavit?	GO/NO GO	Pages 54-58
Signed SBD 3.2		Mandatory	Did the bidder submit a completed and signed SBD 3.2 pricing schedule in a separate envelope?	GO/NO GO	Pages 41-47
Signed SBD 1		Mandatory	Has the bidder signed the SBD 1?	GO/NO GO	Pages 1 & 47-51

Document description	Reference to bidder's document	Weight	Criteria (All criteria are weighted equally to each other)	Grading Scheme	Bid Section Reference
Address	Page 4	Mandatory	Has the bidder provided an address where their workshop and technical staff may be visited	GO/NO GO	Pages 4-16
Warranty list	Page 4	Mandatory	Has the bidder provided a	GO/NO GO	Pages 4-16

			warranty list that covers all required components with warranty specifications?		
Instrument brochure	Item #1	Mandatory	Are the rainfall/precipitation instrument specifications met?	GO/NO GO	Pages 4-16
Instrument brochure	Item #2	Mandatory	Are the air temperature and surface water vapour/humidity instrument specifications met?	GO/NO GO	Pages 4-16
Instrument brochure	Item #3.1	Mandatory	Are the high velocity anemometer & wind direction instrument specifications met?	GO/NO GO	
Instrument brochure	Item #3.2	Mandatory	Are the lower velocity anemometer & wind direction instrument specifications met?	GO/NO GO	Pages 4-16
Instrument brochure	Item #4.1	Mandatory	Are the four component net radiometer - ISO 9060 - Class C specifications met?	GO/NO GO	Pages 4-16
Instrument brochure	Item #4.2	Mandatory	Are the integrated net radiometer specifications met?	GO/NO GO	Pages 4-16
Instrument brochure	Item #4.3	Mandatory	Are the pyranometer - ISO 9060 - Class C specifications met?	GO/NO GO	Pages 4-16
Instrument brochure	Item #4.4	Mandatory	Are the total UV radiometer specifications met?	GO/NO GO	Pages 4-16
Instrument brochure	Item #4.5	Mandatory	Are the Photosynthetically Active Radiation instrument specifications met?	GO/NO GO	Pages 4-16
Instrument brochure	Item #5	Mandatory	Are the air pressure/barometer sensor specifications met?	GO/NO GO	Pages 4-16
Instrument brochure	Item #6	Mandatory	Are the soil moisture sensor specifications met?	GO/NO GO	Pages 4-16

Instrument brochure	Item #7	Mandatory	Are the integrated soil moisture, soil temperature and soil electrical conductivity sensor specifications met?	GO/NO GO	Pages 4-16
Instrument brochure	Item #8	Mandatory	Are the soil/ground level temperature sensor specifications met?	GO/NO GO	Pages 4-16
Instrument brochure	Item #9	Mandatory	Are the leaf wetness sensor specifications met?	GO/NO GO	Pages 4-16
Instrument brochure	Item #10.1	Mandatory	Are the Type 1 data logger specifications met?	GO/NO GO	Pages 4-16
Instrument brochure	Item #10.2	Mandatory	Are the Type 2 data logger specifications met?	GO/NO GO	Pages 4-16
Instrument brochure	Item #11	Mandatory	Are the multiplexer/channel expansion module specifications met?	GO/NO GO	Pages 4-16
Instrument brochure	Item #12	Mandatory	Are the lightning sensor specifications met?	GO/NO GO	Pages 4-16
Instrument brochure/design specifications	Item #13.1	Mandatory	Are the tripod mast specifications met?	GO/NO GO	Pages 4-16
Design specifications	Item #13.2	Mandatory	Are the straight pole mast specifications met?	GO/NO GO	Pages 4-16
Instrument brochures	Item#14	Mandatory	Are the enclosure, cross arm and mounting hardware specifications met?	GO/NO GO	Pages 4-16
Instrument brochures	Item#15	Mandatory	Are the communications systems' specifications met?	GO/NO GO	Pages 4-16
Instrument brochure	Item#16	Mandatory	Are the power supply component specifications met?	GO/NO GO	Pages 4-16
Training curriculum/list of topics	Item#18	Mandatory	Are all required topics covered?	GO/NO GO	Pages 4-16

bidder can train on					
Trainer qualifications/experience/competence	Item #18	Mandatory	Are trainers OEM certified and have they presented courses on the topics required? Has proof (such as OEM letter of certification) been submitted to substantiate the above? Preference is given to OEM certification.	GO/NO GO	Pages 4-16
Equipment brochures	Item#19.1	Mandatory	Wind speed & direction calibration tool specifications met?	GO/NO GO	Pages 4-16
Equipment brochures	Item#19.2	Mandatory	Rain calibrator technical specifications met?	GO/NO GO	Pages 4-16
Equipment brochures	Item#19.3	Mandatory	Portable temperature, pressure & humidity transfer standard specifications met?	GO/NO GO	Pages 4-16
Catalogue/list	Item#20	Mandatory	Is an itemised list provided? Does it contain consumables/service components for all sensors, loggers and calibration tools as well as other common consumable items such as desiccant?	GO/NO GO	Pages 4-16
Software brochure/manual	Item#21	Mandatory	Does the software allow for all specified functions to be performed?	GO/NO GO	Pages 4-16

Technical support capability (Specifications - Page 12) is evaluated by submission of case studies and customer satisfaction

Five (5) case studies that meet the specifications are **mandatory** requirements.

In addition, SAEON will conduct a customer satisfaction survey as specified.

Bidders can score a maximum of 10 points per case study and a potential 50 points in total for five case studies.

Bidders that do not meet a threshold of 40/50 in the customer satisfaction survey are disqualified from further evaluation.

Case study 1		Mandatory	Have all required details been submitted?	GO/NO GO	Pages 4-16
Customer satisfaction 1		0-5 0-5	Outcome Response time	/5 /5	Pages 4-16
Case study 2		Mandatory	Have all required details been submitted?	GO/NO GO	Pages 4-16
Customer satisfaction 2		0-5 0-5	Outcome Response time	/5 /5	Pages 4-16
Case study 3		Mandatory	Have all required details been submitted?	GO/NO GO	Pages 4-16
Customer satisfaction 3		0-5 0-5	Outcome Response time	/5 /5	Pages 4-16
Case study 4		Mandatory	Have all required details been submitted?	GO/NO GO	Pages 4-16
Customer satisfaction 4		0-5 0-5	Outcome Response time	/5 /5	Pages 4-16
Case study 5		Mandatory	Have all required details been submitted?	GO/NO GO	Pages 4-16
Customer satisfaction 5		0-5 0-5	Outcome Response time	/5 /5	Pages 4-16
Equipment brochures		Mandatory	Does the software have the specified capabilities?	GO/NO GO	Pages 4-16

BIDDER IS ABLE TO DELIVER THE SPECIFICATION?	YES - PASS TO PRICING	NO - DISQUALIFIED
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THE BID PREPARATION

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. The NRF distributes the response to a clarification request to all respondents that have communicated their intention to bid (i.e. briefing session attendance register) within 2 working days of receipt of the query. The NRF does not provide the origin of the request to any party.

Response preparation costs

The NRF 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

The NRF, in the interests of transparent procurement, utilises the two-envelope system to minimise any form of price bias in the technical selection phase. All responses must be submitted in two sealed envelopes/boxes; the first envelope/box shall have the technical, compliance and BBBEE response and the second envelope/box shall only have the financial response. Bidders must ensure that they do not indicate any financial information in the first envelope/box.

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: Quote

Central Supplier Database registration

The NRF is legislatively only allowed to contract with third parties registered on the National Treasury's Central Supplier Database. Third parties include their Master Registration Number (Supplier Number) for evaluation purposes. The NRF utilises the third parties' Master Registration Number conduct due diligence through the Central Supplier Database as part of the due diligence pre-award process inclusive of tax compliance verification.

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

The NRF supports the Government's broad based black economic empowerment recognising that 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, the NRF condemns any form of fronting. The NRF's evaluation committees conduct or initiate the enquiries/investigations to determine the accuracy of the third parties representations. The third parties have the onus of proving that fronting does not exist. Where the NRF identifies a potential breach may exist, the NRF notifies the third parties of the allegation. The third parties have a period of 7 days from the date of notification to provide evidence that such potential breach does not exist. The NRF, upon confirmation of fronting, will invalidate the contract, apply for the third parties to be restricted from conducting business with the public sector for a period not exceeding 10 years, and exercise any other remedies the NRF may have against the concerned third party.

Disclaimers

The NRF has produced this document in good faith. The NRF, its agents, and its employees and associates do not warrant its accuracy or completeness; make no representation, warranty, assurance, guarantee or endorsements to any third parties concerning the document. The NRF has no liability towards the responding third parties 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 Foundation;

“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:

B-BBEE Status level certificate issued by an authorized body or person;

A sworn affidavit as prescribed by the B-BBEE Codes of Good Practice;

Any other requirement prescribed in terms of the B-BBEE Act.

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

“NRF” means the National Research Foundation and it is used interchangeable with its business units managing the contract being South African Environmental Observation Network (SAEON)

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.

Responsive to submission requirements

A Bid that meets all the submission requirements in the bid document is a responsive bid that proceeds to the next stage. The NRF’s evaluation committee will disqualify non-responsive submissions.

Meeting technical specifications

The NRF’s evaluation committee will disqualify responsive submissions that do not meet the minimum technical specifications set out in this document.

The bidder will be disqualified as they did not meet the minimum technical specifications.

Due Diligence Research

NRF will conduct due diligence on a bidder by contacting the references submitted to verify the bidder's capability to provide the goods/services required.

Stage 2 – Price competition

The NRF's evaluation committee assesses compliant bidders from the technical evaluation stage on their pricing and specific goals. The NRF'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. The NRF's evaluation committee will rank the qualifying bids on points scored on the basis of both Price and Specific Goals levels as indicated on SBD 6.1 in accordance with the PPPFR 2022.

Stage 3 – Award and Contract Signing

The bid evaluation committee recommends to the Bid Adjudication Committee for subsequent approval by the 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.

Cancellation of the bid prior to award

The NRF cancels this bid invitation prior to making an award:

- 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.

PART B – PRICING

PRICING CONDITIONS OF CONTRACT FOR THIS BID

Actual Prices charged by the bidder for goods delivered and/or services performed for this bid shall not vary from the prices quoted by the bidder in the submitted bid with the exception of any price adjustments as outlined in the following price conditions.

1.	Compliant price calculation for price competition: Price quoted is South African Rands
2.	Date of unit pricing: All unit prices are quoted at the closing date of this bid.
3.	Price Quotation Basis: Unit prices are fully inclusive of all applicable taxes <u>including VAT</u> , less all unconditional discounts, plus all costs to deliver the services and/or goods to the specified delivery point stated in South African Rand currency. Where imported goods/services are to be used, the exchange rate to be quoted in arriving at ZAR if a firm local currency price is not quoted. For imported items, bidders are encouraged to include the percentage of the unit prices that is susceptible to changes in foreign exchange rates (this cannot be 100%). Also include the base rate of exchange that was used for the quotation.
4.	Quantity estimation: Bidders must quote according to the quantities stipulated in the pricing schedule. The quantity of one is just used for the determination of the catalogue price
5.	Contract Price: 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.
6.	Value Added Tax: Pricing will be adjusted for any variation in the Value Added Tax rate as gazetted.
7.	Price Adjustment Rules: The business unit will not consider any other unit price variations. The appointed bidder provides detailed reasons for the submitted price variations substantiated by evidence.
8.	Contract Price Management during the contract: Where appropriate, the contract manager will issue written purchase orders authorising the deliverables of this bid as addendums to this contract. The purchase orders stipulate quantity, work description, delivery date, and the unit price in accordance with the contract.
9.	Delivery Points are: See list under Specifications above.
10.	Application of Preference Points: In determining the final price/preference points for the bidder, the preference points are those in the completed Standard Bidding Document 6.1 Preference claim form.

BID PRICE SCHEDULE (SBD 3.2)

Please complete SBD 3.2 below and submit it along with any other pricing documents in a separate envelope (stand-alone)

DESCRIPTION	Unit price	% Unit price that depends on RoE ²	Base ³ RoE	Number of units	VAT	TOTAL (INCLUDES VAT of 15%)
Item#1. Precipitation sensor & ancillaries				1		
Item#2. Air temp & humidity sensor & ancillaries				1		
Item#3.1. High velocity wind speed & direction sensor & ancillaries				1		

² RoE: Rate of Exchange. Bidders may not include local margins, mark-up or local transport in this percentage.

³ This is the Rate of Exchange used for the quoted unit price

DESCRIPTION	Unit price	% Unit price that depends on RoE ²	Base ³ RoE	Number of units	VAT	TOTAL (INCLUDES VAT of 15%)
Item#3.2 Lower velocity wind speed & direction sensor & ancillaries				1		
Item#4.1. Four component net radiometer - ISO 9060 - Class C & ancillaries				1		
Item#4.2. Integrated net radiometer & ancillaries				1		
Item#4.3. Pyranometer - ISO 9060 - Class C & ancillaries				1		
Item#4.4. Total UV Radiometer & ancillaries				1		
Item#4.5. Photosynthetically Active Radiation sensor & ancillaries				1		
Item#5. Barometer & ancillaries				1		
Item#6. Soil moisture sensors & ancillaries				1		

DESCRIPTION	Unit price	% Unit price that depends on RoE ²	Base ³ RoE	Number of units	VAT	TOTAL (INCLUDEs VAT of 15%)
Item#7. Integrated soil moisture, soil temperature and soil electrical conductivity sensor & ancillaries				1		
Item#8. Soil/ground level temperature sensor & ancillaries				1		
Item#9. Leaf wetness sensor & ancillaries				1		
Item#10.1. Type 1 data logger & ancillaries				1		
Item#10.2. Type 2 data logger & ancillaries				1		
Item#11. Multiplexer/channel expansion module & ancillaries				1		
Item#12. Lightning sensor & ancillaries				1		
Item#13.1. Tripod mast & ancillaries				1		
Item#13.2. Straight pole mast & ancillaries				1		
Item#14. Enclosure, cross arms & ancillaries				1		

DESCRIPTION	Unit price	% Unit price that depends on RoE ²	Base ³ RoE	Number of units	VAT	TOTAL (INCLUDES VAT of 15%)
Item#15. Communication - GSM option & ancillaries				1		
Item#15. Communication - Satellite option & ancillaries				1		
Item#15. Communication - antenna & ancillaries				1		
Item#16. Power supply - solar panel				1		
Item#16. Power supply - regulator/charge controller				1		
Item#16. Power supply - lead acid battery				1		
Item#16. Power supply - lithium iron phosphate battery				1		
Item#18. Training rate (per person per day)				1		
Item#19.1. Calibration - anemometer torque verification tool & ancillaries				1		

DESCRIPTION	Unit price	% Unit price that depends on RoE ²	Base ³ RoE	Number of units	VAT	TOTAL (INCLUDES VAT of 15%)
Item#19.1. Calibration - anemometer drive/speed verification tool & accessories				1		
Item#19.1. Calibration - wind vane torque verification tool & ancillaries				1		
Item#19.1. Calibration - wind vane alignment tool for in situ verification				1		
Item#19.1. Calibration - wind vane alignment tool for lab based verification				1		
Item#19.2. Calibration - rain calibrator				1		
Item#19.3. Calibration - portable calibration kit for temperature, humidity and pressure & ancillaries				1		
Item#20. Consumables/service components (See Annexure 1)				1		
Item#21. Software (provide itemised list downstream costs if applicable, (See Annexure 1)).				1		

DESCRIPTION	Unit price	% Unit price that depends on RoE ²	Base ³ RoE	Number of units	VAT	TOTAL (INCLUDES VAT of 15%)
Item#22. Technical support (provide rates if support is not included with items listed above)				1		
Item#23. Delivery (provide rates to destinations listed)				1		
Incidental shipping service				1		
Commission on additional items sourced where the partner acts as a purchasing agent						
TOTAL BID PRICE INCLUSIVE OF VAT			R			

The NRF may include an additional stage in the evaluations process to ask for additional cost parameters. Bidders will not be able to change the original prices but will be asked for prices or rates on additional services.

PART C - RETURNS

INVITATION TO BID (SBD 1)	
Bid number	NRF/SAEON EFTE/58/2023-24 B
Closing date and time	02 May 2024 10:00 AM

The NRF recognizes the date and time as recorded on its systems for closure purposes.	
SUMMARY OF BID REQUIREMENTS	
Procurement of a service provider for the supply, delivery, calibration and technical support of various meteorological equipment, components and spare parts as well as technician training for a period of 5 years.	
Number of original bid documents for contract signing	2
Two envelope system	Yes
Price validity period from date of closure	One hundred and twenty (120) days

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

SUPPLIER INFORMATION

VAT Registration Number

Tax Compliance Status

Tax Compliance System PIN

OR

Central Supplier Database No.

MAAA

B-BBEE Status Level Verification Certificate

Tick Applicable Box.

Yes No

B-BBEE Status Level Sworn Affidavit

Tick Applicable Box.

Yes No

[A B-BBEE status level verification certificate/sworn affidavit (for EMEs & QSEs) must be submitted in order to qualify for preference points for B-BBEE – also refer to the SBD 6.1]

Are you the accredited representative in South Africa for the goods/services/works offered?

Yes No
[If yes enclose proof]

Are you a foreign-based supplier for the goods/services/works offered?

Yes No
[If yes, answer the questionnaire below]

Is the entity a resident of the Republic of South Africa (RSA)?

Yes No

Does the entity have a branch in the RSA?

Yes No

Does the entity have a permanent establishment in the RSA?

Yes No

Does the entity have any source of income in the RSA?

Yes No

Is the entity liable in the RSA for any form of taxation?

Yes 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).

BID SUBMISSION

1. Bids must be delivered by the stipulated time to the correct address. Late bids will not be accepted for consideration.

2. All bids must be submitted on the officially provided forms – (not to be re-typed) or in the manner prescribed in the bid document.

SUPPLIER INFORMATION

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.

TAX COMPLIANCE REQUIREMENTS

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 www.sars.gov.za .
4.	Bidders may also submit a printed TCS certificate together with the bid, available via e-filing through the SARS website www.sars.gov.za .
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.

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?	<input type="checkbox"/> Yes <input type="checkbox"/> 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 months?	<input type="checkbox"/> Yes <input type="checkbox"/> 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	

BIDDER'S DISCLOSURE	SBD 4
<p>1. PURPOSE OF THE FORM</p> <p>Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.</p> <p>Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.</p>	
<p>2. Bidder's declaration</p> <p>2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest⁴ in the enterprise, employed by the state?</p> <p style="text-align: right;">YES/NO</p>	
<p>2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person</p>	

⁴ the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

2.2 Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution?

YES/NO

2.2.1 If so, furnish particulars:

.....
.....

2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract?

YES/NO

2.3.1 If so, furnish particulars:

.....
.....

3 DECLARATION

I, the undersigned, (name)..... in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 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 consortium⁵ will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying 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.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.6 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.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
Signature

.....
Date

.....
Position

.....
Name of bidder

⁵ 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.

SBD 6.1

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to tender:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 **To be completed by the organ of state**

(delete whichever is not applicable for this tender).

The applicable preference point system for this tender is the 80/20 preference point system.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

- (a) Price; and
- (b) Specific Goals.

1.4 **To be completed by the organ of state:**

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20

- 1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.
- 1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. DEFINITIONS

- (a) **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) **“price”** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) **“tender for income-generating contracts”** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) **“the Act”** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

3.1.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

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

80/20	or	90/10
$P_s = 80 \left(1 - \frac{P_t - P}{P} \right)$	or	$P_s = 90 \left(1 - \frac{P_t - P}{P} \right)$

Where

- P_s = Points scored for price of tender under consideration
- P_t = Price of tender under consideration

P_{min} = Price of lowest acceptable tender

3.2. FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

3.2.1. POINTS AWARDED FOR PRICE

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

$$P_s = 80 \left(1 + \frac{P_t - P}{P} \right) \quad \text{or} \quad P_s = 90 \left(1 + \frac{P_t - P}{P_{max}} \right)$$

Where

P_s = Points scored for price of tender under consideration
P_t = Price of tender under consideration
P_{max} = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:
- 4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
- 1.1. (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
 - (b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,

then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

B-BBEE Level	Number of points allocated (90/10 system) (To be completed by the organ of state)	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (90/10 system) (To be completed by the tenderer)	Number of points claimed (80/20 system) (To be completed by the tenderer)
1	10	20		
2	9	18		
3	8	16		
4	5	12		
5	4	8		
6	3	6		
7	2	4		
8	1	2		
Non compliant	0	0		

DECLARATION WITH REGARD TO COMPANY/FIRM

4.3. Name of company/firm.....

4.4. Company registration number:

4.5. TYPE OF COMPANY/ FIRM

- Partnership/Joint Venture / Consortium
- One-person business/sole propriety
- Close corporation
- Public Company
- Personal Liability Company
- (Pty) Limited

- Non-Profit Company
- State Owned Company

[TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
 - (a) disqualify the person from the tendering 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 tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution, if deemed necessary.

.....
SIGNATURE(S) OF TENDERER(S)

SURNAME AND NAME:

DATE:

ADDRESS:

.....

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 we 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)

Annexure 1: Service components suggested template

We suggest that bidders provide itemised lists of service components organised by item as listed below or similar.

Item	Service components	Price including VAT	Reference instrument brochure/manual
Item#x Example	<ol style="list-style-type: none"> 1. Cabling per meter (m) 2. Spare part a 3. Spare part b 4. Consumable a 5. Consumable b 6. Etc. 	<ol style="list-style-type: none"> 1. Rxxxx.xx 2. Rxx.xx 3. Etc. 	Link to instrument manual or page reference in supplied literature
Item#1. Rainfall/Precipitation			
Item#2. Air temperature and surface water vapour/humidity			
Item#3.1. High velocity anemometer & wind direction			
Item#3.2. Lower velocity anemometer & wind direction			
Item#4.1. Four component net radiometer - ISO 9060 - Class C			
Item#4.2. Integrated net radiometer			
Item#4.3. Pyranometer - ISO 9060 - Class C			

Item#4.4. UV radiometer			
Item#4.5. Photosynthetically Active Radiation			
Item#5. Air pressure/barometer			
Item#6. Soil moisture sensor			
Item#7. Integrated soil moisture, soil temperature and soil electrical conductivity			
Item#8. Soil/ground level temperature sensor			
Item#9. Leaf wetness			
Item#10.1. Type 1 data loggers			
Item#10.2. Type 2 data loggers			
Item#11. Multiplexer/channel expansion module			
Item#12. Lightning sensor			
Item#13. Tripod/mast			

Item#14. Enclosure, cross arm and mounting hardware			
Item#15. communications systems			
Item#16. Power supply			
Item#19.1. Wind speed & direction calibration tool			
Item#19.2. Rain calibrator			
Item#19.3. Portable temperature, pressure & humidity transfer standard			
Item#20. Any additional consumables/ service components not listed above			
Item#21. Software maintenance/upgrade costs, extensions, apps not included in base package			

Annexure 2. Checklist for recording training course topics offered by the bidder

Training required	Does your company offer training that covers the following topics? Write down which topics are covered below.
<ul style="list-style-type: none"> ○ Basic logger introduction (possibly combined with the basic Met instrument maintenance) <ul style="list-style-type: none"> ■ Logger requirements & maintenance ■ Basic logger programming/configuration for a weather station ■ Wiring - sensor and loggers ■ Basic program editing ■ Data downloads/transfer ■ Troubleshooting common issues 	
<ul style="list-style-type: none"> ○ Advanced data logger applications <ul style="list-style-type: none"> ■ Advanced instrument control ■ Advanced programing - writing custom programmes 	
<ul style="list-style-type: none"> ○ Advanced data management applications <ul style="list-style-type: none"> ■ Automated data downloads 	

<ul style="list-style-type: none"> ■ Communications between servers and field stations ■ Web interface development (if logger software allows) 	
<ul style="list-style-type: none"> ○ Basic meteorological instrument setup and maintenance <ul style="list-style-type: none"> ■ Tipping bucket rain gauge ■ Temperature/Relative humidity sensor ■ Wind sensors ■ Radiation sensors ■ Wiring considerations on site ■ Basic remote communications setup and testing ■ Power supply considerations ■ Troubleshooting common issues 	
<ul style="list-style-type: none"> ○ Basic meteorological instrument problem identification, repair and calibration <ul style="list-style-type: none"> ■ Tipping bucket rain gauge ■ Temperature/Relative humidity sensor ■ Wind sensors ■ Radiation sensors ■ Remote communication ■ Power supply 	

<ul style="list-style-type: none">■ Instrument wiring repairs/extensions	
<ul style="list-style-type: none">○ Advanced troubleshooting<ul style="list-style-type: none">■ Advanced remote communications troubleshooting■ Advanced power supply troubleshooting	

Annexure 3. Template for evaluation of technical support capacity

Bidders are required to provide all details below for a case study to be considered complete. References that are not contactable will score a 0/5 in the customer satisfaction surveys

Detail required	Bidder response
Name of company/customer to whom support service was provided	
Name of contact person to whom service was provided	
Current contact details of the customer (phone number and email)	
Date(s) of support provision	
Name and title/position of bidder's technical support staff member	
Technical support staff signature	
Brief description of the nature of the problem	

Outcome/result of the technical support intervention	
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