INVITATION TO BID (SBD 1)

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

| BID NUMBER: | NRF/SAAO/2014/014 | CLOSING DATE: | 12 January 2015 | CLOSING TIME | 11:00 |

**BID DESCRIPTION**

Large Format CCD (Charged Coupled Device)

Preferential Procurement System Applicable (points for price: points for procurement preference): 90:10

| Briefing Session | Non Compulsory | Date and Time: | 10 December 2014 - 15:00 SAST (UTC +2:00) | Location: | email: grant@saao.ac.za for details |

**BID DOCUMENTS ARE TO BE DEPOSITED IN THE BID BOX SITUATED AT:**

**EITHER PHYSICALLY OR BY COURIER**

**SAAO Site**
**Observatory Road**
**Observatory**
**Cape Town**

**ELECTRONICALLY**

**Email to:**
**bids@saao.ac.za**

Your file name should be **NRFSAAO2014014YourCompanyName**
ANY ENQUIRIES REGARDING THE BIDDING PROCEDURE DIRECTED TO:

Contact Person: Grant Southey
Tel: 021 4609376
Email: grant@saao.ac.za (do not use this address for bid submission)

Bidders should timeously deliver bids to the correct address. If the bid is late at the SAAO address, it is not considered.

The bid box is open from 08h00 to 16h30 South African times, 5 days a week (Monday to Friday). Electronic bid box is open 24 hours and a date/time audit trail is maintained.

ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS IN THIS INVITATION (NOT TO BE RE-TYPED) WITH ADDITIONAL INFORMATION ON ATTACHED SUPPORTING SCHEDULES

THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS - 2011, THE GENERAL CONDITIONS OF CONTRACT (http://www.saao.ac.za/gcc/) AND SPECIAL CONDITIONS OF CONTRACT AS STIPULATED IN THIS INVITATION.

| THE FOLLOWING PARTICULARS MUST BE FURNISHED AS LEAD PAGE OF THE BID RESPONSE |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| BID NUMBER: | NRF/SAAO/2014/014 | CLOSING DATE: | 9 January 2014 | CLOSING TIME: | 11:00 |
| NAME OF BIDDER |
| REPRESENTED BY |
| POSTAL ADDRESS |
| PHYSICAL ADDRESS |
| TELEPHONE NUMBER | CODE | NUMBER |
| CELL PHONE NUMBER | CODE | NUMBER |
| FACSIMILE NUMBER | CODE | NUMBER |
E-MAIL ADDRESS

VAT REGISTRATION NUMBER

HAS AN ORIGINAL AND VALID TAX CLEARANCE CERTIFICATE BEEN SUBMITTED? YES or NO

PREFERENCE CLAIM FORM BEEN SubMITTED FOR YOUR PREFERENCE POINTS? (SBD 6.1) YES or NO

(A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE MUST SUPPORT PREFERENCE POINTS CLAIMED)

IF YES, WHO WAS THE B-BBEE CERTIFICATE ISSUED BY

AN ACCOUNTING OFFICER AS CONTEMPLATED IN THE CLOSE CORPORATION ACT (CCA) □

A VERIFICATION AGENCY ACCREDITED BY THE SOUTH AFRICAN ACCREDITATION SYSTEM (SANAS); OR □

A REGISTERED AUDITOR □

[Tick Applicable Box]

ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS/SERVICES/WORKS OFFERED? YES or NO

IF YES ENCLOSE PROOF

SIGNATURE OF BIDDER

NAME of BIDDER

DATE

CAPACITY UNDER WHICH THIS BID IS SIGNED

BID RESPONSE SUBMISSION FORMAT / CHECKLIST

No of originals 1 Number of bid pack copies 1 electronic

Pack split into “Technical” and “Awarding” Sections No Two envelope system required No

Proposal – Bidder’s B-BBEE Transformation Program Yes / No

SUPPLIER ACCREDITATION

Provide documentation per the NRF Prospective Supplier Accreditation Pack available at http://www.saao.ac.za/supplier-reg/ Yes / No

Provide evidence of being an Accredited Prospective Supplier registered in the NRF Supplier Database Yes / No

Certified copies of certificate of incorporation (as per entity type) Yes / No
1. **Background to the National Research Foundation and its business units**

The National Research Foundation (NRF) is a juristic person established in terms of section 2 of the National Research Foundation Act, Act 23 of 1998 and a schedule 3A public entity in terms of the Public Finance Management Act. The NRF is the government’s national agency responsible for promoting and supporting research and human capital development through funding, the provision of National Research Facilities and science outreach platforms and programs to the broader community in all fields of science and technology, including natural science, engineering, social science and humanities.

The South African Astronomical Observatory (SAAO) is the national centre for optical and infrared astronomy in South Africa. It is a facility of the National Research Foundation under the Department of Science and Technology. Its prime function is to conduct fundamental research in astronomy and astrophysics by providing a world-class facility and by promoting astronomy and astrophysics in Southern Africa. SAAO headquarters are in the suburb of Observatory in Cape Town. The main telescopes used for research are located at the SAAO observing station (32°22.795’S 20°48.657’E) near Sutherland in the Northern Cape, a 4-hour drive from Cape Town.

2. **Scope of Work**

The scope of work will be for manufacture and delivery of a scientific grade, large format CCD detector, for an imaging camera, and an electrical sample / setup chip, capable of presenting a realistic load to the controller circuitry. The supplied chips must be shipped with specific test reports on all specifications, which are stated in Paragraph 4.

A mechanical sample, which may be electrically dead or have a damaged silicon surface, is also required. Detailed drawings of the chip must be supplied where all measurements are clearly stated. Drawings and datasheets of the proposed chips must accompany the bid submission. If 3D models of the chips are available these should be sent too.

3. **Context**

As part of its mandate to provide world-class astronomical facilities, the SAAO is looking to purchase a large format CCD detector. This detector will be incorporated into a new imaging camera being developed by the SAAO for use on the existing 1.9-m and a new 1.0-m telescope, at the observation site in Sutherland, South Africa.

4. **Specification of Goods and Services being Procured**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum image area (mm)</td>
<td>90 x 90</td>
</tr>
<tr>
<td>Maximum pixel size (μm)</td>
<td>15</td>
</tr>
<tr>
<td>Minimum full well (ke-)</td>
<td>250</td>
</tr>
<tr>
<td>Number of outputs</td>
<td>Minimum 4 - Maximum 8</td>
</tr>
<tr>
<td>Maximum dark current @ 173K (e-/pix/hr)</td>
<td>5</td>
</tr>
<tr>
<td>Maximum read noise at 173K at 50kHz (e-)</td>
<td>3</td>
</tr>
<tr>
<td>Minimum QE at 400nm (%)</td>
<td>70</td>
</tr>
<tr>
<td>Minimum QE at 650nm (%)</td>
<td>75</td>
</tr>
<tr>
<td>Minimum QE at 900nm (%)</td>
<td>45</td>
</tr>
<tr>
<td>Setup chip provided</td>
<td>Minimum requirement: present a realistic load to the controller circuitry. Ideally capable of producing an image.</td>
</tr>
<tr>
<td>Specification</td>
<td>Requirement</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Delivery time (months)</td>
<td>Less than 9 Months</td>
</tr>
<tr>
<td>Maximum number of connectors</td>
<td>4</td>
</tr>
<tr>
<td>Output sensitivity: high responsivity mode (µV/e)</td>
<td>Minimum 5</td>
</tr>
<tr>
<td>Output sensitivity: low responsivity mode (µV/e)</td>
<td>Minimum 2</td>
</tr>
<tr>
<td>Maximum column defects</td>
<td>20</td>
</tr>
<tr>
<td>Maximum white spots</td>
<td>2000</td>
</tr>
<tr>
<td>Maximum traps &gt;200e-</td>
<td>30</td>
</tr>
<tr>
<td>Maximum total black &amp; white spots</td>
<td>4000</td>
</tr>
<tr>
<td>Flatness (maximum peak to valley) (µm)</td>
<td>40</td>
</tr>
<tr>
<td>Package format</td>
<td>Minimum 2 sides buttable</td>
</tr>
<tr>
<td>Maximum package size (mm)</td>
<td>100 x 100</td>
</tr>
<tr>
<td>Mounting interface</td>
<td>3 point</td>
</tr>
<tr>
<td>Minimum size of main hold down fasteners</td>
<td>M4</td>
</tr>
<tr>
<td>All electrical connections to and from the CCD</td>
<td>Standard commercial off the shelf connectors</td>
</tr>
<tr>
<td>Connector details</td>
<td>Low out-gassing and compact</td>
</tr>
<tr>
<td>Wiring loom detail (if supplied)</td>
<td>Integral unit (preferably Flex PCB).</td>
</tr>
</tbody>
</table>

5. **Applicable Standards (South African National Standards)**

   No applicable South African standards

6. **Local Content Requirements**

   There is no requirement for local content

7. **Evidence of Supply Capacity (Technical Merit)**

   Bidders are required to provide a profile of themselves for evaluation of their capacity to perform the work, which details the resources available. No more than 3 pages.

8. **Evidence of Supplier Capability (Technical Merit)**

   Bidders are required to provide references and other evidence demonstrating their experience in delivering the work required and the quality of such previous work. Bidders are required to supply three (3) references from customers,
showing their expertise. These letters must address the suppliers ability to supply timeously, the quality of workmanship and equipment, and the customers overall experiences with the supplier. The template for these letters is included at the end of this document.

9. **Performance Level Management**

   The service provider performance is measured against the levels specified in the Specification section of this document.

10. **Contract Manager - SAAO**

    The appointed service provider reports to the specified SAAO project manager.

    Meetings, where needed, will be scheduled between both parties.

11. **Safety and Health Administration**

    The contract supplier is solely responsible for the safety and well-being of its employees when working at the NRF’s Business Unit.

12. **Contract Period**

    The contract will commence with immediate effect upon signing of Acceptance of Offer and will continue until the delivery of the CCD detectors to the SAAO in Observatory, Cape Town.

13. **Product / Service Delivery Validation**

    Invoices are submitted to SAAO representatives validate that delivery of goods / works / services has been made and at the required quality and on time. No invoices for outstanding deliverables or for any unproductive or duplicated time spent by the service provider are validated for payment.

14. **Payment Intervals**

    The SAAO undertakes to pay validated invoices in full within thirty (30) days from the monthly statement date.

    The SAAO does not accept predating of invoices.
15. **Pricing Schedule for the Duration of the Contract**

*(Standard Bidding Document 3.1 and 3.3)*

**NOTE**

Only firm prices will be accepted. Non-firm prices (including prices subject to rates of exchange variations) will not be considered.

- Price quoted is fully inclusive of all costs including delivery to the specified NRF Business Unit geographical address and includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies.
- Detailed information is optional and is provided as annexures to the details provided below.
- No changes or extensions or additional ad hoc costs are accepted once the contract has been awarded.
- Bid price in South African currency, foreign exchange risk is for the account of the bidder.
- Pricing is subject to the addition of Preference Points as stipulated in Section 23 below.

**OFFER TO BE VALID FOR** 120 days FROM THE CLOSING DATE OF BID.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>UNIT</th>
<th>QTY</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIXED CHARGE ITEMS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large Format CCD Detector - Science Grade</td>
<td>Sum</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Electrical Sample / Setup Chip</td>
<td>Sum</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Mechanical Sample</td>
<td>Sum</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Packaging, Delivery &amp; Importation to Observatory, Cape Town</td>
<td>Sum</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>ADDITIONAL PRICE ITEMS OR DETAIL PRICE SCHEDULES ATTACHED</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the offer comply with the specification(s)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>YES/NO</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If not to specification, indicate deviation(s) in a separate attached schedule</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Period required for delivery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Delivery: <em>Firm / Not Firm</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery basis</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16. **Selection and Awarding of Contract**

This bid is evaluated through a two-stage process.

16.1. **Stage 1 – Selection of Qualified Bidders**

- Bidders bid response / submission is evaluated against the bid invitation specifications as well as the bidder’s capacity and capability.
- Evaluation is made in accordance to published evaluation criteria and the scoring set for each criterion.
- All qualifying bidders are shortlisted for the awarding stage.
16.2. **Stage 2 – Awarding of the Contract**

- Bidders are compared on a fair and equal basis taking into account all aspects of the proposals
- The award criterion are:
  - **Price** – with the lowest priced bid on an equal and fair comparison basis receiving the highest price score as set out in the 2011 Preference Regulations
  - **Preference** – preference points as claimed in the preference claim form are added to the price ranking scores and the highest combined score is nominated for the contract award
- **Administration** - Contracts are awarded where bidders have supplied the relevant administrative documentation especially the tax certificate.

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

Bids scoring less than the minimum threshold of 65% and, where GO/NO GO scoring is applied, scores of “NO GO” are marked as failed and are not considered in the next stage of evaluation

18. **Selection on Specifications and Technical / Functional Capabilities and Capacities**

Evaluation scoring for all criteria other than “GO/NO GO” are scored on the following basis:

<table>
<thead>
<tr>
<th>NO</th>
<th>ELEMENT</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Minimum image area - 90mmX90mm</td>
<td>GO / NO GO</td>
</tr>
<tr>
<td>2</td>
<td>Maximum pixel size - 15μm</td>
<td>GO / NO GO</td>
</tr>
<tr>
<td>3</td>
<td>Minimum full well (ke-) - 250</td>
<td>GO / NO GO</td>
</tr>
<tr>
<td>4</td>
<td>Minimum number of outputs - 4</td>
<td>GO / NO GO</td>
</tr>
<tr>
<td>5</td>
<td>Maximum number of outputs - 8</td>
<td>GO / NO GO</td>
</tr>
<tr>
<td>6</td>
<td>Maximum dark current @ 173K (e-/pix/hr) 5</td>
<td>GO / NO GO</td>
</tr>
<tr>
<td>7</td>
<td>Maximum number of connectors - 4</td>
<td>GO / NO GO</td>
</tr>
<tr>
<td>8</td>
<td>Package format - Minimum of 2 Sides buttable</td>
<td>GO / NO GO</td>
</tr>
<tr>
<td>9</td>
<td>Mounting interface - 3 Point</td>
<td>GO / NO GO</td>
</tr>
<tr>
<td>10</td>
<td>Minimum size of main hold down fastners - M4</td>
<td>GO / NO GO</td>
</tr>
<tr>
<td>11</td>
<td>All electrical connectors Standard COTS</td>
<td>GO / NO GO</td>
</tr>
<tr>
<td>12</td>
<td>Connectors - low outgassing and compact</td>
<td>GO / NO GO</td>
</tr>
<tr>
<td>13</td>
<td>Loom length (if supplied) 80-120mm</td>
<td>GO / NO GO</td>
</tr>
</tbody>
</table>

**Example Total Score**

\[
\text{Total Evaluation Score} = \left( \frac{\text{Score} \times \text{weighting} \times \text{No of Evaluators}}{\text{Maximum Score} \times 100 \times \text{No of Evaluators}} \right)
\]

Example Total Score – \(\left(\frac{(3 \times 40 \times 4) + (4 \times 30 \times 4) + (5 \times 30 \times 4)}{5 \times 100 \times 4}\right) = \left(\frac{1560}{2000}\right) = 78\%\)
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Weight</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>Minimum Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum QE @ 400nm (%)</td>
<td>5%</td>
<td>≥75%</td>
<td>≥70%</td>
<td>≥65%</td>
<td>≥60%</td>
<td>≥55%</td>
<td>4</td>
</tr>
<tr>
<td>Minimum QE @ 650nm (%)</td>
<td>5%</td>
<td>≥85%</td>
<td>≥80%</td>
<td>≥75%</td>
<td>≥70%</td>
<td>≥65%</td>
<td>3</td>
</tr>
<tr>
<td>Minimum QE @ 900nm (%)</td>
<td>5%</td>
<td>≥50%</td>
<td>≥45%</td>
<td>≥40%</td>
<td>≥35%</td>
<td>≥30%</td>
<td>4</td>
</tr>
<tr>
<td>Delivery Time in Months</td>
<td>5%</td>
<td>≤7 months</td>
<td>≤8 Months</td>
<td>≤9 Months</td>
<td>≤10 Months</td>
<td>&gt;10 Months</td>
<td>3</td>
</tr>
<tr>
<td>Output sensitivity: high responsivity mode (µV/ē )</td>
<td>5%</td>
<td>≥3</td>
<td>≥2</td>
<td>≥4</td>
<td>≥3</td>
<td>≥2</td>
<td>3</td>
</tr>
<tr>
<td>Output sensitivity: low responsivity mode (µV/ē )</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Column Defects</td>
<td>5%</td>
<td>≤15</td>
<td>≤20</td>
<td>≤25</td>
<td>≤30</td>
<td>≤50</td>
<td>3</td>
</tr>
<tr>
<td>Maximum white spots</td>
<td>5%</td>
<td>≤1500</td>
<td>≤1750</td>
<td>≤2000</td>
<td>≤2250</td>
<td>≤2500</td>
<td>3</td>
</tr>
<tr>
<td>Maximum traps &gt;200e-</td>
<td>5%</td>
<td>≤30</td>
<td>≤35</td>
<td>≤40</td>
<td>≤45</td>
<td>≤50</td>
<td>3</td>
</tr>
<tr>
<td>Maximum total black &amp; white spots</td>
<td>5%</td>
<td>≤3750</td>
<td>≤4000</td>
<td>≤4250</td>
<td>≤4500</td>
<td>≤4750</td>
<td>3</td>
</tr>
<tr>
<td>Flatness (maximum peak to valley) (µm)</td>
<td>5%</td>
<td>≤30</td>
<td>≤40</td>
<td>≤45</td>
<td>≤50</td>
<td>≤55</td>
<td>3</td>
</tr>
<tr>
<td>Maximum package size (mm)</td>
<td>5%</td>
<td>95 x 95</td>
<td>100 x 100</td>
<td>105 x 105</td>
<td>115 x 115</td>
<td>120 x 120</td>
<td>3</td>
</tr>
</tbody>
</table>

References (Weight 40%)

The reference letters from previous customers will be scored according to the table at the beginning of Paragraph 18. Three referees letters, in the format at the end of this document, must accompany the submission or else the points will not be awarded for missing reference letters. The final scores for reference letters will be averaged for all three letters. The SAAO reserves the right to call the referees on the letters.

19. **General Conditions of Contract**

General Conditions of Contract, as issued by National Treasury, are part of this contractual agreement and are made available on the SAAO Website (http://www.saao.ac.za/gcc/).

20. **Explanatory Notes to the Declarations in the SBD Documents**

The explanatory notes for the Standard Bidding Documents (SBD)

(SBD6.1 – Preference Points Claim form, SBD4 – Declaration of Interest, SBD8 – Past Supply Chain Practices and SBD9 – Competitive Bidding) declarations in this contract are made available on the NRF Website (www.nrf.ac.za -> bids) as separate documents as published by National Treasury.

21. **Special Conditions applying to this contract**

a) COMPLIANCE WITH FULL SCOPE OF THE BID INVITATION

Only bidders who can comply with the full scope of work and specification as set out in this document will be considered.

b) JOINT PROPOSALS

Service providers are allowed to submit joint proposals to allow different companies to undertake different components of the work under one single proposal. Each service provider to provide tax certificate, B-BEE
c) VALIDATION OF SUBMITTED DOCUMENTATION

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

d) NOT LIABLE FOR BID RESPONSE PREPARATION COSTS

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

e) CANCELLATION PRIOR TO AWARDING

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

f) LATE BIDS.

Bids submitted after the stipulated closing date (and time) is not considered.

g) COLLUSION, FRAUD AND CORRUPTION

Any effort by a bidder to influence bid evaluation, bid comparisons or bid award decisions in any manner, may result in rejection of the bid concerned.

h) LETTER OF AWARD

Once the delegated bid approver(s) has reached the decision, the successful bidder is informed through a written letter of acceptance, which in conjunction with elements detailed in the Standard Bidding Document 7 forms the contract between the NRF and the Bidder.

i) CONFIDENTIALITY

The successful bidder signs a general confidentiality agreement with the NRF.

j) VALIDITY PERIOD

The bid has a validity period of 90 days from date of closure of the call / bid.

k) PRESENTATIONS AND PROOF OF CONCEPT

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

l) INTELLECTUAL PROPERTY PROVIDED IN THE BID INVITATION

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

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

m) INTELLECTUAL PROPERTY CONTAINED IN THE DELIVERABLES

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

22.1. DECLARATION OF INTEREST (STANDARD BIDDING DOCUMENT 4)

22.1.1 Any legal person, including persons employed by the state¹, or persons having a kinship with persons employed by the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid (includes an advertised competitive bid, a limited bid, a proposal or written price quotation). In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons employed by the state, or to persons connected with or related to them, it is required that the bidder or his/her authorised representative declare his/her position in relation to the evaluating/adjudicating authority where-

the bidder is employed by the state; and/or

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

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

22.1.2.1 Full Name of bidder or his or her representative:

22.1.2.2 Identity Number:

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

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

22.1.2.5 Tax Reference Number:

22.1.2.6 VAT Registration Number:

22.1.2.6.1 The names of all directors/trustees/shareholders/members, their individual identity numbers, tax reference numbers and, if applicable, employee/PERSAL numbers must be indicated in paragraph 3 below.

22.1.2.7 Are you or any person connected with the bidder presently employed by the state? YES/NO

22.1.2.7.1 If so, furnish the following particulars in an attached schedule:
Name of person/director/trustee/shareholder/member:

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

Position occupied in the state institution

Any other particulars:

21.1.2.7.2 If you are presently employed by the state, did you obtain the appropriate authority to undertake remunerative work outside employment in the public sector? YES/NO

21.1.2.7.2.1 If yes, did you attach proof of such authority to the bid document? YES/NO

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

21.1.2.7.2.2 If no, furnish reasons for non-submission of such proof as an attached schedule

21.1.2.8 Did you or your spouse, or any of the company’s directors/trustees/shareholders/members or their spouses conduct business with the state in the previous twelve months? YES/NO

21.1.2.8.1 If so, furnish particulars as an attached schedule:

21.1.2.9 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? YES/NO

21.1.2.9.1 If so, furnish particulars as an attached schedule.

21.1.2.10 Are you, or any person connected with the bidder, aware of any relationship (family, friend, other) between any other bidder and any person employed by the state who may be involved with the evaluation and or adjudication of this bid? YES/NO

21.1.2.10.1 If so, furnish particulars as an attached schedule:

21.1.2.11 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? YES/NO

21.1.2.11.1 If so, furnish particulars as an attached schedule:

21.1.3. **Full details of directors/trustees/members/shareholders.**

<table>
<thead>
<tr>
<th>Full Name</th>
<th>Identity Number</th>
<th>Personal Income Tax Reference Number</th>
<th>State Employee Number/ Payroll (Persal) Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

Schedule attached with the above details for all directors / members / shareholders YES NO
22.2. DECLARATION OF BIDDER’S PAST SUPPLY CHAIN MANAGEMENT PRACTICES (STANDARD BIDDING DOCUMENT 8)

<table>
<thead>
<tr>
<th>Item</th>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.2.1</td>
<td>Is the bidder or any of its directors listed on the National Treasury’s Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Database of Restricted Suppliers now resides on the National Treasury’s website (<a href="http://www.treasury.gov.za">www.treasury.gov.za</a>) and can be accessed by clicking on its link at the bottom of the home page.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If so, furnish particulars as an attached schedule:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.2.2</td>
<td>Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Register for Tender Defaulters can be accessed on the National Treasury’s website (<a href="http://www.treasury.gov.za">www.treasury.gov.za</a>) by clicking on its link at the bottom of the home page.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If so, furnish particulars as an attached schedule:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.2.3</td>
<td>Was the bidder or any of its directors convicted by a court of law (including a court outside of the Republic of South Africa) for fraud or corruption during the past five years?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>If so, furnish particulars as an attached schedule:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.2.4</td>
<td>Was any contract between the bidder and any organ of state terminated during the past five years on account of failure to perform on or comply with the contract?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>If so, furnish particulars as an attached schedule:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
22.3. **CERTIFICATE OF INDEPENDENT BID DETERMINATION** *(STANDARD BIDDING DOCUMENT 9)*

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

I certify, on behalf of:__________________________________________________________ (Name of Bidder) that:

1. I have read and I understand the contents of this Certificate;

2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;

3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;

4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign the bid, on behalf of the bidder;

5. For the purposes of this Certificate and the accompanying bid, I understand that the word “competitor” shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:

   (a) has been requested to submit a bid in response to this bid invitation;

   (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and

   (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder

6. 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 consortium³ will not be construed as collusive bidding.

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

7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:

   (a) prices;

   (b) geographical area where product or service will be rendered (market allocation)

   (c) methods, factors or formulas used to calculate prices;

   (d) the intention or decision to submit or not to submit, a bid;
(e) the submission of a bid which does not meet the specifications and conditions of the bid; or

(f) bidding with the intention not to win the bid.

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

9. 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.

10. 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.
23. PREFERENCE POINTS CLAIM FORM (STANDARD BIDDING DOCUMENT 6.1)

POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTION

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

<table>
<thead>
<tr>
<th>B-BBEE Status Level of Contributor</th>
<th>Number of points (90/10 system)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
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<td>5</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Non-compliant contributor</td>
<td>0</td>
</tr>
</tbody>
</table>

BID DECLARATION

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

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

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

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

SUB-CONTRACTING

Will any portion of the contract be sub-contracted? YES / NO

If yes, indicate:

(i) what percentage of the contract will be subcontracted? ..............................................................%  
(ii) the name of the sub-contractor? ..........................................................................................  
(iii) the B-BBEE status level of the sub-contractor? ..................................................  
(iv) whether the sub-contractor is an EME? YES / NO
DECLARATION WITH REGARD TO COMPANY/FIRM

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

VAT registration number: .................................................................................................................................

Company registration number .............................................................................................................................

TYPE OF COMPANY/FIRM

☐ Partnership/Joint Venture / Consortium

☐ One person business/sole propriety

☐ Close corporation

☐ Company

☐ (Pty) Limited

[Tick applicable box]

DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

........................................................................................................................................................................

COMPANY CLASSIFICATION

☐ Manufacturer

☐ Supplier

☐ Professional service provider

☐ Other service providers, e.g. transporter, etc.

[Tick applicable box]

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

I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contribution of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we 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 above, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;

(iv) If the B-BBEE status level of contribution has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –

(a) disqualify the person from the bidding process;

(b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;

(c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;

(d) restrict the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, from obtaining business from any organ of state for a period not exceeding 10 years, after the audi alteram partem (hear the other side) rule has been applied; and

(e) forward the matter for criminal prosecution

(v) A person will not be awarded points for B-BBEE status level if it is indicated in the bid documents that such a bidder intends sub-contracting more than 25% of the value of the contract to any other enterprise that does not qualify for at least the points that such a bidder qualifies for, unless the intended sub-contractor is an EME that has the capability and ability to execute the sub-contract.

(vi) A person awarded a contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an EME that has the capability and ability to execute the sub-contract.
24. CONTRACT FORM - PURCHASE OF GOODS / WORKS / SERVICES
(STANDARD BIDDING DOCUMENT 7)

PART 1 – WRITTEN OFFER (To Be Filled In By the Bidder)

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

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

   (i) Bidding documents, viz

   | Invitation to bid (SBD1) | Technical Specification(s) |
   | Bidder’s responses to technical specifications, capability requirements and capacity |
   | Pricing schedule(s) (SBD3) | Tax clearance certificate |
   | Preference claims for Broad Based Black Economic Empowerment Status Level of Contribution in terms of the Preferential Procurement Regulations 2011 (SBD6.1); |
   | Declaration Certificate for Local Production and Content (SBD6.2); |
   | Declaration of interest (SBD4); | Declaration of bidder’s past SCM practices (SBD8); |
   | Certificate of Independent Bid Determination (SBD9) | Special Conditions of Contract; and |

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

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

5. I declare that I have no participation in any collusive practices with any bidder or any other person regarding this or any other bid.

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

7. I confirm that I am duly authorised to sign this contract.
PART 2 – ACCEPTANCE OF WRITTEN OFFER

The National Research Foundation issues a written Letter of Award or, dependent on the complexity, a written purchase order signed by delegated authoriser (in accordance with the Public Finance Management Act, 1999) detailing:

- The supply of services / works / goods specified in this bid invitation and in annexures forming part of the bid invitation,

- The delivery instructions applying to this contract;

- The payment of validated invoices as set out in this bid invitation and

- The minimum threshold for local production and content, if applicable.

The acceptance of the written offer is authorised by a duly delegated official of the NRF and such proof of authority is available upon request.
25. Definition

“all applicable taxes” includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies;

“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 received by a measured entity based on its overall performance using the relevant scorecard contained in the Codes 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 an organ of state for the provision of services, works or goods, through price quotations, written price quotations, advertised competitive bidding processes or proposals;

“bid price” price offered by the bidder, including value added tax (VAT);

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

“Closing time” means the date and hour specified in the bidding documents for the receipt of bids.

“Collusion” means Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).

Collusive bidding is a per se prohibition meaning that it cannot be justified under any grounds. Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and/or services for purchasers who wish to acquire goods and/or services through a bidding process.

Bid rigging is, therefore, an agreement between competitors not to compete.

“comparative price” means the price after the factors of a non-firm price and all unconditional discounts that can be utilised have been taken into consideration;

“consortium or joint venture” 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;

“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.

“Contract price” means the price payable to the supplier under the contract for the full and proper performance of his contractual obligations.

“Corrupt practice” means the offering, giving, receiving, or soliciting of any thing of value to influence the action of
a public official in the procurement process or in contract execution.

"Countervailing duties" are imposed in cases where an enterprise abroad is subsidised by its government and encouraged to market its products internationally.

“Country of origin” means the place where the goods were mined, grown or produced or from which the services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembly of components, a commercially recognised new product results that is substantially different in basic characteristics or in purpose or utility from its components.

“Day” means calendar day.

“Delivery” means delivery in compliance of the conditions of the contract or order.

“Delivery ex stock” means immediate delivery directly from stock actually on hand.

“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.

“designated sector” means a sector, sub-sector or industry that has been designated by the Department of Trade and Industry in line with national development and industrial policies for local production, where only locally produced services, works or goods or locally manufactured goods meet the stipulated minimum threshold for local production and content;

“duly sign” means a Declaration Certificate for Local Content that has been signed by the Chief Financial Officer or other legally responsible person nominated in writing by the Chief Executive, or senior member/person with management responsibility (close corporation, partnership or individual).

"Dumping" occurs when a private enterprise abroad market its goods on own initiative in the RSA at lower prices than that of the country of origin and which have the potential to harm the local industries in the RSA.

“EME” means any enterprise with an annual total revenue of R5 million or less.

“Firm price” means the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract;

"Force majeure" means an event beyond the control of the supplier and not involving the supplier’s fault or negligence and not foreseeable. Such events may include, but is not restricted to, acts of the purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

“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.

“functionality” means the measurement according to predetermined norms, as set out in the bid documents, of a service or commodity that is designed to be practical and useful, working or operating, taking into account, among other factors, the quality, reliability, viability and durability of a service and the technical capacity and ability of a bidder;

“GCC” means the General Conditions of Contract.
“Goods” means all of the equipment, machinery, and/or other materials that the supplier is required to supply to the purchaser under the contract.

“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.

“Local content” means that portion of the bidding price which is not included in the imported content provided that local manufacture does take place.

“Manufacture” means the production of products in a factory using labour, materials, components and machinery and includes other related value-adding activities.

“non-firm prices” means all prices other than “firm” prices;

“Order” means an official written order issued for the supply of goods or works or the rendering of a service.

“person” includes a juristic person;

“Project site,” where applicable, means the place indicated in bidding documents.

“Purchaser” means the organization purchasing the goods.

“rand value” means the total estimated value of a contract in South African currency, calculated at the time of bid invitations, and includes all applicable taxes and excise duties;

“Republic” means the Republic of South Africa.

“SCC” means the Special Conditions of Contract.

“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.

“Shareholder” means a person who owns shares in the company and is actively involved in the management of the enterprise or business and exercises control over the enterprise.

“State” means –

(i) any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No. 1 of 1999);

(ii) any municipality or municipal entity;

(iii) Provincial Legislature;

(iv) National Assembly or the National Council of Provinces; or

(v) Parliament.

“stipulated minimum threshold” means that portion of local production and content as determined by the Department of Trade and Industry;

“sub-contract” means the primary contractor’s assigning, leasing, making out work to, or employing, another person to support such primary contractor in the execution of part of a project in terms of the contract;
“total revenue” bears the same meaning assigned to this expression in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act and promulgated in the Government Gazette on 9 February 2007;

“trust” means the arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person;

“trustee” means any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.

“Written” or “in writing” means handwritten in ink or any form of electronic or mechanical writing.

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

The South African Astronomical Observatory is purchasing a large format CCD and would appreciate your effort in completing the reference below based on your experience with:

Name of Supplier: ___________________________

Product purchased: __________________________

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Poor</th>
<th>Average</th>
<th>Meets Requirements</th>
<th>Exceeds Requirements</th>
<th>Exceeds Requirements and adds value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professionalism</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Interpersonal skills</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Turn around / completion times</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Satisfaction with the CCD supplied.</td>
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<tr>
<td>Response times</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Reliability of equipment</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Would you use them again?  
No  
Yes

Overall Impression

Completed by: ___________________________

Company Name: ___________________________

Contact Number: ___________________________

Company Stamp