



SARAO

South African Radio
Astronomy Observatory

REQUEST FOR INFORMATION

RFI NUMBER:	SKA SA FAP 001 2017	CLOSING DATE:	29 September 2017	CLOSING TIME	11:00
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SHORT DESCRIPTION

REQUEST FOR INFORMATION FROM INTERESTED PARTIES FOR FINANCIAL ASSISTANCE PROGRAMME PARTICIPATION IN SKA CONSORTIA

Validity period from date of closure:		60	days
Briefing Session / Information Session	Date and Time	15 September 2017 at 10:00	
	Location	Bidders have the option to attend at either locations below which will be linked via videcon	
		SKA SA Pinelands 3 rd Floor, The Park Park Road Pinelands Cape Town 7405	The SKA SA Rosebank 1 ST Floor , Blend on Baker Building 17 Baker Street Rosebank Johannesburg 2196

EITHER PHYSICALLY OR BY COURIER	ENVELOPE ADDRESSING:
SKA SA Office, 3rd Floor, The Park, Park Road, Pinelands, Cape Town	RFI Number and Name, Postal Address, Contact Name, Telephone Number and email address on the envelope

Bidders are required to deliver Bids to the correct address timeously. The NRF does not consider late bid responses.

Bidders submit their bid response on the official forms in this invitation (not to be re-typed) with additional information supplied on attached supporting schedules.

ANY BIDDING PROCEDURE ENQUIRIES DIRECTED TO:

Contact Person:	Mr. Rayyan Arnold (Supply Chain Specialist)	
Tel:	(021) 506 7300	
Email:	rarnold@ska.ac.za	

ANY TECHNICAL ENQUIRIES DIRECTED TO:

Contact Person:	Carla Sharpe (Business Manager)	
Tel:	(021) 506 7300	
Email:	carla@ska.ac.za	

COMPLIANT SUBMISSION REQUIREMENTS:

1	Signed and completed RFI Invitation		
2	Registration Proof of legal identity per entity (Certificate of Incorporation)		
3	Bidders Profile		
4	Contactable references		
5	Pricing Schedule(s) (SBD3), including detailed schedules attached		
6	Declaration of interest (SBD4; this document)		
7	Declaration of bidders past SCM practices (SBD8; this document)		
8	Certificate of independent bid determination (SBD9; this document)		
9	Any information in response to RFI		
REPRESENTED BY (Company name)			
POSTAL ADDRESS			
PHYSICAL ADDRESS			
TELEPHONE NUMBER	CODE	NUMBER	
CELL PHONE NUMBER	CODE	NUMBER	
FACSIMILE NUMBER	CODE	NUMBER	
E-MAIL ADDRESS			
VAT REGISTRATION NUMBER			
COMPANY REGISTRATION NUMBER			
DESCRIBE PRINCIPAL BUSINESS ACTIVITIES:			
TYPE OF COMPANY/FIRM [Tick applicable box]			
Partnership/Joint Venture/Consortium		One person business/sole proprietor	
Close Corporation		Company	

(Pty) Limited		Other	
COMPANY CLASSIFICATION [Tick applicable box]			
Manufacturer		Supplier	
Professional Service Provider		Other service providers e.g. transporter, etc.	

Briefing:

For more information on the bid process and work package areas: Organizations fitting participation criteria are encouraged to attend the SKA South Africa Information Session to be hosted at 10h00 on the **15 September 2017** at the SKA SA Johannesburg and Cape Town offices, linked via telecon, for further discussions and information dissemination on the requirements, work package and the associated financial assistance programme. In order to attend the Information Day, please RSVP by the 13 September to industry@ska.ac.za and note that places may be limited.

1. Background to the National Research Foundation

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.

2. Context in which the required procurement is needed/utilised

The South African Square Kilometre Array (SKA) project, which includes the construction of the MeerKAT radio telescope in the Karoo, is a project of the South African Radio Astronomy Observatory (SARAO), a national facility of the National Research Foundation and the SKA SA. Information about the project is available from www.ska.ac.za.

3. Undertakings by Respondent

It will be accepted that the Respondent, on submitting the RFI response, has read, understood and accepted all the terms and conditions of the document. The submission of an RFI by any Respondent shall presume complete acceptance of the terms and conditions of the document. All qualifications and or exceptions should be noted in the RFI Response document.

The NRF has no obligation to enter into any agreement with the respondent. This RFI is for information

purposes only and the NRF does not intend to create any expectation towards the respondent in relation to this RFI.

4. Specification

SKA South Africa invites responses to this RFI from South African industry and institutions with appropriate existing expertise that may be eligible for financial assistance on a shared cost, shared risk basis towards participation in the Square Kilometre Array (SKA) design phase in any or all of the following areas:

Dish Consortium:

1. Lead the SPF Band 1 and 5 development teams towards their CDRs. Project management, Systems Engineering and technical leadership of the two groups. Regular interaction with the two groups and participation in the management of the consortium.
2. Further develop the SPF services (controller, Vacuum and Helium) systems in concert with the Band 1 and Band 5 development.
3. Support the installation, setting to work and integration of the SKA Band2 feed and SPF services on the SKA-MPI Dish in the Karoo. Support Band 2 feed and services during the operation of the SKA-MPI dish during 2018.
4. Develop the SPF Band2 lab test jig to enable the acceptance testing of the Band2 feed during industrialisation, production and operation.
5. Provide the SKA Dish Consortium with general SPF engineering services to support the completion of the SKA Dish Consortium CDR.

The organisation to be contracted for this work package should have the following capabilities:

1. Have a good understanding of the SKA Dish systems and the consortium. In order to lead the Band1 and Band5 teams, a sufficient level of seniority and high level of experience is required.
2. Experts in cryogenically cooled receiver systems for radio astronomy applications.
3. Experience in industrialisation and production of systems similar to the SPF.

INFRA Consortium:

The Square Kilometre Array (SKA) Telescope is a science mega-project that aims to build the world's largest radio telescope. Due to the high number of radio antennas (refer to Figure 1) and very high processing requirements, the SKA's telescope in South Africa will consume a significant amount of power.

The current configuration of the SKA1-MID telescope due to be built in South Africa comprises of a core

area that is densely populated with dishes. This core area accommodates approximately 75% of the dishes for SKA1, while the remaining dishes will be distributed along three spiral arms, which extend out from the core up to a distance of approximately 120km. The distance between these dishes increase with distance from the core, so that the outer dishes are significant distances from each other. Due to the large distances between the dishes in the spiral arms, especially the outermost dishes, the reticulation of power to these dishes will be a significant capital expenditure.

The SKA telescopes will be equipped with some of the most sensitive radio frequency receivers ever built. As such, the Karoo site has been declared as a radio frequency protection zone. Any equipment that is installed in this area will be subject to strict Radio Frequency Interference (RFI) requirements and measurements.

The scope of this work will relate to the feasibility and pre prototype design proposal of potential islanded power systems. This Expression of Interest therefore requests further information from interested South African commercial entities for the supply and operation of islanded renewable power stations for spiral arm dishes for the scenarios described above, and specifically the tariffs that the SKAO can expect to be charged for such systems. Capital purchase options can also be proposed, but the SKAO is primarily interested in options where only a tariff is charged for the energy supplied. The solution proposed must be in the form of a Power Purchase Agreement (PPA) whereby the SKAO would enter into a contract (typically 10-30 years) and the SKAO pays a tariff based on the energy consumed monthly.

Science Data Processor (SDP):

Activities will include SDP Architecture review & documentation, Cost Submission, Compliance Submission, Risk review and CDR review.

Consortium management and coordination as a member (SDP SE) of the SDP project coordination group and SDP management team.

In addition,

- Systems Engineering oversight as required by Sprint tasks
- Project Management of the Systems Engineering tasks & activities
- SKAO (systems level) System Engineering point of contact
- Risk management
- Expertise in large scale and high performance computing and software systems

5. Due Diligence of Supply Capacity and Capability

Bidder's profile

Bidders are required to provide a profile of themselves for evaluation of their capacity to supply the required skills as set out in section 4.

Contactable References

Bidder is required to supply a list of five (5) contactable references.

Written references from previous customers

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

Criteria	Below Expectations	Meets Expectations	Above Expectations
Professionalism			
Interpersonal skills			
Turn around/completion times			
Satisfaction with the work done.			
Overall Impression (i.e. would use again)			

6. Pricing Schedule for the Duration of the Contract

NOTE Detailed information is optional and provided as annexures to the details provided below.					
RFI Bid price in South African currency, foreign exchange risk is for the account of the Bidder.					
Pricing is subject to the addition of Preference Points as stipulated in the section below - Standard Bidding Document 6.1 Preference claim form					
OFFER TO BE VALID FOR		60 days	FROM CLOSING DATE OF BID.		
ITEM NO	QUANTITY (unit of measure)	DESCRIPTION OF SERVICE	RATE/UNIT PRICE (per unit of measure)	BID/QUOTE PRICE	
1					
2					
3					
4					
		TOTAL (INCLUSIVE OF VAT)			
B-BBEE STATUS LEVEL OF CONTRIBUTION (Per SBD 6.1 below)			Level	Preference Points Claimed	
Are detailed price schedules attached?				Yes	No
Does the offer comply with the specification(s)?				Yes	No
If the offer does not comply with specification, indicate deviation(s) in a separate attached schedule.					

7. PREFERENCE POINTS CLAIMED (SBD 6.1)

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

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

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

Level	=	80:20
	=	

(Points claimed 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).

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

- 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 Bidder from the bidding process;
- b) Recover costs, losses or damages it has incurred or suffered as a result of that Bidder’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 ten (10) years, after the audi alteram partem (hear the other side) rule has been applied; and forward the matter for criminal prosecution

8. SUB-CONTRACTING (STANDARD BIDDING DOCUMENT 6.1)

Will any portion of the contract be sub-contracted?	Yes	No
If Yes, indicate:		
(i) What percentage of the contract will be subcontracted?	%	
(ii) The name of the sub-contractor?		
(iii) The B-BBEE status level of the sub-contractor?		
(iv) Whether the sub-contractor is an EME?	Yes	No

I/we, the undersigned, who is/are duly authorized to do on behalf of the company/firm, certify that the information is true and correct and I/we acknowledge that:

- i. A Bidder will not be awarded points for B-BBEE status level if it is indicated in the Bid documents that such a Bidder intends sub-contracting more than 25% of the value of the contract to any other enterprise that does not qualify for at least the points that such a Bidder qualifies for, unless the intended sub-contractor is an EME that has the capability and ability to execute the sub-contract.
- ii. A Bidder awarded a contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the Bidder concerned, unless the contract is sub-contracted to an EME that has the capability and ability to execute the sub-contract.

9. DECLARATION OF INTEREST (SBD 4)

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

- The Bidder is employed by the State; and/or

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

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

- Full Name of Bidder or his/her representative

- Identity Number:

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

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

- Tax Reference Number:

- VAT Registration Number:

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

Schedule attached with the above details for all directors/members/shareholders	Yes	No
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- Are you or any person connected with the Bidder presently employed by the state? If so, furnish the following particulars in an attached schedule:
- | | | |
|--|-----|----|
| | Yes | No |
|--|-----|----|

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

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

Position occupied in the state institution

Any other particulars:

- If you are presently employed by the State, did you obtain the appropriate authority to undertake remunerative work outside employment in the public sector? 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.)
- | | | |
|--|-----|----|
| | Yes | No |
|--|-----|----|

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

- Do you, or any person connected with the Bidder, have any relationship (family, friend, other) with a person employed by the State and who may be involved with the evaluation and or adjudication of this Bid? If so, furnish particulars as an attached schedule.
- | | | |
|--|-----|----|
| | Yes | No |
|--|-----|----|

- Are you, or any person connected with the Bidder, aware of any relationship (family, friend, other) between any other Bidder and any person employed by the State who may be involved with the evaluation and or adjudication of this Bid? If so, furnish particulars as an attached schedule:
- | | | |
|--|-----|----|
| | Yes | No |
|--|-----|----|

- Do you or any of the directors/ trustees/ shareholders/ members of the company have any interest in any other related companies whether or not they are bidding for this contract? If so, furnish particulars as an attached schedule:
- | | | |
|--|-----|----|
| | Yes | No |
|--|-----|----|

10. DECLARATION OF BIDDER'S PAST SCM PRACTICES (SBD 8)

<ul style="list-style-type: none"> Is the Bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? If Yes, furnish particulars as an attached schedule: 	Yes	No
<ul style="list-style-type: none"> Is the Bidder or any of its directors listed on the Register for Tender Defaulters in terms of Section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? If Yes, furnish particulars as an attached schedule: 	Yes	No
<ul style="list-style-type: none"> Was the Bidder or any of its directors convicted by a court of law (including a court outside of the Republic of South Africa) for fraud or corruption during the past five years? If Yes, furnish particulars as an attached schedule: 	Yes	No
<ul style="list-style-type: none"> Was any contract between the Bidder and any organ of state terminated during the past five years on account of failure to perform on or comply with the contract? If Yes, furnish particulars as an attached schedule: 	Yes	No
<p>The Database of Restricted Suppliers and Register for Tender Defaulters resides on the National Treasury's website (www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.</p>		

11. CERTIFICATE OF INDEPENDENT BID DETERMINATION (SBD 9)

<p>I, the undersigned, in submitting this Bid in response to the invitation for the Bid made by the NATIONAL RESEARCH FOUNDATION, do hereby make the following statements that I certify to be true and complete in every respect:</p>		
<ul style="list-style-type: none"> I have read and I understand the contents of this Certificate; 	Yes	No
<ul style="list-style-type: none"> I understand that the Bid will be disqualified if this Certificate is found not to be true and complete in every respect; 	Yes	No
<ul style="list-style-type: none"> I am authorised by the Bidder to sign this Certificate, and to submit the Bid, on behalf of the Bidder; 	Yes	No
<ul style="list-style-type: none"> Each person whose signature appears on the Bid has been authorised by the Bidder to determine the terms of, and to sign, the Bid on behalf of the Bidder; 	Yes	No
<p>For the purposes of this Certificate and the accompanying Bid, I understand that the word "competitor" shall include any individual or organisation, other than the Bidder, whether or not affiliated with the Bidder, who:</p> <ol style="list-style-type: none"> Has been requested to submit a Bid in response to this Bid invitation; Could potentially submit a Bid in response to this Bid invitation, based on their qualifications, abilities or experience; and Provides the same goods and services as the Bidder and/or is in the same line of business as the Bidder 		
<p>The Bidder has arrived at the accompanying Bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium³ will not be construed as collusive bidding.</p>		
<p>In particular, without limiting the generality of paragraphs above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:</p> <ol style="list-style-type: none"> Prices; Geographical area where product or service will be rendered (market allocation); Methods, factors or formulas used to calculate prices; The intention or decision to submit or not to submit, a Bid; The submission of a Bid which does not meet the specifications and conditions of the Bid; or Bidding with the intention not to win the Bid. 		
<p>In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this Bid invitation relates.</p>		
<p>The terms of this Bid have not been, and will not be, disclosed by the Bidder, directly or indirectly, to any competitor, prior to the date and time of the official Bid opening or of the awarding of the contract.</p>		

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

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.

12. BID SUBMISSION CERTIFICATE FORM

I hereby undertake to supply all or any of the goods, works and services described in this procurement invitation to the **NATIONAL RESEARCH FOUNDATION** in accordance with the requirements and specifications stipulated in this Procurement Invitation document at the price/s quoted.

The following documents are deemed to form and be read and construed as part of this agreement even where integrated in this document:

Invitation to RFI	Technical Specification(s) set out in this RFI Invitation inclusive of any annexures attached
Bidder's responses to technical specifications, capability requirements and capacity as attached to this document	
Pricing Schedule(s) (SBD3) including detailed schedules attached	
Preference claims for Broad Based Black Economic Empowerment Status Level of Contribution in terms of the Preferential Procurement Regulations 2011 (SBD6.1) and the BBEE certificate	
Declaration of Interest (SBD4);	Declaration of Bidder's past SCM practices (SBD8);
Certificate of Independent Bid Determination (SBD9)	General Conditions of Contract

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

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

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

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

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

NAME (PRINT)	
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WITNESSES

1 _____

2 _____

CAPACITY	
SIGNATURE	
NAME OF FIRM	
DATE	