



**TENDER DESCRIPTION:**

**DESIGN, MANUFACTURE, INSTALLATION AND COMMISSIONING OF PHASE 1 OF THE SKAO SCIENCE PROCESSING CENTRE (SPC) AND ASSOCIATED INFRASTRUCTURE FOR THE CAPE TOWN HOST INFRASTRUCTURE SYSTEM (CTHIS) FACILITY AT ITHEMBA LABS, CAPE TOWN**

**BID NO: NRF/SARAO SHAO/23/2025-26**

**Closing Date: 29 July 2025**

**NAME OF BIDDER:** \_\_\_\_\_

**CSD NUMBER:** \_\_\_\_\_

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## GENERAL TENDER INFORMATION

- TENDER DESCRIPTION** : DESIGN, MANUFACTURE, INSTALLATION AND COMMISSIONING OF PHASE 1 OF THE SKAO SCIENCE PROCESSING CENTRE (SPC) AND ASSOCIATED INFRASTRUCTURE FOR THE CAPE TOWN HOST INFRASTRUCTURE SYSTEM (CTHIS) FACILITY AT ITHEMBA LABS, CAPE TOWN
- CIDB CONTRACTOR GRADING** : Contractors must have a CIDB contractor grading designation of **8 GB** or higher
- BID CLARIFICATION MEETING** : A non-compulsory bid clarification meeting will take place as follows
- Date:** Tuesday, 01 July 2025  
**Time:** 10.00 AM  
**Zoom Registration Link:**  
<https://ska.zoom.us/meeting/register/bPbj1NDVTpOyg5fkt95y8A>
- COMPULSORY SITE VISIT** : A compulsory site visit will take place as follows -
- Date:** Friday, 04 July 2025  
**Time:** 10.00 AM  
**Venue:** iThemba LABS Precinct (located on the Old Faure Road, which runs parallel to the N2, between the M32 and R310, in Cape Town).  
GPS coordinates: Latitude: 34°1'27.96"S; Longitude: 18°43'1.32"E
- BID CLOSING DATE** : Tuesday, 29 July 2025
- CLOSING TIME** : 12:00 PM
- SUBMISSION INSTRUCTIONS** : Electronic submissions must be sent to [tenders@sarao.ac.za](mailto:tenders@sarao.ac.za)
- Bids must be submitted in two separate electronic folders, one with the compliance and technical response, and the second with the financial response. Technical submissions should preferably be in searchable PDF format

**BIDDER'S REPRESENTATIVE CONTACT INFORMATION:**

NAME OF BIDDER: .....

CONTACT PERSON: .....

TELEPHONE NUMBER: CODE.....NUMBER.....

CELL PHONE NUMBER: .....

E MAIL ADDRESS: .....

**SOUTH AFRICAN RADIO ASTRONOMY OBSERVATORY**

**BID NO: NRF/SARAO SHAO/23/2025-26**

**DESIGN, MANUFACTURE, INSTALLATION AND COMMISSIONING OF PHASE 1 OF THE SKAO SCIENCE PROCESSING CENTRE (SPC) AND ASSOCIATED INFRASTRUCTURE FOR THE CAPE TOWN HOST INFRASTRUCTURE SYSTEM (CTHIS) FACILITY AT ITHEMBA LABS, CAPE TOWN**

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## T1: Tendering Procedures

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## T1.1 TENDER NOTICE AND INVITATION TO TENDER

### SOUTH AFRICAN RADIO ASTRONOMY OBSERVATORY

**BID NO: NRF/SARAO SHAO/23/2025-26**

**DESIGN, MANUFACTURE, INSTALLATION AND COMMISSIONING OF PHASE 1 OF THE SKAO SCIENCE PROCESSING CENTRE (SPC) AND ASSOCIATED INFRASTRUCTURE FOR THE CAPE TOWN HOST INFRASTRUCTURE SYSTEM (CTHIS) FACILITY AT ITHEMBA LABS, CAPE TOWN**

### BID NOTICE

Bids are invited for the following Works published by the South African Radio Astronomy Observatory (SARAO), a business unit of the National Research Foundation (NRF) (hereinafter referred to as the "Employer").

Bid Number	Bid Description	CIDB Grading	Bid Closing Date and Time
NRF/SARAO SHAO/23/2025-26	DESIGN, MANUFACTURE, INSTALLATION AND COMMISSIONING OF PHASE 1 OF THE SKAO SCIENCE PROCESSING CENTRE (SPC) AND ASSOCIATED INFRASTRUCTURE FOR THE CAPE TOWN HOST INFRASTRUCTURE SYSTEM (CTHIS) FACILITY AT ITHEMBA LABS, CAPE TOWN	It is estimated that contractors must have a CIDB contractor grading designation of <b>8 GB</b> or higher	29 July 2025 at 12.00 PM

#### BID CLARIFICATION MEETING AND SITE VISIT

A non-compulsory bid clarification meeting will take place as detailed below –

Date: Tuesday, 01 July 2025

Time: 10.00 AM

Registration & Meeting Link: To register in advance for the briefing session, click on the following link:

<https://ska.zoom.us/meeting/register/bPbj1NDVTpOyg5ft95y8A>

After registering, bidders will receive a confirmation email containing information about joining the meeting.

Following the bid clarification meeting, a Compulsory site visit will be held as detailed below.

Date: Friday, 04 July 2025

Time: 10:00 AM

Venue: iThemba LABS Precinct (located on the Old Faure Road, which runs parallel to the N2, between the M32 and R310, in Cape Town). GPS coordinates: Latitude: 34°1'27.96"S; Longitude: 18°43'1.32"E

**NOTE** - Any bid submitted by a bidder not represented at the site visit will be rejected. Persons attending the bid clarification meeting and site visit must be duly authorised to represent the bidder.

#### PREFERENTIAL PROCUREMENT SYSTEM:

The 90/10 price and preference points system, as prescribed by the Preferential Procurement Regulations, 2022 issued under the Preferential Procurement Policy Framework Act, (Act No 5 of 2000) (PPFA) will be applied to evaluate this bid.

**EVALUATION CRITERIA:**

Only bids achieving a minimum score of 70% for Functionality (in both Stages 2.1 & 2.2 of the Functionality Evaluation) will be evaluated further on price and preference. **Failure to achieve the minimum score will result in a bid being held to be non-responsive and disqualified.**

**BID PUBLICATION:**

The bid document will be available from Tuesday, 24 June 2025 and may be accessed on the following websites: [www.sarao.ac.za/tenders](http://www.sarao.ac.za/tenders), and [www.etenders.gov.za](http://www.etenders.gov.za).

**BID SUBMISSION:**

Electronic bid submissions must be sent to [tenders@sarao.ac.za](mailto:tenders@sarao.ac.za), on or before the closing date, **Tuesday, 29 July 2025.**

Bids must be submitted in separate electronic folders, one (or more) with the compliance and technical response, and a separate folder for the financial response. Submissions should preferably be in searchable PDF format.

**BID CONDITIONS:**

SARAO does not bind itself to accept the lowest or any tender and reserves the right to accept any tender or portion of a tender. SARAO reserves the right to cancel the tender without making an award.

**BID ENQUIRIES:**

Bid enquiries may be directed to [tender-enquiries@sarao.ac.za](mailto:tender-enquiries@sarao.ac.za).

### T1.1.1 LOCALITY PLAN: SITE VISIT

The site is located within the iThemba LABS NRF facility precinct on Old Faure Road, City of Cape Town municipal region near the suburb of Blue Downs and is accessible via Old Faure Road to the North, the N2 to the South and R310 to the East.

A site visit will be conducted as detailed below. Please note that bidders are responsible for arranging their own logistics to attend the clarification meeting at iThemba Labs, and drive to the site (address below) for the site visit directly after.

**Date:** Friday, 04 July 2025

**Time:** 10:00 AM

**Venue:** iThemba LABS Precinct (located on the Old Faure Road, which runs parallel to the N2, between the M32 and R310, in Cape Town).

**GPS coordinates:** Latitude: 34°1'27.96"S; Longitude: 18°43'1.32"E



Figure 1: CTHIS Site – Portion of Erf 4197, adjacent to iThemba Labs Precinct (located on Old Faure Road), Cape Town

## T1.2 TENDER DATA

### T1.2.1 Standard Conditions of Tender

The conditions of tender are the Standard Conditions of Tender as contained in Board Notice 423 of 2019 in Government Gazette No 42622 of 8 August 2019, Construction Industry Development Board (CIDB) Standard for Uniformity in Construction Procurement. (see [www.cidb.org.za](http://www.cidb.org.za)).

### T1.2.2 Variations to the Standard Conditions of Tender

The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall take precedence in the interpretation of any ambiguity or inconsistency between it and the standard conditions of tender. Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies.

The following variations, amendments and additions to the Standard Conditions of Tender shall apply to this tender.

Clause No.	Variation, Amendment or Addition
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C.1	<b>General</b>
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C.1.2	<b>Tender Documents</b>
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*Add the following to the end of **Clause C.1.2**:*

“The Tender Document for this Contract comprises the following:

Not issued to Tenderers, but available from the S.A. Federation of Civil Engineering Contractors, the S.A. Institution of Civil Engineering, the S.A. Bureau of Standards, the Government printers, the Construction Industry Development Board, and the Employer, as applicable:

1. CIDB, “The Standard for Uniformity in Construction Procurement Annex C, Standard Conditions of Tender”, Board Notice 423 of 2019 of Government Gazette No. 42622 of 9 August 2019.
2. The General Conditions of Contract for this project is the Second Edition 2017 FIDIC (International Federation of Consulting Engineers) Yellow Book, Conditions of Contract for Plant and Design Build.
3. The Preferential Procurement Policy Framework Act No 5 of 2000, and the Preferential Procurement Policy Framework Act Regulations, 2022, published in Government Gazette 47452 on 4 November 2022.
4. The Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, and the Construction Regulations (2014).

C.2	<b>Bidder’s Obligations</b>
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C.2.1	<b>Eligibility</b>
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C.2.1.1	<i>Add the following to the end of <b>Clause C.2.1.1</b>:</i>
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**A. Construction Industry Development Board (CIDB) Registration**

Only those tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, for an **GB** class of construction work, are eligible to have their tenders evaluated.

**B. Joint Ventures and Consortia are eligible to submit a tender offer provided that:**

Joint ventures are eligible to submit tenders provided that:

1. Every member of the joint venture is registered with the CIDB;
2. The lead partner has a contractor grading designation in the GB class of construction work; or not lower than one level below the required grading designation in the class of works under consideration and possesses the required recognition status;
3. The combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a **GB** class of construction work or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations;
4. The Bidder, if a joint venture or consortium, must submit a signed JV or consortium agreement specific to the tendered contract and showing clearly the percentage contribution of each partner to the Joint Venture or Consortium. The value of work to be undertaken by each partner must be within their CIDB grading limit;
5. The following joint venture agreements are recommended for use or to serve as a basis for the development of an agreement –
  - The CIDB Joint Venture Agreement, which is intended for use by all types of contractors, including professional service providers;
  - The South African Federation of Civil Engineering Contractors (SAFCEC) Joint Venture Agreement, which is intended only for joint ventures between established contractors and is not suitable for use by professional service providers;

### **C. National Treasury Central Supplier Database Registration**

Bidders must register on the National Treasury Central Supplier (CSD) Database and provide their CSD registration number where required in this bid document. Bidders who are not registered are not precluded from submitting bids, but must be registered prior to Contract Award.

In the case of Joint Venture partnerships this requirement will apply individually to each party to the Joint Venture.

Bidders who wish to register as service providers on the CSD can register online at <https://secure.csd.gov.za/Account/Register>.

### **D. Attendance of Compulsory Site Visit**

Only Bidders who attend the site visit, and have Schedule A2 to this bid document (Certificate of Attendance of Site Visit), signed by the Employer's agent, will be eligible to submit a tender offer.

### **E. Bidder's Tax Clearance Certificate**

Bidders must be registered with the South African Revenue Services (SARS) and must provide their CSD registration number and valid SARS Tax Clearance PIN Number.

At the point of contract award, the recommended bidder must be in good standing with SARS, failing which the bidder must be in good standing within such extended period as may be granted by the Employer, failing which the bid will be disqualified from further consideration.

Each party to a Joint Venture or Consortium must submit their individual CSD registration numbers and Tax Clearance PIN Numbers. Each member of the Joint Venture or Consortium must be in good standing with SARS at the time of contract award, failing which the bid will be disqualified from further consideration.

### **F. Letter of Good Standing with the Compensation Commissioner (COIDA)**

Bidders must submit their Letter of Good Standing with the Compensation Commissioner, in terms of the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993.

Letters of Good Standing submitted must be current and valid.

In the case of Joint Ventures or Consortia, each party must submit their respective Letters of Good Standing with the Compensation Commissioner.

### **G. Minimum Functionality Score to be Achieved**

Any tender which scores less than the minimum threshold values for the functionality evaluation, will be held to be non-responsive and disqualified.

## H. Health and Safety Plan for Construction

The tenderer is required to submit a draft Health and Safety Plan for the construction of this project or a similar project that has been completed.

## I. Environmental Management Plan

The tenderer is required to submit a draft Environmental Management Plan together with their offer, which deals with the management of environmental areas of the identified site.

### C.2.7 Bid Clarification Meeting

Add the following to the end of **Clause C.2.7**:

“The arrangements for a bid clarification meeting and site visit are as stated in the Tender Notice and Invitation to Tender.

Bidders should be represented by a person or persons who are suitably qualified and experienced to comprehend the aspects of the work involved.

Bidders shall bear all costs for attendance of the clarification meeting and site visit.”

### C.2.13 Submitting a Tender Offer

#### C.2.13.2 Add the following to the end of **Clause C.2.13.2**:

“Bid submissions must be in electronic format.

Bid submissions must comprise separate electronic folders divided as follows -

- “**Technical**” submission, and
- “**Financial**” submission (Folders must be titled with the bidder’s company name and folder title. Attachments are limited to 25 MB per email)

Bid submissions should preferably be in searchable PDF format.

Failure to comply with these requirements may result in the tender being deemed non-responsive.”

#### C.2.13.3 Delete the contents of **Clause C.2.13.3** and replace with the following:

Electronic bid submissions must be sent to [tenders@sarao.ac.za](mailto:tenders@sarao.ac.za).

#### C.2.13.4 Add the following after the first sentence of **Clause C.2.13.4**:

“The tender must be signed by a person duly authorised to do so.”

#### C.2.13.6 Delete the contents of **Clause C.2.13.6** and replace with the following:

“A two-envelope procedure as described in **Clause C.3.5** will be followed.

Bids must be submitted in separate electronic folders, one for the Compliance and Technical response, and another for the Financial response. Each main folder may have sub-folders, and if this is the case, each sub-folder must be clearly indicated as such.”

#### C.2.13.8 Substitute the contents of **Clause C.2.13.8** with the following:

“Accept that the employer will not assume responsibility for any technological or logistical difficulties which might affect its bid submission being received on time.”

#### C.2.13.9 Delete the contents of **Clause C.2.13.9** and replace with the following:

“Only tender offers submitted in electronic format to [tenders@sarao.ac.za](mailto:tenders@sarao.ac.za) will be accepted by the Employer.”

## **C.2.15 Closing Time**

### **C.2.15.1** *Add the following to the end of Clause C.2.15.1:*

“The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender”

## **C.2.16 Tender Offer Validity**

### **C.2.16.1** *Add the following to the end of Clause C.2.16.1:*

“The tender offer validity period is 12 weeks.

### **C.2.16.2** *Add the following to the end of Clause C.2.16.2:*

“The maximum extension on the tender offer validity period is 12 weeks.”

## **C.2.17 Clarification of Tender Offer after Submission**

*Add the following to the end of Clause C.2.17:*

“A tender may be rejected as non-responsive if the Bidder fails to provide any clarification requested by the Employer within such time as is granted by the Employer to provide such clarification. A tender may be rejected if the unit rates or lump sums for any of the items in the Activity Pricing Schedule are, in the opinion of the Employer, unreasonable, and the Bidder fails, within such time as is granted by the Employer, to justify any specific rates or lump sums (i.e. to provide a financial breakdown of how such rates or sums were obtained) or to adjust the unit rates or lump sums for such items whilst retaining the total contract price.”

## **C.3 The Employer’s Undertakings**

### **C.3.1 Respond to Requests from the Bidder**

#### **C.3.1.1** *Substitute the contents of Clause C.3.1.1 with the following:*

“The Employer will respond to requests for clarification received up to five working days before the tender closing time stated in the Tender Data and circulate responses to all bidders who attended the bid clarification meeting and site visit.”

### **C.3.5 Two-envelope System**

#### **C.3.5.1** *Substitute the contents of Clause C.3.5.1 with the following:*

“Where it is stated in the Tender Data that a two-envelope (two separate electronic folders) process is to be followed, open only the technical proposal of valid bids for evaluation by the Employer’s evaluation committee. Technical proposals will not be opened in the presence of bidders’ representatives, however a list of bids received on the closing date will be published on the Employer’s website within 10 days of the tender closing date.”

#### **C.3.5.2** *Substitute the contents of Clause C.3.5.2 with the following:*

“Evaluate functionality of the technical proposals offered by bidders, and only open the financial proposals of bidders who score the minimum number of functionality points or higher.

Financial proposals will not be opened in the presence of bidders.”

### **C.3.7 Grounds for rejection and disqualification**

*Add the following to the end of Clause C.3.7:*

“Bids will be disqualified if -

- (a) There is no evidence that the bidder was represented at the compulsory site visit.
- (b) Any of the bidder’s directors or shareholders are listed on the National Treasury Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004, as a person prohibited from doing business in the public sector.
- (c) If, from information given in the completed Compulsory Enterprise Questionnaire or SBD forms, the

Employer considers that there is a conflict of interest or other risk concerning the bidder which may potentially compromise the tender process.

- (d) The bidder has been restricted from doing business with the Employer.
- (e) In a two-envelope system, the bidder fails to submit both a technical proposal and a financial proposal.”

### **C.3.8 Test for Responsiveness**

#### **C.3.8.2** *Add the following to the end of **Clause C.3.8.2**:*

“Bids will also be considered non-responsive if:

- (a) The bid offer does not satisfy the minimum thresholds for eligibility stipulated in the evaluation criteria summarised in clause C.3.11 below.
- (b) The Bidder has not fully and correctly completed the Offer portion of D2.1 (Form of Offer and Acceptance), specifically, the bid price has not been completed in words and numbers, or the Bidder has failed to sign the Offer portion of D2.1.
- (c) The Bidder fails to respond, within such time frame granted by the Employer, to any written request for clarification, and such failure renders it impossible for the Employer to clarify any ambiguities in the bid submission, and therefore renders it impossible to evaluate the bid submission any further.
- (d) There are any other material deficiencies in the bid submission which cannot be cured by clarification without affecting the competitive position of other tenderers presenting responsive tenders.

### **C.3.11 Evaluation of Tender Offers**

#### **C.3.11.1 General**

*Add the following clauses after **Clause C.3.11.1**:*

#### **C.3.11.2 The Evaluation Method**

Bids will be evaluated in three stages, as follows –

##### Stage 1:

Compliance with administrative requirements in Part T2 (submission of returnable documents).

Note - In this stage, discretion may be applied by the Employer to allow bidders to complete and/or sign returnable schedules not completed and/or signed in the first instance or to submit returnable documents not submitted in the first instance, provided that such returnable schedules or documents are of a purely administrative nature and do not pertain to the substance of the bid such as to affect the competitive position of bidders, by giving one or more bidders a second and unfair opportunity to augment the quality (substantive) aspects of their bid. Only bids that satisfy the requirements of Stage 1 will proceed to Stage 2.

##### Stage 2:

Bids will be evaluated on the functionality criteria summarised in Clause C.3.11.2.1 below. This Stage will consist of two sub-stages, namely Stage 2.1 and Stage 2.2. Only bids which –

- (i) achieve a minimum score of 63 points out of a possible 90 points (70%) in stage 2.1 - Capability & Capacity; and
- (ii) achieve a minimum score of 35 points out of a possible 50 points (70%) in Stage 2.2 - Experience & Planning

will be evaluated further in Stage 3.

##### Stage 3:

Price offers will be scored on the 90/10 price and preference points system.

The lowest priced bid will not necessarily be accepted and the Employer reserves the right to accept the whole or part of any tender, or not to consider any tender at all.

The Employer reserves the right to reject overpriced or under-priced bids, which are outside the identified price range for the bid.

The Employer may conduct a site visit to the factory premises of the top three (3) shortlisted bidders, to confirm production capabilities.

### C.3.11.2.1 Score Functionality

Bids will be evaluated on the Functionality Criteria summarised below -

#### Stage 2.1 – Capability & Capacity

Functionality Criteria	Maximum Points	Schedule
Capability – Qualifications and Experience of Design and Construction personnel	85	Schedules B6 and B7
Project Organisational Chart for Key Design and Construction personnel	5	Schedules B6 and B8
<b>Total</b>	<b>90</b>	

**Note: Bidders must score a minimum of 63 points out of a possible 90 points(70%), in Stage 2.1 to proceed to Stage 2.2**

#### Stage 2.2 – Experience & Planning

Functionality Criteria	Maximum Points	Schedule
Previous Experience and Track Record	20	Schedule B9
Method Statement based on Scope of Work specific to this project	15	Schedule B10
Preliminary Project Programme	5	Schedule B11
Environmental Management Plan	5	Schedule B12
Quality Management Plan	5	Schedule B13
<b>Total</b>	<b>50</b>	

**Note: Bidders must score a minimum of 35 points out of a possible 50 points (70%) in Stage 2.2 to proceed to Stage 3**

### C.3.17 Provide Copies of the Contract

*Add the following to the end of **Clause C.3.17**:*

“The number of paper copies of the signed contract to be provided by the Employer is ONE.”

### T1.2.3 Additional Conditions of Tender

The additional conditions of tender are:

### C.4.1 Compliance with Occupational Health and Safety Act 1993 and Construction Regulations (as amended 2014)

Bidders are to note the requirements of the Occupational Health and Safety Act No. 85 of 1993 and the latest amended Construction Regulations (2014) issued in terms of Section 43 of the Act. The Bidder shall be deemed to have read and fully understood the requirements of the above Act and Regulations and to have allowed for all costs in compliance therewith.

In this regard the Bidder shall submit with the tender, appended to Schedule B15: Health, Safety, Environmental and Quality (SHEQ) Management Plan in T2.2 Returnable Documents, a detailed SHEQ Plan prepared in accordance with the Health and Safety Specification (given in respect of the Works in order to demonstrate the necessary competencies and resources to perform the construction work all in accordance with the Act and Regulations).

#### **C.4.2 Claims Arising after Submission of Tender**

No claim whatsoever as to the true intent and meaning of anything contained in the Conditions of Contract, Scope of Work and Pricing Data, will be accepted by the Employer after the submission of any tender and the Bidder shall be deemed to have:

- (1) Read and fully understand the Conditions of Contract.
- (2) Read and fully understood the whole text of the Scope of Work and Pricing Data and thoroughly acquainted himself with the nature of the works proposed and generally of all matters which may influence the Contract.
- (3) Visited the site of the proposed works, carefully examined existing conditions, the means of access to the site, the conditions under which the work is to be done, and acquainted himself with any limitations or restrictions that may be imposed by the Municipal or other Authorities in regard to access and transport of materials and plant to and from the site and made the necessary provisions for any additional costs involved thereby.
- (4) Requested the Employer to make clear the actual requirements of anything contained in this bid document, the exact meaning or interpretation of which is not clearly intelligible to the Bidder.

#### **C.4.3 Imbalance in Tendered Rates**

In the event of tendered rates or lump sums being declared by the Employer to be unacceptable to it because they are either excessively low or high (in comparison to the Employer market price range determination), or not in proper balance with other rates or lump sums, the Bidder may be required to produce evidence and advance arguments in support of the tendered rates or lump sums objected to. If, after submission of such evidence and any further evidence requested, the Employer is still not satisfied with the tendered rates or lump sums objected to, it may request the Bidder to amend these rates and lump sums along the lines indicated by it.

The Bidder will then have the option to alter and/or amend the rates and lump sums objected to and such other related amounts as are agreed on by the Employer, but this shall be done without altering the Contract Price.

Should the Bidder fail to amend the Tender in a manner acceptable to the Employer, the Employer may reject the Tender.

## T2: Returnable Documents

<b>Number</b>	<b>Heading</b>	<b>Page No.</b>
T2.1	Schedule of Returnable Documents	16
T2.2	Returnable Documents	19

## **T2.1 SCHEDULE OF RETURNABLE DOCUMENTS**

### **T2.1.1. General**

The tender document must be submitted as a whole. All schedules and forms must be properly completed as instructed and the tender document should not be taken apart or altered in any way whatsoever.

Bidders are required to complete each returnable document listed in section T2.1.2 below, to the best of their ability, as the evaluation of tenders will be based on the information provided.

Submission of the returnable documents is mandatory. Failure to do so will result in a bid being held to be non-responsive, except in limited circumstances, specifically, the Employer will allow bidders to complete returnable schedules not completed in the first instance or to submit returnable documents not submitted in the first instance where these are purely of an administrative nature (specifically, Schedules A1-A7; the Standard Bidding Documents (SBD); and Schedules B1-B4) and do not pertain to the substance of the bid such as to affect the competitive position of bidders, by giving one or more bidders a second and unfair opportunity to augment the quality (substantive) aspects of their bid.

## T2.1.2. List of Returnable Documents

Schedule	Description	Page No.
<b>Company Specific Schedules</b>		
A1	Authority to Sign Bid Documents	20
A2	Certificate of Attendance of Site Visit	21
A3	Certificate of Authority for Joint Ventures and Consortia	22
A4	Compulsory Enterprise Questionnaire	23
A5	Bidder's Bank Account Details	24
A6	Certificate of Insurance Cover	25
A7	Form concerning the fulfilment of the Construction Regulations, 2014	26
<b>Standard Bidding Documents (SBD) for Compliance Assessment</b>		
SBD 4	Bidder's Disclosure	27
SBD 6.1	Preference Points Claim Form in terms of the Preferential Procurement Regulations 2022	29
<b>Returnable Documents for Compliance Assessment</b>		
B1	CIDB Registration	33
B2	Tax Clearance	34
B3	National Treasury Central Supplier Database (CSD) Registration	35
B4	BBBEE Certificate or Sworn Affidavit	36
B5	Schedule of Proposed Subcontractors	37
<b>Returnable Documents for Functionality Assessment</b>		
B6	Schedule of Key Personnel	38
B7	Curriculum Vitae of Key Personnel	47
B8	Project Organisational Chart for Key Personnel	50
B9	Bidder's Previous Experience and Track Record	51
B10	Method Statement	53
B11	Preliminary Project Programme in Primavera P6 or MS Project	54
B12	Environmental Management Plan	56

B13	Quality Management Plan	57
<b>Returnable Documents Pertaining to the Contract</b>		
B14	Amendments/ Alternatives and Qualifications by Bidder	58
B15	Record of Addenda to Tender Documents	59
B16	Joint Venture or Consortium Agreement	60
B17	Letter of Good Standing with the Compensation Commissioner (COIDA)	61
D1.1	Scope of Works	63
D2.1	Form of Offer and Acceptance	70
D2.2	Contract Data	75
D3.1	Pricing Instructions	83
D3.2	Priced Schedule Summary	84

## **T2.2 RETURNABLE DOCUMENTS**

**NB: BIDDERS MUST COMPLETE THESE DOCUMENTS / FORMS TYPED IN BLACK, OR IN BLACK INK**

**A1. AUTHORITY TO SIGN BID DOCUMENTS**

I/We\*, the undersigned, am/are\* duly authorised to sign the form of tender on behalf of

by virtue of the Articles of Association/Resolution of the Board of Directors\*, of which a copy is attached, or

\*Delete whichever is inapplicable

1.			
	<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>

2.			
	<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>

**WITNESSES:**

1.			
	<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>

2.			
	<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>



**A3. CERTIFICATE OF AUTHORITY FOR JOINT VENTURES AND CONSORTIA**

*This Returnable Schedule is to be completed only if the bidder is a joint venture or consortium.*

We, the undersigned, are submitting this tender offer as a joint venture / consortium, and hereby authorise

Mr/Ms \_\_\_\_\_, authorised signatory of .....company, close corporation or partnership, acting in the capacity of lead partner, to sign all documents in connection with the tender offer and any contract resulting from it on our behalf.

NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
Lead partner		Signature : Name : Designation :
		Signature : Name : Designation :
		Signature : Name : Designation :
		Signature : Name : Designation :

**Note:**

A copy of the Joint Venture or Consortium Agreement showing clearly the percentage contribution of each partner to the Joint Venture or Consortium must be included in the bid submission.

## A4. COMPULSORY ENTERPRISE QUESTIONNAIRE

The following particulars must be furnished. In the case of a joint venture / consortium, **separate** enterprise questionnaires in respect of each partner must be completed and submitted.

**Section 1: Name of enterprise**

**Section 2: VAT registration number, if any**

**Section 3: CIDB registration number, if any**

**Section 4: Particulars of sole proprietors and partners in partnerships**

Name*	Identity number*	Personal income tax number*

\* Complete only if sole proprietor or partnership and attach separate page if more than 3 partners

**Section 5: Particulars of companies and close corporations**

Company registration number

Close corporation number

Tax reference number

**Section 6: The attached SBD 4 must be completed for each attender and be attached as a tender requirement**

**Section 7: The attached SBD 6.1 must be completed for each attender and be attached as a tender requirement**

The undersigned, who warrants that he/she is duly authorised to do so on behalf of the enterprise:

- i) authorises the Employer to obtain a tax Clearance certificate from the South African Revenue Services that my / our tax matters are in order;
- ii) confirms that neither the name of the enterprise nor the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004;
- iii) confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise, has within the last five years been convicted of fraud or corruption;
- iv) confirms that I/we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the bidders or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest;
- v) confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

**SIGNED:**

	<b>ENTERPRISE NAME</b>	<b>DATE</b>	

	<b>NAME</b>	<b>POSITION</b>	<b>SIGNATURE</b>

**A5. BIDDER’S BANK ACCOUNT DETAILS**

Notes to Bidder:

- 1. The Bidder shall attach to this form a letter from the bank at which he declares he conducts his account.
- 2. The Bidder’s banking details as they appear below must be completed.
- 3. In the event that the bidder is a joint venture or consortium, each party must complete this form.

The bidder must provide the following information:

(i)	Name of Account Holder:	
(ii)	Account Number:	
(iii)	Bank Name:	
(iv)	Branch Number:	
(v)	Bank and Branch Contact Details:	

**SIGNED BY/ON BEHALF OF BIDDER:**

	<b>NAME</b>	<b>SIGNATURE</b>	

## A6. CERTIFICATE OF INSURANCE COVER

**Note to Bidder:**

In the event that the Bidder is a joint venture or consortium, the details of each partner must also be provided.

Insurance must be as indicated in the Contract Data.

Bidders shall provide the following details of this insurance cover:

- (i) Name of Bidder: .....
- (ii) Period of Validity: .....
- (iii) Value of Insurance: .....

- Insurance for Works and Bidder's Equipment:

Company: .....

Value: .....

- Insurance for Bidder's Personnel:

Company: .....

Value: .....

- Motor Vehicles liability:

Company: .....

Value: .....

- Third Party liability:

Company: .....

Value: .....

**SIGNED BY/ON BEHALF OF BIDDER:**

	<b>NAME</b>		<b>SIGNATURE</b>		

**A7. FORM CONCERNING THE FULFILLMENT OF THE CONSTRUCTION REGULATIONS, 2014**

In terms of regulation 4(3) of the Construction Regulations, 2014, as amended (hereinafter referred to as the Regulations), promulgated on 18 July 2003 in terms of Section 43 of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) and the Construction Regulations (2014) the Employer shall not appoint a contractor to perform construction work unless the Contractor can satisfy the Employer that his/her firm has the necessary competencies and resources to carry out the work safely and has allowed adequately in his/her tender for the due fulfilment of all the applicable requirements of the Act and the Regulations.

- I confirm that I am fully conversant with the Regulations and that my company has (or will acquire/procure) the necessary competencies and resources to timeously, safely and successfully comply with all of the requirements of the Regulations.

YES	
NO	

- Proposed approach to achieve compliance with the Regulations (Tick)

Own resources, competent in terms of the Regulations (refer to 3 below)	
Own resources, still to be hired and/or trained (until competency is achieved)	
Specialist subcontract resources (competent) – specify:	

- Provide details of proposed key persons, competent in terms of the Regulations, who will form part of the team as specified in the Regulations (CVs to be attached):
- Provide details of proposed training (if any) that will be undergone:
- Potential key risks identified and measures for addressing risks:

I have fully included in my tendered rates and prices (in the appropriate payment items provided in the Schedule of Quantities) for all resources, actions, training and any other costs required for the due fulfilment of the Regulations for the duration of the construction and defects repair period.

YES	
NO	

**SIGNED BY/ON BEHALF OF BIDDER:**

<b>NAME</b>	<b>SIGNATURE</b>		

## SBD 4 BIDDER'S DISCLOSURE

### 1. PURPOSE OF THE FORM

1.1 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.

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.

### 2. BIDDER'S DECLARATION

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest<sup>1</sup> in the enterprise, employed by the state? ..... **YES / NO**

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 having a controlling interest in the enterprise, in the 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 employed by the procuring entity? ..... **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 .....  
 .....  
 .....

<sup>1</sup> 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.

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 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 consortium<sup>2</sup> 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;
- 3.5 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.

CERTIFICATION

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

I ACCEPT THAT THE STATE MAY REJECT MY 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.

.....  
Date

.....  
Signature

.....  
Position

.....  
Name of bidder

<sup>2</sup> 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:**

- a) The applicable preference point system for this tender is the 90/10 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 (namely, BBBEE status level of contributor)

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

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	90
SPECIFIC GOALS	10
<b>Total points for Price and SPECIFIC GOALS</b>	<b>100</b>

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:

$$P_S = 80 \left( 1 - \frac{P_t - P}{P} \right) \quad \text{or} \quad P_S = 90 \left( 1 - \frac{P_t - P}{P} \right)$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = 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

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmax = 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—

- (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 tenderers: The tenderer must indicate how they claim points for each preference point system).**

The specific goals allocated points in terms of this tender	Number of points allocated (90/10 system) (To be completed by the organ of state)	Number of points claimed (90/10 system) (To be completed by the tenderer)
BBBEE status level of contributor  (Note: Bidders are required to submit their B-BBEE certificates or sworn affidavits (in the case of EMEs/QSEs) in order to be eligible to claim points)		
1	10	
2	9	
3	6	
4	5	
5	4	
6	3	
7	2	
8	1	
Non-compliant	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 proprietor
- 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.

<p>..... <b>SIGNATURE(S) OF TENDERER(S)</b></p> <p><b>SURNAME AND NAME:</b> .....</p> <p><b>DATE:</b> .....</p> <p><b>ADDRESS:</b> ..... ..... .....</p> <p>.....</p>
---

**B1. CIDB REGISTRATION**

Bidders must be registered with the Construction Industry Development Board (CIDB) register of contractors.

Where a Bidder satisfies CIDB Contractor grading designation requirements through a joint venture or consortium, such Bidder must submit the joint CIDB grading, and certificates of contractor registration in respect of each partner.

**NAME OF BIDDER**

**COMPANY REGISTRATION NUMBER**

**CRS NUMBER**

**SIGNED BY/ON BEHALF OF BIDDER:**

<b>NAME</b>		<b>SIGNATURE</b>		<b>DATE</b>

## B2. TAX CLEARANCE

Bidders must be registered and in good standing with the South African Revenue Services (SARS), and must provide their CSD registration number and valid SARS Tax Clearance PIN Number in this Schedule.

Bidders who are not registered with, or in good standing with SARS are not precluded from submitting bids, but must be registered and in good standing prior to Contract Award.

Each party to a Joint Venture or Consortium must submit their individual Tax Clearance PIN Number and CSD Supplier Number. (These are to be attached to the bidder's submission).

--

**PIN NUMBER**

--

**CSD SUPPLIER NUMBER**

**SIGNED BY/ON BEHALF OF BIDDER:**

<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>

**B3. NATIONAL TREASURY CENTRAL SUPPLIER DATABASE (CSD) REGISTRATION**

Bidders must be registered with the National Treasury Central Supplier Database (CSD) and must provide their CSD Registration Number issued by National Treasury.

Bidders who are not so registered are not precluded from submitting bids, but must be registered prior to Contract Award.

Each party to a Consortium or Joint Venture must submit their individual CSD Registration Number.

<b>CSD REGISTRATION NUMBER</b>		

**SIGNED BY/ON BEHALF OF BIDDER:**

<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>

**B4. B-BBEE CERTIFICATE OR SWORN AFFIDAVIT**

In order to claim preference points in terms of Preferential Procurement Regulations (2022), bidders must submit a valid BBBEE certificate issued by a Verification Agency accredited by SANAS; or in the case of Exempted Micro Enterprises (EMEs), a sworn affidavit confirming annual total revenue and level of black ownership or a BBBEE certificate issued by the Companies and Intellectual Property Commission; or in the case of Qualifying Small Enterprises (QSEs), a sworn affidavit confirming annual total revenue and level of black ownership.

Unincorporated joint ventures and consortia must submit a consolidated B-BBEE certificate.

**SIGNED BY/ON BEHALF OF BIDDER:**

<b>NAME</b>		<b>SIGNATURE</b>	<b>DATE</b>

## B5. SCHEDULE OF PROPOSED SUBCONTRACTORS

To be linked with Local Participation Guidelines. Refer to D1.2 Scope of Works under **Contractor and Labour Participation Goals (CLPG)**

We notify you that it is our intention to employ the following Subcontractors for work in this contract.

SUBCONTRACTORS				
Category/type	Subcontractor Name/Address/Contact Person/Phone/e-mail/Details of Organisation/Firm/ Experience	Items of work (pay items) to be undertaken by the Subcontractor	Value of work sub-contracted	Local EME's or Local QSE's

**NB: If there is insufficient space above, the Tenderer may include the additional sheets in the Supporting Documentation file.**

Number of additional sheets submitted by the Bidder to this Schedule (If nil, enter NIL)

Acceptance of this tender shall not be construed as approval of all or any of the listed subcontractors. Should any of the subcontractors not be approved subsequent to acceptance of the tender, this shall in no way invalidate this tender, and the tendered unit rates for the various items of work shall remain final and binding, even in the event of a subcontractor not listed above being approved by the Engineer.

**SIGNED BY/ON BEHALF OF BIDDER:**

<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>

## B6. SCHEDULE OF KEY PERSONNEL

The tender offer shall include an organogram clearly showing the team of key personnel the Bidder proposes to assign to the Contract and how responsibilities for the various disciplines or work and components of the Works will be assigned. The appointed contractor may not replace the key personnel provided in this schedule without the prior written approval of the Employer.

The Personnel identified in Schedule B6 will be incorporated into the Contract as the “**Contractor’s Representative**” (Clause 1.1.18) and “**Key Personnel**” (Clause 1.1.48) as defined in the FIDIC Yellow Book second edition 2017 Contract.

In the case of a Joint Venture or where major sub-contractors are made use of, the organogram must show how respective responsibilities are to be allocated.

The organogram must show at least the following personnel:

- Data Centre Specialist
- Construction Manager
- Structural Engineer
- Electrical Engineer
- Mechanical Engineer
- Civil Engineer

### Stage 2.1 Functionality Assessment

**Note: Bidders that fail to achieve a minimum of 70% for each functionality sub-criteria/requirement will not be considered for further evaluation. The successful Bidder must ensure that all key personnel have active registrations with relevant professional bodies and must remain active for the entire duration of the contract.**

<b>STAGE 2.1 - CAPABILITY AND CAPACITY CRITERIA (KEY PERSONNEL)</b>			
<b>(All Key Personnel will be required during the Design and Construction Phases of the Project)</b>			
<b>No.</b>	<b>Criteria</b>	<b>Score Allocation</b>	<b>Maximum Score</b>
<b>1.</b>	<b>Key Personnel</b>		<b>85</b>
<b>1.1</b>	<b>Data Centre Specialist</b>		<b>10</b>
<b>1.1.1</b>	<b>Qualifications</b>		<b>5</b>
	MSc Degree/M-Tech (or higher) in Computer Science/IT/Electronics - NQF Level 8 (or higher)	5	
	BSc Degree/B-Tech (or higher) in Computer Science/IT/Electronics - NQF Level 7 (or higher)	4	
	National Diploma in Computer Science/IT/Electronics - NQF Level 6	2	
	None of the above qualifications	0	
<b>1.1.2</b>	<b>Demonstrable Experience</b>		<b>5</b>
	15 or more years’ experience in designing data centres, monitor server centres and other centralized repositories of computer systems for cloud, data, and IT-enabled companies and oversight during construction, ensuring that networks function uninterruptedly, users’ access to data, speed of processing and power maintenance are efficient.	5	
	10-14 years’ experience in designing data centres, monitor server centres and other centralized repositories of computer systems for cloud, data, and IT-enabled companies and oversight during construction, ensuring that networks function uninterruptedly, users access to data, speed of	4	

<b>STAGE 2.1 - CAPABILITY AND CAPACITY CRITERIA (KEY PERSONNEL)</b>			
<b>(All Key Personnel will be required during the Design and Construction Phases of the Project)</b>			
<b>No.</b>	<b>Criteria</b>	<b>Score Allocation</b>	<b>Maximum Score</b>
	processing and power maintenance are efficient.		
	5-9 years' experience in designing data centres, monitor server centres and other centralized repositories of computer systems for cloud, data, and IT-enabled companies and oversight during construction, ensuring that networks function uninterruptedly, users access to data, speed of processing and power maintenance are efficient.	3	
	1- 4 years' experience in designing data centres, monitor server centres and other centralized repositories of computer systems for cloud, data, and IT-enabled companies and oversight during construction, ensuring that networks are functioning uninterruptedly, users access to data, speed of processing and power maintenance are efficient.	1	
	No experience in designing data centres, monitor server centres and other centralized repositories of computer systems for cloud, data, and IT-enabled companies and oversight during construction, ensuring that networks function uninterruptedly, users access to data, speed of processing and power maintenance are efficient.	0	
<b>1.2</b>	<b>Construction Manager</b>		<b>15</b>
<b>1.2.1</b>	<b>Qualifications</b>		<b>5</b>
	Bachelor's Degree (B-Tech, BSc, BEng) or higher in Building / Civils - NQF Level 7 or higher	5	
	National Diploma in Building / Civils - NQF Level 6	4	
	Other technical qualification in Building / Civils -NQF Level 5	2	
	None of the above qualifications	0	
<b>1.2.2</b>	<b>Registration with Professional Bodies</b>		<b>5</b>
	Registration with SACPCMP as a Professional Construction Manager (Pr.CM) or Professional Construction Project Manager (Pr.CPM) or demonstrated equivalent registration (Active Registration)	5	
	Registration with any other recognized and legislated professional body in the Built Environment or demonstrated equivalent registration (Active Registration)	2.5	
	Registration with SACPCMP as a Candidate Construction Manager (C. CM) or demonstrated equivalent registration (Active Registration)	1	
	No Registration	0	
<b>1.2.3</b>	<b>Demonstrable Experience</b>		<b>5</b>
	10 years or more experience in the commercial building industry	5	

<b>STAGE 2.1 - CAPABILITY AND CAPACITY CRITERIA (KEY PERSONNEL)</b>			
<b>(All Key Personnel will be required during the Design and Construction Phases of the Project)</b>			
<b>No.</b>	<b>Criteria</b>	<b>Score Allocation</b>	<b>Maximum Score</b>
	5-9 years' experience in the commercial building industry	4	
	1-4 years' experience in the commercial building industry	2	
	No experience in commercial construction	0	
<b>1.3</b>	<b>Structural Engineer</b>		<b>15</b>
<b>1.3.1</b>	<b>Qualifications</b>		<b>5</b>
	Master's Degree (M-Tech, MSc, MEng) or higher in Structural Engineering - NQF Level 8 or higher	5	
	Bachelor's Degree (B-Tech, BSc, BEng) or higher in Structural Engineering - NQF Level 7 or higher	4	
	None of the above qualifications	0	
<b>1.3.2</b>	<b>Registration with Professional Bodies</b>		<b>5</b>
	Pr-Eng registration with ECSA (Engineering Council of South Africa) or demonstrated equivalent registration (Active registration)	5	
	Pr-Tech-Eng registration with ECSA or demonstrated equivalent registration (Active registration)	3.75	
	Registration with any other recognized and legislated professional body in the Built Environment or demonstrated equivalent registration (Active Registration)	2.5	
	Not registered with a professional body	0	
<b>1.3.3</b>	<b>Demonstrable Experience</b>		<b>5</b>
	15 or more years' experience, with at least 7 years post-date of professional registration, in designing concrete and steel structures, and oversight during construction	5	
	10-14 years' experience with at least 5 years post-date of professional registration in designing concrete and steel structures and oversight during construction	4	
	5-9 years' experience with at least 3 years post-date of professional registration in designing concrete and steel structures and oversight during construction	3	
	1-4 years' experience, with at least 1 year post-date of professional registration in designing concrete and steel structures and oversight during construction	1	
	No experience, no years post-date of professional registration, in designing concrete and steel structures and oversight during construction	0	
<b>1.4</b>	<b>Electrical Engineer</b>		<b>15</b>

<b>STAGE 2.1 - CAPABILITY AND CAPACITY CRITERIA (KEY PERSONNEL)</b>			
<b>(All Key Personnel will be required during the Design and Construction Phases of the Project)</b>			
<b>No.</b>	<b>Criteria</b>	<b>Score Allocation</b>	<b>Maximum Score</b>
<b>1.4.1</b>	<b>Qualifications</b>		<b>5</b>
	Bachelor's Degree (B-Tech, BSc, BEng) or higher in Electrical Engineering (HC) - NQF Level 7 or higher	5	
	National Diploma in Electrical Engineering (HC) - NQF Level 6	4	
	Other technical qualification in Electrical Engineering -NQF Level 5	2	
	None of the above qualifications	0	
<b>1.4.2</b>	<b>Registration with Professional Bodies</b>		<b>5</b>
	Pr-Eng. ECSA registration or demonstrated equivalent registration (Active registration)	5	
	Pr-Tech-Eng. ECSA registration or demonstrated equivalent registration (Active registration)	3.75	
	Registration with any other recognized and legislated professional body related to the built environment or demonstrated equivalent registration (Active Registration)	2.5	
	Not registered with a professional body	0	
<b>1.4.3</b>	<b>Demonstrable Experience</b>		<b>5</b>
	15 or more years' experience with at least 7 years post-date of professional registration, in designing internal building electrical reticulation, designing bulk electrical supply to a site and designing a power supply to equipment complete with protection & facilitating access from Local Authority to connect bulk power supply. Provide oversight during construction.	5	
	10 - 14 years' experience with at least 5 years post-date of professional registration, in designing internal building electrical reticulation, designing bulk electrical supply to a site and designing a power supply to equipment complete with protection & facilitating access from Local Authority to connect bulk power supply. Provide oversight during construction.	4	
	5 - 9 years' experience with at least 3 years post-date of professional registration, in designing internal building electrical reticulation, designing bulk electrical supply to a site and designing a power supply to equipment complete with protection & facilitating access from Local Authority to connect bulk power supply. Provide oversight during construction.	3	
	1 - 4 years' experience with at least 1 year post-date of professional registration, in designing internal building electrical reticulation, designing bulk electrical supply to a site and designing a power supply to equipment complete with protection & facilitating access from Local Authority to connect bulk power supply. Provide oversight during construction.	1	

<b>STAGE 2.1 - CAPABILITY AND CAPACITY CRITERIA (KEY PERSONNEL)</b>			
<b>(All Key Personnel will be required during the Design and Construction Phases of the Project)</b>			
<b>No.</b>	<b>Criteria</b>	<b>Score Allocation</b>	<b>Maximum Score</b>
	No experience post-date of professional registration, in designing internal building electrical reticulation, designing bulk electrical supply to a site / building & facilitating access from Local Authority to connect bulk power supply.	0	
<b>1.5</b>	<b>Mechanical Engineer</b>		<b>15</b>
<b>1.5.1</b>	<b>Professional Qualifications</b>		<b>5</b>
	Bachelor's Degree (B-Tech, BSc, BEng) or higher in Mechanical Engineering - NQF Level 7 or higher	5	
	National Diploma in Mechanical Engineering - NQF Level 6	4	
	Other technical qualification in Mechanical Engineering -NQF Level 5	2	
	None of the above qualifications	0	
<b>1.5.2</b>	<b>Registration with Professional Bodies</b>		<b>5</b>
	Pr-Eng. ECSA registration or demonstrated equivalent registration (Active registration)	5	
	Pr-Tech-Eng. ECSA registration or demonstrated equivalent registration (Active registration)	3.75	
	Registration with any other recognized and legislated professional body related to the built environment or demonstrated equivalent registration (Active Registration)	2.5	
	Not registered with a professional body	0	
<b>1.5.3</b>	<b>Demonstrable Experience</b>		<b>5</b>
	15 or more years' experience with at least 7 years post-date of professional registration, in designing concrete and steel structures, bulk services supply and oversight during construction	5	
	10-14 years' experience with at least 5 years post-date of professional registration in designing concrete and steel structures, bulk services supply and oversight during construction	4	
	5-9 years' experience, with at least 3 years post-date of professional registration in designing concrete and steel structures, bulk services supply and oversight during construction	3	
	1-4 years' experience with at least 1 year post-date of professional registration in designing concrete and steel structures, bulk services supply and oversight during construction	1	
	No experience, post-date of professional registration, in designing concrete and steel structures, bulk services supply and oversight during	0	

<b>STAGE 2.1 - CAPABILITY AND CAPACITY CRITERIA (KEY PERSONNEL)</b>			
<b>(All Key Personnel will be required during the Design and Construction Phases of the Project)</b>			
<b>No.</b>	<b>Criteria</b>	<b>Score Allocation</b>	<b>Maximum Score</b>
	construction		
<b>1.6</b>	<b>Civil Engineer</b>		<b>15</b>
<b>1.6.1</b>	<b>Professional Qualifications</b>		<b>5</b>
	Bachelor's Degree (B-Tech, BSc, BEng) or higher in Civil Engineering - NQF Level 7 or higher	5	
	National Diploma in Civil Engineering - NQF Level 6	4	
	Other technical qualification in Civil Engineering -NQF Level 5	2	
	None of the above qualifications	0	
<b>1.6.2</b>	<b>Registration with Professional Bodies</b>		<b>5</b>
	Pr-Eng. ECSA registration or demonstrated equivalent registration (Active registration)	5	
	Pr-Tech-Eng. ECSA registration or demonstrated equivalent registration (Active registration)	3.75	
	Registration with any other recognized and legislated professional body related to the built environment or demonstrated equivalent registration (Active Registration)	2.5	
	Not registered with a professional body	0	
<b>1.6.3</b>	<b>Demonstrable Experience</b>		<b>5</b>
	15 or more years' experience, with at least 7 years post-date of professional registration, in designing concrete and steel structures, bulk services supply and oversight during construction	5	
	10-14 years' experience with at least 5 years post-date of professional registration in designing concrete and steel structures, bulk services supply and oversight during construction	4	
	5-9 years' experience with at least 5 years post-date of professional registration in designing concrete and steel structures, bulk services supply and oversight during construction	3	
	1-4 years' experience with at least 1 year post-date of professional registration in designing concrete and steel structures, bulk services supply and oversight during construction	1	
	No experience, post-date of professional registration, in designing concrete and steel structures, bulk services supply and oversight during construction	0	
<b>2.</b>	<b>Organogram</b>		<b>5</b>

<b>STAGE 2.1 - CAPABILITY AND CAPACITY CRITERIA (KEY PERSONNEL)</b>			
<b>(All Key Personnel will be required during the Design and Construction Phases of the Project)</b>			
<b>No.</b>	<b>Criteria</b>	<b>Score Allocation</b>	<b>Maximum Score</b>
<b>2.1</b>	<b>Project Organisational Chart for Key Personnel</b>		<b>5</b>
	<p>The organogram meets the requirements of this bid, showing the hierarchy of <b>all</b> the key roles on the project team, reporting lines and confirms the Bidder's capacity to undertake this project including;</p> <ul style="list-style-type: none"> <li>• SACPCMP registered FULL TIME Construction Manager to be appointed in terms of CR(8)1.</li> <li>• SACPCMP registered FULL TIME Construction &amp; Safety Officer to be appointed in terms CR(8)5.</li> <li>• Client Health and Safety Agent (registered with SACPCMP as a CHSA) to execute all deliverables for the project stages 3 - 6 as per SACPCMP requirements.</li> <li>• Health and Safety Organogram as specified in Annexure <b>14</b> and Annexure <b>15</b>.</li> </ul>	5	
	<p>The organogram shows an unclear hierarchy of all key roles on the project team, and reporting lines and limited demonstration of Bidder's capacity to undertake this project. The organogram includes;</p> <ul style="list-style-type: none"> <li>• SACPCMP registered FULL TIME Construction Manager to be appointed in terms of CR(8)1.</li> <li>• SACPCMP registered FULL TIME Construction &amp; Safety Officer to be appointed in terms CR(8)5.</li> <li>• Client Health and Safety Agent (registered with SACPCMP as a CHSA) to execute all deliverables for the project stages 3 - 6 as per SACPCMP requirements.</li> <li>• Health and Safety Organogram as specified in Annexure 14 and Annexure 15.</li> </ul>	3	
	<p>The organogram shows an unclear hierarchy of all key roles on the project team, and reporting lines and limited demonstration of Bidder's capacity to undertake this project. The organogram does not include a Health and Safety Organogram as specified in Annexure <b>14</b> and Annexure <b>15</b>.</p>	1	
	No Organogram submitted.	0	
	<b>Sub-total</b>		<b>90</b>

**Note: Bidders must score a minimum of 63 points (70%) out of a possible 90 points, in the above Functionality Assessment (Schedule B6) in order to be considered for further evaluation in Stage 2.2**

**The Stage 2.2 Functionality Assessment continues on Schedules B9-B13.**

**Note: Bidders must score a minimum of 35 points (70%) out of a possible 50 points in Stage 2.2 to proceed to Stage 3**

**Table 1: Schedule of Key Project Personnel**

**Note: In addition to Table 1, Bidders must submit a Project Organisational Chart identifying all resources indicated above and all support staff required to ensure successful delivery of the project, including interfaces with SARAO**

<b>Key Construction Team Personnel</b>	<b>Name and Surname</b>	<b>Educational Qualifications</b>	<b>Professional Body &amp; Membership Number</b>	<b>Professional Membership Registration Date</b>	<b>No of years' experience in terms of required skills</b>	<b>Company Name &amp; Physical address and contact details of local office</b>
Data Centre Specialist						
Construction Manager						
Structural Engineer						
Electrical Engineer						
Mechanical Engineer						
Civil Engineer						

## **B7. CURRICULUM VITAE OF KEY TEAM PERSONNEL**

CVs must be submitted in the required format as outlined in the CV Template below.

Only include CVs for the required personnel as listed in the above table and in the format of the CV template provided in this schedule. Attach CVs in the order that the Key Personnel are listed in Schedule B6.

### **CVs must include the following information -**

- (i) Surname (and maiden name in brackets where applicable);
- (ii) First name/s;
- (iii) Date of birth;
- (iv) Nationality;
- (v) Education and Specialist training highlighting Key Qualifications relevant to this project;
- (vi) Membership with Professional Bodies relevant to this project including Date of Registration;
- (vii) Certified copies of both Educational Qualifications and Professional Bodies Membership;
- (viii) Detailed outline of professional experience directly related to the role of the team member in this project;
- (ix) Experience to include the following;
  - Total number of years of experience directly related to the role of the team member in this project
  - Total number of years of experience directly related to the role of the team member in this project post Professional Registration date
  - Project details (including Budget, Client/Employer, Year of completion,) of projects directly related to the role of the team member in this project that the project team member has participated in
  - Team member's Key skills and expertise relevant to this project

If any changes are made to any personnel from the initial approved lists at the time of the tender award, written communication of all changes should be submitted to SARAO for approval to minimise any unforeseen risks.

**Do NOT include CVs for support staff.**

### **Please Note:**

The Bidder should respond to the requirements listed in Table 1 and insert the details of the required personnel in the Schedule of Key Construction Personnel and attach the supporting documentation and subcontracting agreements (where applicable);

The Bidder must clearly indicate in the Table where one person can fulfil various roles.

Do not include support staff in the Schedule of Key Construction Personnel. Only key personnel will be assessed. Support staff will therefore not be assessed. However, it is the responsibility of the Bidder to ensure that the project is provided with adequate support capacity;

Where there are no names next to the suggested Key Construction Personnel, it will be assumed that the Bidder does not have the personnel included in the team;

In order to qualify, the team must include all the Key Construction Personnel (or indicate where one person fulfils other roles) and each Team Member must meet the minimum requirements in relation to qualification, registration and number of years' experience as stated in Table 1.

**Curriculum Vitae Template of Key Project Personnel Listed in Schedule B6**

**NAME OF COMPANY**

1. Surname (and maiden name in brackets where applicable):
2. First name/s:
3. Date of birth:
4. Nationality:
5. Education and Specialist Training:

Key Qualifications (Relevant to this Project)	Institution	Date Obtained

**6. Professional Registration:**

Professional Body (Active & relevant to this Project)	Registration Type or Category	Registration Date	Registration Number

**7. Certified Copies of Key Educational Qualifications relevant to this project:**

**8. Certified Copies of Key Professional Registration Certificates relevant to this project:**

**9. Detailed Professional Experience relevant to the team member's role in this project:**

Date (From – To):	
Client/Employer's Name:	
Location:	
Position in firm or project role:	
High-level description of duties or responsibilities, key skills and expertise in position or project team:	
<b>Reference</b> Name : Position: Contact Number: Email Address:	

<b>Date (From – To):</b>	
<b>Client/Employer’s Name:</b>	
<b>Location:</b>	
<b>Position in firm or project role:</b>	
<b>High-level description of duties or responsibilities, key skills and expertise in position or project team:</b>	
<b><u>Reference</u></b> <b>Name :</b> <b>Position:</b> <b>Contact Number:</b> <b>Email Address:</b>	

## **B8. PROJECT ORGANISATIONAL CHART FOR KEY PERSONNEL**

Bidders must attach to this Schedule, an organisational chart for the key design and construction personnel, detailing their respective roles and responsibilities on the project.

## B9. BIDDER'S PREVIOUS EXPERIENCE AND TRACK RECORD

Bidders will be evaluated on the criteria for previous experience and track record detailed below.

**Note:**

- (i) Table 2 below (next page), must be completed with a list of bidders' previous, completed projects that were completed during the last 5 years. Projects listed must be relevant to the scope of work of this tender.
- (ii) Supporting documentation evidencing the bidder's experience must be attached to this Schedule.
- (iii) The Employer may conduct a site visit to the factory premises of the top three (3) short-listed bidders to confirm production capabilities.

Criteria	Sub criteria	Indicators	Sub-criteria	Score Allocation
<b>Previous Experience and Track Record</b>	Past experience in delivering similar construction contracts/ projects	<p>The bidding entity has experience in delivering similar construction contracts/projects. Bidder's previous experience include executing a project/contract valued at R30 million or higher in the preceding five (5) years and demonstrates the following three (3) experience key indicators -</p> <ol style="list-style-type: none"> <li>1. Construction of commercial buildings</li> <li>2. Construction of data centres</li> <li>3. Has executed 5 or more construction contracts in the preceding five (5) years</li> </ol>	The bidder has demonstrated extensive experience in delivering similar construction contracts/ projects. Bidder's experience includes executing a contract/project to the value of R30 million or higher in the preceding five (5) years, and demonstrates all three (3) listed experience key indicators.	20
			The bidder has demonstrated satisfactory experience in delivering similar construction contracts/ projects. Bidder's experience includes executing a contract/project to the value of R20 million or higher in the preceding five (5) years, and demonstrates two (2) of the three (3) listed experience key indicators including indicator No. 2.	15
			The bidder has demonstrated average experience in delivering similar construction contracts/ projects. Bidder's experience includes executing a contract/project to the value of R10 million or higher in the preceding five (5) years and demonstrates one (1) of the three (3) listed experience key indicators.	10
			The bidder has demonstrated below average or unsatisfactory experience in delivering similar construction contracts/ projects. Bidder's experience demonstrates none of the three (3) listed experience key indicators.	0
			<b>Sub-total</b>	

**Table 2: List of Previously Completed Similar Projects**

<b>PROJECT/EMPLOYER (Name, Tel. No and Fax No.)</b>	<b>NATURE OF WORK</b>	<b>VALUE OF WORK</b>	<b>YEAR OF COMPLETION</b>	<b>ANY DISPUTES</b>

## B10. METHOD STATEMENT

Bidders must submit a detailed method statement relevant to the scope of work of this tender, including any requirement for system or equipment shutdowns.

Method statements submitted will be evaluated on the criteria detailed below.

Criteria	Key Indicators	Sub-criteria	Score Allocation
<b>Method Statement</b>	The method statement must, as a <u>minimum</u> , address the <u>following aspects</u> : 1. Adherence to the Scope of Work, Requirements Specification, Performance Specification and Concept Design Reports 2. Planning for Project Execution (PEP) 3. Lead times for manufactured products and transportation to site; 4. Construction process (including all testing); 5. Safety, Health, Environmental and Quality compliance during the design, manufacturing and construction phases; 6. Testing and Verification; 7. Completion, commissioning and handover. 8. Communication & stakeholder management	The method statement provides a clear and detailed overview and all of the eight (8) aspects discussed under the heading key indicators have been addressed.	15
		The method statement provides a clear and detailed overview of seven (7) of the eight (8) aspects discussed under the heading indicators have been addressed inclusive of aspect No. 1.	10
		The method statement provides a limited overview with less than six (6) of the eight (8) aspects discussed under the heading indicators having been addressed inclusive of aspect No. 1.	5
		No method statement submitted	0
		<b>Sub-total</b>	<b>15 Points</b>

## B11. PRELIMINARY PROJECT PROGRAMME IN PRIMAVERA P6 OR MS PROJECT

Bidders must provide a preliminary proposed programme below (refer to section D1.2), or refer to their proposed programme and attach it to this schedule. Bidder's attention is drawn to Clauses 8.1, 8.2 and 8.3 of the Second edition FIDIC Contract (Yellow Book, 2017), regarding the items to be shown on a programme, as well as the Specific Requirements attached hereto.

Bidders must provide a in electronic copy and pdf copy complying with, but not limited to, in Gantt-chart format with the minimum requirements, as follows:

- Activity ID
- Activity Description
- Activity Duration
- Commencement Date
- Section Start and Take Over date
- Start and Finish dates (assuming Co)
- Baseline
- Time Risk Allowance
- Total Float

The Programme should clearly demonstrate alignment with the project management plan including, but not limited to resources, time risk allowances, et cetera.

Schedule Key Milestone Timelines Table; (Duration indicated is calendar days)

<b>Key Milestones</b>	<b>Duration (calendar days) from time of Commencement Date</b>
KM 1: Design of the SPC Phase 1 modules	29
KM 2: Site Access	62
KM 3: Site Preparation for the SPC Phase 1 modules	121
KM 4: Long Lead Time Material Delivery	121
KM 5: Manufacture of the SPC Phase 1 modules	168
KM 6: Installation of the SPC Phase 1 modules	190
KM 7: Handover of the SPC Phase 1	190

Note: The Preliminary Programme will be used for evaluation purposes only and the time durations will be incorporated into the final contract between the parties. Upon award of the contract, the appointed contractor will be required to submit an accepted programme as per Clause 8.3.

Criteria	Indicators	Sub-criteria	Score Allocation
<b>Preliminary Programme</b>	Provide a Preliminary Programme for the duration of this contract  A COMPREHENSIVE programme will include: <ul style="list-style-type: none"> <li>● All activities listed from the appointment, lead times, documentation planning, site preparation &amp; establishment, installation work, with all activities clearly referenced and linked (dependencies shown)</li> <li>● Programme reflects the key aspects of the works chronologically</li> <li>● Programme reflects a critical path</li> <li>● Programme complies with overall start and completion dates</li> <li>● Programme clearly reflects completion of the services</li> <li>● Key milestones as indicated</li> </ul> A SUFFICIENT Programme will include: <ul style="list-style-type: none"> <li>● Programme reflects the key aspects of the works chronologically</li> <li>● Programme complies with overall start and completion dates</li> <li>● Programme clearly reflects completion of the services</li> <li>● Key milestones as indicated</li> </ul> A PARTIAL Programme will include: <ul style="list-style-type: none"> <li>● Programme does not reflect the above information clearly and omits key information</li> <li>● Key milestones as indicated</li> </ul>	The Programme is <u>Comprehensive as described in the indicator</u>	5
		The Programme is <u>Sufficient as described in the indicator</u>	4
		The Programme is <u>Partial as described in the indicator</u>	2
		The Tenderer has submitted no preliminary programme	0
<b>Sub-total</b>			<b>5 Points</b>

## B12. ENVIRONMENTAL MANAGEMENT PLAN

Bidders must submit an environmental management plan specific to this project's activities to support the allocation of points.

Bids will be evaluated on the following criteria -

Criteria	Measurement Criteria	Score Allocation
<b>Bidders must provide a draft Environmental Management Plan (EMP) for this contract. The EMP must as a minimum address the following:</b> <b>1. Applicable environmental legislation</b> <b>2. Project description</b> <b>3. Roles and responsibilities of personnel implementing the EMP</b> <b>4. Environmental Awareness Plan</b> <b>Environmental Impacts and mitigation measures and how will they be monitored</b> <b>5. How environmental incidents will be reported and managed</b> <b>6. Management of waste</b> <b>7. Environmental audits</b> <b>8. Rehabilitation measures/plan of disturbed areas</b>	The environmental management plan provides a clear and detailed overview and all eight (8) aspects are discussed under the heading indicators addressed	5
	The environmental management plan provides a clear and detailed overview and only six (6) aspects are discussed under the heading indicators addressed	3.5
	The environmental management plan provides a clear and detailed overview and only four (4) or less aspects are discussed under the heading indicators addressed	2.5
	The Tenderer has submitted no information	0
<b>Sub-Total</b>		<b>5</b>

### B13. QUALITY MANAGEMENT PLAN

Bidders must submit a quality management plan specific to this project's activities to support the allocation of points.

Bids will be evaluated on the following criteria -

Criteria	Measurement Criteria	Score Allocation
<b>Bidder must provide a Quality Management System based on the following aspects -</b> <b>1. Customer focus</b> <b>2. Leadership</b> <b>3. Involvement of people</b> <b>4. Process approach</b> <b>5. System approach</b> <b>6. Continual improvement</b> <b>7. Fact-based decision making</b> <b>8. Mutually beneficial supplier relationships</b>	The Quality Management System provides a clear and detailed overview and all eight (8) aspects are discussed under the heading indicators addressed	5
	The Quality Management System provides a clear and detailed overview and only six (6) aspects are discussed under the heading indicators addressed	3.5
	The Quality Management System provides a clear and detailed overview and only four (4) or less aspects are discussed under the heading indicators addressed	2.5
	The Tenderer has submitted no information	0
<b>Sub-total</b>		<b>5</b>

## B14. AMENDMENTS/ ALTERNATIVES AND QUALIFICATIONS BY BIDDER

The schedules below are not an invitation for amendments, deviations or alternatives but should the Bidder desire to make any departures from the provisions of this contract he shall set out his proposals clearly hereunder.

I / We herewith propose the amendments, alternatives and discounts as set out in the tables below:

### (1) AMENDMENTS

PAGE, CLAUSE OR ITEM NO	PROPOSED AMENDMENT

- (a) *Amendments to the General and Special Conditions of Contract are not acceptable;*  
 (b) *The Bidder must give full details of all the financial implications of the amendments and qualifications in a covering letter attached to his tender.*

### (2) ALTERNATIVES

PROPOSED ALTERNATIVE	DESCRIPTION OF ALTERNATIVE

- (a) *Individual alternative items that do not justify an alternative tender and an alternative offer for time for completion should be listed here.*  
 (b) *In the case of a major alternative to any part of the work, a separate Pricing Schedule, programme, etc, and a detailed statement setting out the salient features of the proposed alternatives must accompany the tender.*  
 (c) *Alternative tenders involving technical modifications to the design of the works and methods of construction shall be treated separately from the main tender offer.*

### (3) QUALIFICATIONS

ITEM ON WHICH QUALIFICATION IS MADE	DESCRIPTION OF QUALIFICATION

- (a) *The Bidder must give full details of any conditional discounts offered or qualifications in a covering letter attached to his tender, failing which, the offer will be prejudiced.*

If there is insufficient space above, the Bidder may append additional sheets.

Number of additional sheets appended by the Bidder to this Schedule (If nil, enter NIL)

SIGNED BY/ON BEHALF OF BIDDER:

NAME		SIGNATURE	DATE

**B15. RECORD OF ADDENDA TO TENDER DOCUMENTS**

We confirm that the following communications received from the Employer before the submission of this tender offer, amending the tender documents, have been considered in this tender offer:

No.	Date	Title or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

If there is insufficient space above, the Bidder may include the additional sheets in the Supporting Documentation file, to be submitted in accordance with Clause C.2.13.3 of T1.2.2 Variations to the Standard Conditions of Tender.

Number of additional sheets submitted by the Bidder in respect of this Schedule ..... (If nil, enter NIL)

**SIGNED BY/ON BEHALF OF BIDDER:**

<b>NAME</b>		<b>SIGNATURE</b>		<b>DATE</b>

**B16. JOINT VENTURE OR CONSORTIUM AGREEMENT**

In the event that the bidder is a Joint Venture or Consortium, attach a signed Joint Venture or Consortium Agreement to this Schedule.

**SIGNED BY/ON BEHALF OF BIDDER:**

<b>NAME</b>		<b>SIGNATURE</b>	<b>DATE</b>

**B17. LETTER OF GOOD STANDING WITH THE COMPENSATION COMMISSIONER  
(COIDA)**

Attach to this Schedule, a valid Letter of Good Standing with the Compensation Commissioner in terms of the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993 (as amended).

Each party to a Joint Venture or Consortium, must submit its COIDA letter of good standing.

**SIGNED BY/ON BEHALF OF BIDDER:**

<b>NAME</b>		<b>SIGNATURE</b>		<b>DATE</b>

## D1: Scope of Works

<b>Number</b>	<b>Heading</b>	<b>Page No.</b>
D1.1	Background to the National Research Foundation and the South African Radio Astronomy Observatory (SARAO)	63
D1.2	Summary of Scope of Works	64

## **D1.1 BACKGROUND TO THE NATIONAL RESEARCH FOUNDATION AND THE SOUTH AFRICAN RADIO ASTRONOMY OBSERVATORY**

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. The NRF supports and promotes research and human capital development through funding, the provision of National Research Facilities and science outreach platforms and programmes to the broader community in all fields of science and technology, including natural science, engineering, social science and humanities. The NRF is a Schedule 3A entity in terms of the Public Finance Management Act of 1999 (Act 1 of 1999 as amended by Act 29 of 2000).

The South African Radio Astronomy Observatory (SARAO), a facility of the National Research Foundation, is responsible for managing all radio astronomy initiatives and facilities in South Africa, including the MeerKAT Radio Telescope in the Karoo, and the Geodesy and VLBI activities at the HartRAO facility. SARAO also coordinates the African Very Long Baseline Interferometry Network (AVN) for the eight SKA partner countries in Africa, as well as South Africa’s contribution to the infrastructure and engineering planning for the Square Kilometre Array (SKA) Radio Telescope. To maximise the return on South Africa’s investment in radio astronomy, SARAO is managing programmes to create capacity in radio astronomy science and engineering research, and the technical capacity required to support site operations. In the reference documentation, SKA SA is understood to mean SARAO.

South Africa and its 8 African partner countries were jointly awarded the SKA together with Australia. The SKA will be Africa’s largest science project which will be a hub for both local and international collaboration. The SKA Organisation has been established with its headquarters at Jodrell Bank in Manchester, United Kingdom. The five key science projects that will be undertaken by the SKA include:

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

The first phase of the SKA1-MID project includes the addition of 133 antennas to the 64-dish MeerKAT radio telescope and the second phase of the project and will include up to 2000 antennas distributed across South Africa and its eight African partner countries.

SARAO has offices based in Johannesburg and Cape Town, as well as the HartRAO facility at Hartebeesthoek and radio-quiet SKA host site in the Karoo, 90km from Carnarvon in the Northern Cape, which hosts the Square Kilometre Array mid-frequency telescopes, MeerKAT, and KAT-7 radio telescope installations, as well as a number of guest instruments, including the HERA telescope.

Further information about SARAO can be found on [www.ska.ac.za](http://www.ska.ac.za) and the international SKA on [www.skatelescope.org.za](http://www.skatelescope.org.za)

## **D1.2 SUMMARY SCOPE OF WORKS (EMPLOYER'S REQUIREMENTS)**

### **OVERVIEW**

The Square Kilometre Array Observatory (SKAO) is conducting the SKA project which is aimed at building the world's largest and most sensitive radio telescope with a collecting area of one square kilometre. This Telescope will be one of the largest scientific endeavours in history and will be located in South Africa and Australia. South Africa has signed a Hosting Agreement to host the mid-frequency component of the SKA telescope, known as SKA\_MID, at the SARAO operated site in the Karoo. The Hosting of the SKA Agreement between the Republic of South Africa represented by the Department of Science, Technology and Innovation ('South Africa') and the Square Kilometre Array Observatory ('SKAO'), was signed on 14 October 2021. South Africa has agreed to provide the Site, infrastructure and assets, and undertake its other obligations as host country, as set out in the Agreement.

The Hosting Agreement requires South Africa to make assets and infrastructure available to the SKAO, subject to appropriate terms and conditions, which includes the construction of an SKA Operations Centre (SOC) and Science Processing Centre (SPC) in the Western Cape, including all the facilities required to house the computing hardware for the SKA Science Data Processing (SDP), which forms part of the SKA\_MID telescope. South Africa is also responsible for establishing an SKA Science Regional Centre (SRC) to enable the South African scientific community to receive and process the data that is produced by the SKA telescopes.

SARAO is proposing to co-locate the SPC and SRC in one facility. Co-location will reduce the cost of data transfer between SPC and SRC. The SPC\_SRC project is thus aimed at building a facility that will co-host these two world-class high-performance computing facilities in one location. The objective of this project is to establish a Data Centre facility, the SKA Science Processing Centre (SPC), which shall include the SKA Regional Centre (SKA-SRC) and associated data infrastructure platforms, and the SKA Operations Centre (SOC), inclusive of SARAO's Headquarters. The SKA SOC and new SARAO Headquarters will collectively be referred to as the Cape Town Operations Centre (CTOC). The SKA SPC and SKA-SRC will collectively be referred to as the High-Performance Computing Building (HPCB).

The Cape Town Operations Centre (CTOC) and High-Performance Computing Building (HPCB) will form part of the Cape Town Hosting Infrastructure System (CTHIS) facilities. The HPCB will be constructed using a modular data centre approach, designed to be flexible and scalable, and to mitigate a possible technical risk in the late delivery of the facility impacting the SKA Antenna Array (AA2) deployment, the project will also need to make provisions to mitigate that risk with the deployment of an Interim SPC (iSPC) Modular Data Centre (MDC) unit, including all the related infrastructure works as part of the SPC deployment (Phase1\_SPC), which will be required in Q4 2025. This iSPC will need to be incorporated into the final HPCB design.

An in-principle agreement has been reached between the Managing Directors of SARAO and iThemba LABS regarding co-location of the Cape Town Host Infrastructure System (CTHIS), at the iThemba LABS precinct in Faure, Western Cape. This in-principle agreement has been supported by the NRF Board. The aim of this Internal Agreement is to enable the establishment, utilization and operation of buildings, power facility, and access to shared services and infrastructure by SARAO at the iThemba LABS site, and for SARAO to provide access to such buildings, power facility, shared services and infrastructure to the SKAO, subject to appropriate terms and conditions.

### **VISION**

The CTHIS facility is envisaged to be a global centre of excellence and world class research facility that combines Science Operation Centre with modern office space (CTOC), Science Processing Centre with high performance computing capabilities (HPCB), and sustainable power consumption that consists of a renewable energy mix. The CTOC building will embrace modern technologies, aiming to minimize its environmental impact (including smart building systems, sustainable design principles and practices). It is envisaged to utilize energy-efficient sources, green building materials and water conservation measures. The facility may also incorporate green spaces, such as rooftop gardens or landscaped areas, promoting a connection with nature. The building will provide flexible spaces for hosting scientific conferences, hosting symposiums and networking events. The facility encourages sustainable transportation options, such as bike racks, electric vehicle charging stations and incorporates accessible design features to ensure ease of movement and inclusivity for individuals with disabilities.

The new facility that will connect and process the power on the precinct will be referred to as The CTHIS Power Generation and Distribution System (PG&DS). The PG&DS will be built with the capacity to handle 20MVA of Eskom supply from the 132kV supply. The facility will also require the capacity to handle 20 MVA back-up power. The PG&DS will also house the Energy Centre for essential and back-up power. The back-up power will consist of Genset and RUPS, future on-site PV (Not Part of the project scope) and future Off-Site IPP (Not Part of the project scope). The PG&DS will supply TLABS with 6 MVA non-essential power from the intake substation and 5MVA essential power with 100% back-up from the Energy Centre. The Energy Centre will supply the CTHIS with 5 MVA [4.5MVA for HPCB + 500kVA for CTOC] essential power with 100% back-up. The Energy Centre will house the MV/LV Transformers; Switchgear; RUPS; Gensets and Diesel tanks.

HPCB is envisaged to be a Modular Data Centre (MDC) facility that is flexible and scalable. The facility is to be designed using a modular approach, consisting of prefabricated components that can be easily assembled and reconfigured. Each container is self-contained, with integrated security and environmental controls. The MDC is designed to be stackable allowing for vertical expansion and maximizing use of available space. The containers house the necessary components and racks for data storage, servers etc., which will be the responsibility of the end-user. The HPCB will also include a combination of liquid cooling and air-cooling facilities, for which this contract and project is required to provide interfaces.

## THE SITE

iThemba LABS: The South African Laboratories for Accelerator Based Sciences, is a multidisciplinary research facility that is based on the development, operation and use of particle accelerators and related research equipment. iThemba LABS operates the only cyclotron facilities on the African continent and the separated sector cyclotron is the largest accelerator facility in the Southern Hemisphere. iThemba LABS is situated 33 km away from the Cape Town City Centre, on Old Faure Road, Eerste River, and falls under the Cape Town Metropolitan Municipality.

1. iThemba LABS (TLABS) currently has a power facility with a power budget of 8 MVA Notified Maximum Demand (NMD) connected to the Cyclotron substation. Future growth for TLABS power budget is 11MVA. The CTHIS will require a power budget of 9 MVA. The existing power facilities to the iThemba LABS precinct will be upgraded to connect to the newly commissioned Magnetic Substation, as part of this project. The total combined power budget for the precinct will be 20MVA [11MVA for TLABS and 9 MVA for CTHIS] of new self-build. The new facility that will connect and process the power on the precinct will be referred to as The CTHIS Power Generation and Distribution System (PG&DS).
2. The CTOC will house the in-country headquarters of the SKAO (SKA SOC), SARAO Headquarters, Laboratories and Workshops, with a combined staff complement of 500 in an A Grade Office Building. Grade A buildings are high quality properties providing good access and are professionally managed with continued above average maintenance. They have incorporated high quality modern finishes, air conditioning, adequate on-site parking, clearly articulated entrance, lobby with clear circulation, high ceilings, and flexible floor plates as some of the defining features.
3. The SKA SPC and SKA-SRC project is aimed at building a facility that will co-host these two world-class high-performance computing facilities in one location. The SKA SPC and SKA-SRC will collectively be referred to as the High-Performance Computing Building (HPCB).
4. The project's Site Development Plan is still under development for finalisation. While the Concept Design Report and associated documents were developed based on the early draft of the SDP, in response to this tender, bidders must consider the current version of the SDP as shown in **Annexure 18**.

## SCOPE OF WORKS

The scope of work shall mean the Employer's Requirements as used in the FIDIC Yellow Book Contract. SARAO requires the services of a Modular Data Centre Service Provider (led by a Modular Data Centre Specialist) to Design, Manufacture, Supply, Install and Commission Phase 1 modules of the SPC. The scope of works includes all associated external works including site clearance, foundation design and installation as well as all bulk infrastructure inclusive of water and electricity supply and related interface connections. The scope of work includes the following:

### 1. Design, Manufacture, Supply, Installation and Commissioning;

- 1.1 Design of the SPC Phase 1 modules
- 1.2 Site Preparation for the SPC Phase 1 modules
- 1.3 Manufacture of the SPC Phase 1 modules
- 1.4 Supply and installation of the SPC Phase 1 modules
- 1.5 Commissioning of the SPC Phase 1 modules
- 1.6 Retrofitting of SPC Phase 1 modules (as necessary and agreed between parties after final detail designs)

For a detailed Scope of Work refer to **Annexures 2 - 12** below and all other Annexures.

SARAO's Professional Services Consultant (PSC), GASS Architecture Studios, follows the SARAO design process i.e. Requirements Review (RR), Preliminary Design Review (PDR), Concept Design Review (CDR), Detail Design Review (DDR) and Verification Test Procedures. This provides SARAO the opportunity to address any outstanding or changes in the issued user requirements, including the late adoption for certain technologies. The Modular Data Centre Service Provider is also expected to follow SARAO's design process with the PSC fulfilling an oversight role over the Modular Data Centre Services Provider for the duration of the Contract and the construction period and in completion of the entire scope. SARAO will have an oversight role through the PSC to ensure compliance to the employer's requirements are adhered to.

**The detailed scope for the project comprises of the following Annexures:**

- Annexure 1 - [F2700-0003-000 HPCB Requirements Specification Rev 01](#)
- Annexure 2 - [SKAO Requirements Specification the SKA-MID iSPC](#)
- Annexure 3 - [F2721-0000-CTHIS-WSP-XX-RP-PM-001 - NRF SARAO CTHIS - iSPC BoD](#)
- Annexure 4 - [F2721-0000-CTHIS-GSS-XX-SP-SC-00-SL-04-02 CTHIS SPC Phase 1 Statement of Work](#)
- Annexure 5 - [F2721-0000-CTHIS-WSP-XX-SP-CE-001 NRF SARAO CTHIS - iSPC Civils Technical Performance Specification](#)
- Annexure 6 - [F2721-000-CTHIS-WSP-XX-RP-DC-001 Rev D - iSPC Data Centre Specialist Technical Performance Specification](#)

- Annexure 7 - [F2721-0000-CTHIS-WSP-XX-SP-EE-001 - NRF SARAO CTHIS - iSPC Electrical Technical Performance Specification](#)
- Annexure 8 - [F2721-0000-CTHIS-WSP-XX-SP-FE-001 - NRF SARAO CTHIS - iSPC Fire Technical Performance Specification](#)
- Annexure 9 - [F2721-0000-CTHIS-WSP-XX-SP-ME-001 HVAC Technical Performance Specification](#)
- Annexure 10 - [F2721-0000-CTHIS-WSP-XX-SP-SE iSPC Structural Technical Performance Specification](#)
- Annexure 11 - [F2721-0000-CTHIS-WSP-XX-SP-WS-001 NRF SARAO CTHIS - iSPC Plumbing Drainage Technical Performance Specification](#)
- Annexure 12 - [F2721-000-CTHIS-GSS-XX-RP-AR-001 - Architectural Specifications](#)
- Annexure 13 - [SKA SARAO CTHIS BRA - Project Baseline Risk Assessment](#)
- Annexure 14 - [SKA SARAO CTHIS HS Spec CIC Health and Safety Specification](#)
- Annexure 15 - [CIC SKA SARAO CTHIS Contractor SHE Pre-qualifying Questionnaire](#)
- Annexure 16 - [SHE Specification and 37.2 Agreement](#)
- Annexure 17 - [CTHIS Schedule of Drawings and Specifications](#)
- Annexure 18 - [F2700-0000-CTHIS-GSS-ZZ-DR-AR-F2700-0000-CTHIS-GSS-ZZ-DR-AR-00-SL-00-03 - CTHIS Updated Site Development Plan](#)
- Annexure 19 - [Geotechnical Investigation Report - Report 2531DK Geotechnical Investigation for SKA](#)
- Annexure 20 - [F2700-000-CTHIS-GSS-XX-RP-AR-001- Cover Page - CTHIS i-SPC MDC Design Specifications](#)
- Annexure 21 - [F2721-000-CTHIS-MMQS-XX-BQ-QS-001 CTHIS -iSPC - Detailed Pricing Schedule -Unpriced](#)

Any reference to 'Scope of Works' in any of the documents forming part of this agreement shall mean the **"Employer's Requirements"** per Clause 1.1.33 of the General Conditions of Contract as identified in Part C2.2

**Annexures 1 - 2** outline the Employer's Requirements Specifications that the Contractors Detail Design must comply with.

**Annexures 3 - 4** outline the Employer's Detailed Scope of Works that the Contractors Detail Design must comply with.

**Annexures 5 - 12** outline the initial Concept Design phase Performance Specifications the Contractors Detail Design must comply with.

**Annexures 13 - 16** outlines Safety, Health, Environmental, Risk and Quality aspects the Contractor's Detail Designs must comply with.

**Annexures 17 - 18** outlines the current Site Development Plan and List of Drawings the Contractor's Detail Designs must comply with.

**Annexure 19** outlines the Geotechnical Investigations Report the Contractor's Detail Designs must consider.

**Annexure 20** outlines the Cover Page that the Bidders must consider in their response to this Tender..

**Annexure 21** outlines the detailed BOQ that the Bidder's response to this Tender must include.

## **CONTRACTOR AND LABOUR PARTICIPATION GOALS (CLPG)**

The appointed Contractor will be required to apply contractor and labour participation goals for this project in terms of the **CIDB Standard for Indirect Targeting for Enterprise Development through Construction Works Contracts, 2013 ('the Standard')**.

The contractor must indicate the contract participation goal it intends to achieve for this project, expressed as a percentage of the total contract amount, as defined in the Standard. The contractor shall engage targeted enterprises in the performance of the contract to the extent that at least five percent (5%) contract participation goal is achieved.

Progress of the contractor in meeting the contractor participation goals shall be reported on at least monthly, at progress meetings between the contractor and the Employer.

### **D1.2.1.1 CONSTRUCTION PROCESS (190 CALENDAR DAYS)**

SARAO has appointed a multidisciplinary team PSC, led by an Architecture company - GASS Architecture Studios ('GASS'). The GASS team has developed an initial Concept Design Report and Scope of Works (Annexures 5 & 6 respectively) for the SPC Phase 1 module. GASS will undertake the Resident Engineer role during construction. The Modular Data Centre Service Provider (MDC Specialist) team shall perform the duties stated in the FIDIC Yellow Book Contract 2017 and shall be responsible for executing the following design, construction management administration roles:

- Review of the PSC's initial concept design and detail design of the SPC Phase 1 modules
- Manufacture of the SPC Phase 1 modules and transportation to iThemba Labs site.
- Site preparation for the iSPC module
- Design and installation of the SPC Phase 1 module foundation
- Installation of the SPC Phase 1 modules, connection of both cooling water and power supply interfaces to the SPC Phase 1 modules and commissioning of the SPC Phase 1 modules.

- Lead monthly face to face progress meetings including the recording of minutes, action items, review of the construction schedule, progress on implementing contract participation goals and socio-economic requirements as defined in the contract
- Assessment, approval and submission of monthly payment certificates to SARAO for payment
- Undertake health, safety, environmental, quality assurance audits in conjunction with SARAO team
- Ensure that the required design disciplines are involved in inspections as applicable to their work during construction
- Compile bi-weekly construction progress reports addressing the construction programme, Health and Safety and Quality, Sub Contractors, Materials on Site, progress photos, plant and equipment on site, benefits register, targeted procurement goals, socio-economic and skills transfer development

### High Level Programme for Completion

<b>SPC Phase 1 Design, Manufacturer, Supply, Installation and Commissioning;</b>
<b>1. Review - Review &amp; Analysis of iSPC Requirements/Reference Conceptual Designs</b> <b>2. iSPC Detail Design - Detail Design Baseline/ Design Report/Construction Working Drawings</b> <b>3. Execution - Planning, Manufacturing, Construction, Testing, Verification, Commissioning &amp; Handover</b>  <b>(190 Calendar Days)</b>
<b>SPC Phase 1 Retrofitting</b>  <b>(30 Calendar Days)</b>

**Figure 3: SARAO Project Management Process**

#### D1.2.1.2 TEST, VERIFICATION, COMMISSIONING AND TAKE OVER

- During the construction phase, testing, verification, and commissioning should be carried out simultaneously with construction. Upon completion of the construction of a specific product, the contractor representative and design team should promptly approve the work by conducting testing, verification, and commissioning of the product, without waiting for the takeover time.
- Taking overall responsibility for coordinating the compilation of the as-built documentation in preparation for achieving an as-built baseline (ABBL):
  - (i) As-built drawings (workshop, construction, Municipal approved, other) in PDF, dwg, dxf, Visio, etc. format both in hard copy and in soft copy. The hard copy must be signed off by the Architect/ design engineer and submitted to the SARAO;
  - (ii) All test, verification and commissioning reports must be reviewed and signed by the relevant design engineer and submitted to SARAO;
  - (iii) Coordinate and supply operations, maintenance manuals and procedures from all suppliers and sub-contractors as per SARAO defined requirements. This shall include the coordination and compilation of the final hand-over package. The final hand-over package must be submitted in hard and soft copy (PDF, word, dwg, dxf, excel, etc.).
  - (iv) Coordination of the training of operational staff for all equipment and required maintenance procedures as per SARAO requirements;
  - (v) All finishing schedules, samples, attic stock, etc.
  - (vi) All Certificates of Compliance which are signed off by the Architect/ design engineers and the contractor;
- Lessons learnt report, Contractor to provide SARAO with a lessons learnt report including but not limited to Technical, Installation, Management, Resource, Supplier, Supply, Site and facility issues.
- Contractor to manage the defect-liability period by conducting an inspection on a quarterly basis for the period and prior to final handover certificates are signed to identify defects which must be addressed by the contractor.

## D1.2.2 SARAO SITE CONSTRAINTS, FACILITIES AND CONDITIONS

### Available Facilities and Restrictions

The Bidder must ensure that the construction area is well maintained and regular housekeeping is done. Random audits will be conducted by SARAO representatives to ensure this is achieved.

The Bidder is advised that SARAO has adopted a strict **No alcohol and illegal narcotic or other drugs policy** on site and shall be enforced by both the Contractor and SARAO, resulting in disciplinary action/removal from site for offenders.

Please refer to **Annexure 16** - SHE Specification and 37.2 Agreement..

## D1.2.3 SUPPORTING DOCUMENTS

The successful bidder must submit the following documents for Take Over to be certified on the construction phase.

The following shall be submitted to SARAO for the works (2 hard copies and 1 USB flash drive):

- All design files in all formats (Dwg, Word, Pdf, Visio, etc.) and versions,
- Electrical Certificate of Compliance,
- Operating and Maintenance Manuals and procedures,
- Equipment selection including manufacturer certified information,
- Shop drawings including wiring diagrams and refrigeration/ condensate piping diagram,
- Inspection record cards/checklists,

## D1.2.4 PERFORMANCE LEVELS

SARAO requires the following levels of performance from the selected Bidder for Section 1:

Performance Area	Required Level of Performance
Construction, Test and Verification, Commissioning and Take Over	190 Calendar Days
Completion of Defects after notification thereof	14 Days

# D2: Agreements and Contract Data

Number	Heading	Page No.
D2.1	Form of Offer and Acceptance	70
D2.2	Contract Data	75

## D2.1 Form of Offer and Acceptance

### Offer

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract in respect of the following works:

**BID NO: NRF/SARAO SHAO/23/2025-26 – DESIGN, MANUFACTURE, INSTALLATION AND COMMISSIONING OF PHASE 1 OF THE SKAO SCIENCE PROCESSING CENTRE (SPC) AND ASSOCIATED INFRASTRUCTURE FOR THE CAPE TOWN HOST INFRASTRUCTURE SYSTEM (CTHIS) FACILITY AT ITHEMBA LABS, CAPE TOWN**

The bidder, identified in the offer signature block below, has examined all the documents listed and included by reference in the tender data and addenda thereto as listed in the Schedule of Returnable, Contract Documents and all documents defining the Employer' Requirements, and by submitting this offer has accepted the conditions of tender and the Contract.

By the representative of the bidder, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance, the tenderer offers to perform all of the obligations and liabilities of the Contractor under the Contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the Conditions of Contract identified in the Contract Data, within the Contract Period stated below.

**A) THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS:**

R .....(in figures) RAND (in words);

This offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document to the tenderer before the end of the period of validity stated in the Tender Data, whereupon the Tenderer becomes the party named as the Contractor in the Conditions of Contract identified in the Contract Data.

**SIGNED ON BEHALF OF/BY THE BIDDER:**

<b>NAME</b>	<b>SIGNATURE</b>
<b>CAPACITY</b>	<b>DATE</b>

**Name and Address of Organisation:**

**SIGNED BY WITNESS:**

<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>

# Acceptance

*By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the Tenderer's offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the Conditions of Contract identified in the Contract Data and for the contract period offered. Acceptance of the tenderer's offer shall form an Agreement between the Employer and the Tenderer upon the terms and conditions contained in this Agreement and in the Contract that is the subject of this Agreement.*

The terms of the contract are contained in:

- Part D2.1 & Part D2.2: Agreements and Contract Data (which includes this Agreement)
- Part D2.3: Pricing Data
- Part D1: Scope of Work (Employer Requirements)

and drawings and documents or parts thereof, which may be incorporated by reference into Parts D1 to D3 above.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto as listed in the Returnable Documents as well as any changes to the terms of the Offer agreed by the Tenderer and the Employer during this process of offer and Acceptance, are contained in the Schedule of Deviations attached to and forming part of this Agreement. No amendments to or deviations from said documents are valid unless contained in this schedule which must be duly signed by the authorised representative(s) of both parties.

The tenderer shall within two weeks of signing this Agreement, including the Schedule of Deviations (if any), or when or just after this Agreement comes into effect, contact the employer's implementing agent (whose details are given in the Contract Data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this Agreement comes into effect on the date of last signature of this document, including the Schedule of Deviations (if any).

**SIGNED ON BEHALF OF/BY THE EMPLOYER:**

<b>NAME</b>	<b>SIGNATURE</b>
<b>CAPACITY</b>	<b>DATE</b>

Name and Address of Organisation

**SIGNED BY WITNESS:**

<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>

## Schedule of Deviations

### Notes:

1. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.
2. A tenderer's covering letter shall not be included in the final contract document. Should any matter in such a letter, which constitutes a deviation as aforesaid, become the subject of agreements reached during the process of Offer and Acceptance, the outcome of such Agreement shall be recorded here.
3. Any other matter arising from the process of Offer and Acceptance either as a confirmation, clarification or change to the tender documents and which it is agreed by the Parties becomes an obligation of the Contract shall also be recorded here.
4. Any change or addition to the tender documents arising from the above Agreements and recorded here shall also be incorporated into the final draft of the Contract.

1. Subject

Details

2. Subject

Details

3. Subject

Details

4. Subject

Details

By the duly authorised representatives signing this Schedule of Deviations, the Employer and the Tenderer agree to and accept the foregoing Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and addenda thereto as listed in the Returnable Documents, as well as any confirmation, clarification or changes to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and Acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the Tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this Agreement.

**Schedule of Deviations (continued)**

**SIGNED ON BEHALF OF/BY THE TENDERER (only on award of Contract):**

<b>NAME</b>	<b>SIGNATURE</b>
<b>CAPACITY</b>	<b>DATE</b>

**SIGNED BY WITNESS (only on award of Contract):**

<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>

**SIGNED ON BEHALF OF/BY THE EMPLOYER:**

<b>NAME</b>	<b>SIGNATURE</b>
<b>CAPACITY</b>	<b>DATE</b>

**SIGNED BY WITNESS:**

<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>

## CONFIRMATION OF RECEIPT

The Bidder, (now Contractor), identified in the Offer part of this Agreement hereby confirms receipt from the Employer, identified in the Acceptance part of this Agreement, of one fully completed original copy of this Agreement, including the Schedule of Deviations (if any) today:

the \_\_\_\_\_ (day) of \_\_\_\_\_(month) \_\_\_\_\_(year)

at \_\_\_\_\_ (place)

**SIGNED ON BEHALF OF/BY THE CONTRACTOR (*only on award of Contract*):**

<b>NAME</b>		<b>SIGNATURE</b>		<b>CAPACITY</b>

**SIGNED BY WITNESS (*only on award of Contract*):**

<b>NAME</b>		<b>SIGNATURE</b>

## D2.2 Contract Data

### Part 1: Contract Data Provided by the Employer

#### CONDITIONS OF CONTRACT

The following FIDIC Conditions of Contract are applicable for this Contract:

Conditions which form part of the Conditions of Contract for Plant and Design Build, Second Edition (Yellow Book, 2017) published by the International Federation of Consulting Engineers and any subsequent amendments made thereto applicable at the time of contract.

Copies of these FIDIC General Conditions (Yellow Book) second edition 2017, may be obtained from the South African Institution of Civil Engineering (SAICE) (tel. 011 805 5947) or Consulting Engineers South Africa (CESA) (tel. 011 463 2022).

#### C2.2.2 PARTICULAR CONDITIONS

Part A: References from Clauses in the General Conditions:

Sub-Clause

1.1	Definitions	
1.1.30 & 1.3(d)	Employer's Name and Address	The Employer (interchangeably, "the Client") is the National Research Foundation, represented by Project Manager of the business unit South African Radio Astronomy Observatory (SARAO)
	Email	<a href="mailto:mcele@sarao.ac.za">mcele@sarao.ac.za</a>
	Telephone number	+27(21) 506 7300
1.1.32	Employer's Personnel	<u>Martin Cele</u>
1.3(a)(ii)	Agreed methods of electronic transmission:	Email
1.3(d)	Contractor's name and address	
	Email	
	Telephone number	
	Contractor's Representative's name	
1.1.27	Defects Notification Period	365 Calendar Days
1.1.35	Engineer's Name and address	Piet Boer GASS Architecture Studios 154 Dorp Street, Stellenbosch Central Stellenbosch, 7600
1.1.36	Engineer' Representative Name and address	Piet Boer GASS Architecture Studios 154 Dorp Street, Stellenbosch Central Stellenbosch, 7600

1.1.86	Time for Completion for the whole works	190 Calendar days from Commencement Date Note: SARAO shall provide formal acceptance and approval of the Works
1.1.89	The Works	Design, Manufacture, Supply, Install and Commission Phase 1 modules of the SPC and associated infrastructure for the Cape Town Host Infrastructure System (CTHIS) Facility at iThemba Labs, Cape Town.
1.4	Contract shall be governed by the law of:	Republic of South Africa
1.4	Ruling Language	English
1.4	Language for communications:	English
1.8	Number of additional paper copies of Contractor's Documents	0
1.9	Period for notification of errors, faults or other defects in the Employer's Requirements	14 days
2.1	Time for access to the site	14 Calendar days after the Commencement Date, subject to acceptance of Contractor's health and safety plan, relevant method statement and receipt of the construction permit as well as all statutory approvals necessary for construction work to commence.
4.2	Amount of Performance Security	Ten (10)% of the Accepted Contract Amount, in the currencies and proportions in which the Contract Price is payable
4.7.2	Period for notification of errors in the items of reference	14 days
6.5	Normal working Hours	08:00 to 17:00 Monday to Friday, excluding weekends and Public Holidays (unless otherwise agreed in writing by SARAO)
8.2	Time for Completion	190 Calendar days from Commencement Date  SARAO shall provide formal acceptance and approval of Completion
8.8	Delay Damages payable for each day of delay	<ul style="list-style-type: none"> <li>• 0.1% per day of the total of the Contract Price at the Take Over Date, for the first 10 days of delay.</li> <li>• 0.2% per day of the total of the Contract Price at the Take Over Date, for the 11th to the 20th day of delay,</li> <li>• 0.4% per day of the total of the Contract Price at the Take Over Date, for the 21st to the 25th day of delay,</li> <li>• 1% per day of the total of the Contract Price at the Take Over Date, for the 26th to the 30th day of delay.</li> </ul>
8.8	Maximum amount of Delay Damages	Delay Damages is limited to 10 % of the total of the Contract Price in the currencies and proportions in which the Contract Price is payable.

13.7	FIXED PRICE Tender	The prices will be fixed and firm for the duration of this contract.
14.1	The Contract Price	The Contract Price is the sum total of the lump sum prices for each of the rated items on the Priced Schedule unless later changed in accordance with this contract.
14.1	The Contract Price Measurement and Valuation	The work will be paid in accordance with work done, which shall be the sum of completed activities in the Priced Schedule, as valued by the Engineer.
14.3	Application for Payment	Each Application for payment shall be made on the 23rd day of each Calendar Month
14.3 (iii)	Percentage of retention	10% of the Contract Price.
14.3 (iii)	Limit of Retention Money	10 % of the Accepted Contract Price.
14.6.2	Minimum amount of Interim Payment Certificates	R 50,000.00
14.7(b)	Period of payment	The longer of 30 days after the issue of the Interim Payment Certificate, or 30 days after the receipt of a valid Tax Invoice with the amounts reflected in the issued IPC.
14.15	Currency/Currencies of Payment	South African Rands
19.2.3(a)	Professional Indemnity Insurance	Is applicable with insurance required to the value of R 10,000,000.00 per occurrence.
21.1	Time for appointment of DAAB (1 member)	On an ad hoc basis and within 30 days after the notification of a Dispute for a dispute.
21.1	List of proposed members of the DAAB	The Association of Arbitrators of South Africa shall nominate and appoint the DAAB member after a dispute has been notified, following the failure by the Parties to agree on a DAAB member within 30 days after a dispute has been notified in connection with this contract

## Part B: Additional Clauses:

### 1 General Provisions

#### 1.1 Definitions

Deleted and replace 1.1.9 with:

**“Contract”** means the Form of Offer and Acceptance, Contract Data, these Conditions, the Employer’s Requirements, the Specifications (Statement of Work), the Annexures, the Drawings, the Schedules, and the further documents (if any) which are listed in the Form of Offer and Acceptance, and further includes drawings and documents or parts thereof which any of the aforesaid documents incorporate by reference.

Deleted and replace 1.1.10 with:

**“Contract Agreement”** means the Form of Offer and Acceptance.

Deleted and replace 1.1.50 with:

**“Letter of Acceptance”** means the Form of Acceptance as contained in part D2.1 of the contract documents.”

Deleted and replace 1.1.51 with:

**“Letter of Tender”** means the Form of Offer as contained in part D2.1 of the contract document.”

Deleted and replace 1.1.72 with:

**“Schedules”** means the document(s) completed by the Contractor and submitted with his tender offer, as included in the Contract. Such document(s) may include Price Schedule, data lists and schedules of rates and/or prices”, and will include Tender Returnable B6 :Key Personnel.

Deleted and replace 1.1.83 with:

**“Tender”** means that section of the Form of Offer and all other documents which the Contractor submitted as the proposal and Returnable Documents, as included in the Contract.

Add the following to 1.1.83:

“The word ‘Tender’ is synonymous with ‘Bid’, and the words ‘Letter of Tender’ with ‘Letter of Bid’, and the words ‘Appendix to Tender’ with ‘Appendix to Bid’, and the words ‘Tender Documents’ with ‘Bidding Documents’.”

Add Clause 1.1.91” **Defect”**

‘**Defect**’ means • a part of the works which is not in accordance with the Scope

Add Clause 1.1.92” **Priced Schedule”**

‘**Priced Schedule**’ means • The Priced Schedule at Part D3.2 of the Pricing Data.

Add Clause 1.1.93 **“Priced Schedule Information”**

**“Priced Schedule Information”** Information in the Priced Schedule is not Scope or Site Information

### **Sub-Clause 1.5 Priority of Documents**

Deleted and replace with:

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:

- a) The Form of Offer and Acceptance including the Schedule of Deviations
- b) The Particular Conditions Part A - Contract Data;
- c) The Particular Conditions Part B – Special Conditions
- d) These General Conditions;
- e) The Employer’s requirements;
- f) Standard and Project Specifications; and
- g) The Annexures
- h) The Schedules.
- i) Any other documents forming part of the Contract

If any ambiguity or discrepancy is found in the documents, the Engineer shall issue any necessary clarification or instruction, with the express undertaking by the Parties that the more onerous requirement is deemed to have been allowed for by the Contractor in the specific context of the ambiguity.

### **Sub-Clause 1.6 Contract Agreement**

Delete the last paragraph:

“The cost of stamp duties and similar charges imposed by law in connection with entry into the Contract Agreement shall be borne by the Employer.”

### **Sub-Clause 1.10 Contract Agreement**

Delete the entire clause 1.10 and replace it with ;

As between the Parties, the Contractor shall retain the intellectual property rights in the Contractor’s Documents and other design documents made by (or on behalf of) the Contractor.

However, the Contractor shall be deemed (by signing the Contract Agreement) to give to the Employer a non-terminable transferable non-exclusive royalty-free license to use, copy and communicate the Contractor’s Documents and such other design documents, including making and using modifications of them. This license shall:

- (a) apply throughout the actual or intended operational life (whichever is longer) of the relevant parts of the Works and the subsequent additional modules at the high performance computing building (HPCB) and additional modules for future SPC expansion phases of the New Cape Town Host Infrastructure System (CTHIS) facility at iThemba Labs, Cape Town;
- (b) entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Contractor’s Documents and such other design documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works and which shall include the concept and detail design of additional modules at the high performance computing building (HPCB), and the subsequent manufacture, supply, install and commission of additional modules for future SPC expansion phases of the New Cape Town Host Infrastructure System (CTHIS) facility at iThemba Labs, Cape Town;

(c) in the case of Contractor's Documents and such other design documents which are in the form of electronic or digital files, computer programs and other software, permit their use on any computer of the Engineer and Employer and/or at the locations of the Employer and the Engineer and/ or at other places as required for the completion of the additional modules at the high performance computing building (HPCB), and the additional modules for future SPC expansion phases of the New Cape Town Host Infrastructure System (CTHIS) facility at iThemba Labs, Cape Town; and

(d) in the event of termination of the Contract:

(i) under Sub-Clause 15.2 [Termination for Contractor's Default], entitle the Employer to copy, use and communicate the Contractor's Documents and the other design documents made by or for the Contractor; or

(ii) under Sub-Clause 15.5 [Termination for Employer's Convenience], Sub-Clause 16.2 [Termination by Contractor] or Sub-Clause 18.5 [Optional Termination], entitle the Employer to copy, use and communicate the Contractor's Documents which has been completed.

for the purpose of completing the Works and/or arranging for any other entities to do so.

The Contractor's Documents and other design documents made by (or on behalf of) the Contractor may, without the Contractor's prior consent, be used, copied or communicated to a third party by (or on behalf of) the Employer for purposes other than those permitted under this Sub-Clause, however limited to the compiling and completion of the concept and detail design of additional modules at the high performance computing building (HPCB), and the subsequent manufacture, supply, install and commission of additional modules for future SPC expansion phases of the New Cape Town Host Infrastructure System (CTHIS) facility at iThemba Labs, Cape Town.

#### **Sub-Clause 1.12 Confidential Details**

Add the following after the first paragraph:

"Any disclosure of information that forms part of the Contract shall not be disclosed without prior consent of the other Party."

## **CLAUSE 2 THE EMPLOYER**

### **Sub-Clause 2.4 Employer's Financial Arrangements**

Delete this sub-clause as it is not applicable. It is also not applicable anywhere where it is referenced in the conditions of contract.

## **CLAUSE 3 THE ENGINEER**

### **Sub-Clause 3.6 Replacement of the Engineer**

Delete the reference to "42 days" in the first paragraph of this sub-clause and replace with "21 days"

## **CLAUSE 4 THE CONTRACTOR**

### **Sub-Clause 4.17 Contractor's Equipment**

Add the following at the end of this Sub-Clause:

"The Contractor shall provide all necessary storage facilities on Site."

### **Sub-Clause 4.20 Progress Reports**

Add the following at the end of this Sub-Clause:

- i) "Contractor and Labour Participation Goals ('CLPG'), sub-contractors and suppliers, including their percentage participation in the Contract."
- ii) The Contractor shall submit a monthly report indicating the targets that have been met, those that have not been met and the reasons thereof.

Failure to reach the CLPG shall render the Contractor liable for the withholding under Clause 14.6.2 of an amount equal to 5% of the Clause 14.3 Statement amount in the applicable month of the failure.

### **Sub-Clause 4.21 Security of the Site**

Add the following to the Sub-Clause:

The Contractor shall in connection with the Works provide and maintain at his own cost all lights, guards, fencing, watching and other appropriate security measures when and where necessary or required by the Employer or by a competent

statutory or other authority for the protection and security of the Works and the Contractor's Equipment, or for the safety and convenience of the public and for the protection of life and property.

#### **Clause 4.5 SUBCONTRACTING**

Add the following at the end of this Clause:

"The Contractor shall ensure that the requirements imposed on the Contractor in terms of this sub-clause shall apply equally to each Subcontractor."

#### **CLAUSE 6 STAFF AND LABOUR**

##### **Sub-Clause 6.5 Working Hours**

Add the following after the last paragraph:

The days of rest are, Saturdays, Sundays and all gazetted South African public holidays.

##### **Sub-Clause 6.7 Health and Safety of Personnel**

Add the following after the second paragraph:

The Employer and the Contractor shall enter into an agreement to complete the work required for the construction of the Works in terms of the provisions of Section 37(2) of the South African Occupational Health and Safety Act (Act No. 85 of 1993) and the Construction Regulations (2014) as amended and the Construction Regulations.

The Contractor shall provide proof to the Employer, within 14 days from the Commencement Date, that he has paid all contributions required in terms of the Compensation for Occupational Injuries and Diseases Act (No 130 of 1993) and the Construction Regulations (2014).

#### **CLAUSE 8 COMMENCEMENT, DELAYS AND SUSPENSION**

##### **Sub-Clause 8.3 Programme**

Add the following:

('l') "The Contractor' Planned completion.

('m') Provision for Time Risk Allowances

('n') Each programme activity showing full resource loading (Contractor People and Contractor Equipment)

All programmes will be in Primavera P6 format and be submitted as both .XER and .PDF files.

Failure by the Contractor to submit an updated programme complying in full with the provisions of Sub-Clause 8.3 may result in 5% of the applicable month's Interim Payment Certificate being deducted and re-certified in a subsequent Interim Payment Certificate after full compliance with the provisions of Sub-Clause 8.3.

#### **CLAUSE 14 CONTRACT PRICE AND PAYMENT**

##### **Sub-Clause 14.7 Payment**

Insert the following before ' ; and':

'including any amounts due in accordance with a decision by the DAB per Clause 21.4.3'

#### **CLAUSE 15 TERMINATION BY EMPLOYER**

##### **Sub-Clause 15.2 Termination for Contractor' Default**

15.2.1 Insert the following clause (i);

*'The Contractor having reached the limit of Delay Damages per clause 8.8 for the whole of the Works or any Section*

**C1.2.2 Part 2: Data Provided by the Contractor**

**Clause 1.2.1: Delivery of Notices**

The name of the Contractor is

The address of the Contractor is

Physical Address	Postal Address
Telephone:	
Email:	

**SIGNED ON BEHALF OF/BY THE BIDDER:**

<b>NAME</b>	<b>SIGNATURE</b>
<b>CAPACITY</b>	<b>DATE</b>

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### D3: Pricing Data

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<b>Number</b>	<b>Heading</b>	<b>Page No.</b>
D3.1	Pricing Instructions	83
D3.2	Priced Schedule Summary	84

## D3.1 Pricing Instructions

### 1. Function of the Priced Activity Schedule

- 1.1.1. Additional Clauses 1.1.91 states: "Information in the Priced Schedule is not Scope or Site Information". This confirms that instructions to do work or how it is to be done are not included in the Priced Schedule but in the Scope. This is further confirmed by Clause 4.1 which states, "The Contractor shall execute the Works in accordance with the Contract". Hence the Contractor does not Provide the Works in accordance with the Priced Schedule. The Priced Schedule is only a pricing document.

### 2. Preparing the Priced Activity Schedule

- 2.1.1. Prices and tendered rates are deemed to be fully inclusive of all costs including delivery to the specified NRF site; Value Added Tax (VAT) and other taxes (this includes all disbursement and travel costs) and Consumer Price Adjustment (CPA) per annum.
- 2.1.2. Hence the Prices tendered by the Contractor in the Priced Schedule are inclusive of everything necessary and incidental to Providing the Works in accordance with the Employers Requirements, as it was at the time of tender, as well as to correct any Defects not caused by an Employer's risk.
- 2.1.3. Only a Fixed and Firm price will be accepted. Non-fixed and firm prices (including prices subject to rates of exchange variations) will not be considered.
- 2.1.4. A full breakdown of costs, including the fully rated Pricing Schedules, contingencies, must be submitted with the Tender Offer in format as set out below and, where applicable, in supporting schedules and provided.
- 2.1.5. The Conditions of Contract, the Contract Data and the Scope of Work shall be read in conjunction with the Pricing Schedule.
- 2.1.6. Bid price in South African currency, foreign exchange risk is for the account of the bidder.
- 2.1.7. It will be assumed that prices included in the Pricing Schedules are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date of bids (refer to [www.sabs.co.za](http://www.sabs.co.za) or [www.iso.org](http://www.iso.org) for information on standards).
- 2.1.8. All costs associated with compliance to the Occupational Health and Safety Act, the National Environmental Management Act and the Water Act must be included in the bidding price where applicable.

### D3.2 Priced Schedule Summary

#### SUMMARY FOR BID OPENING PURPOSES

#### Section 1: SPC Phase 1 Design, Manufacture, Supply, Installation and Commissioning

NOTE: ALL SUMMARY COSTS CARRIED FROM THE DETAILED PRICED SCHEDULE. THE COMPLETED DETAILED PRICED SCHEDULE (ACTIVITY SCHEDULE) SHALL FORM PART OF THIS TENDER SUBMISSION. THE OFFER WILL BE BASED ON THE PROVIDED STATEMENT OF WORK, CONSOLIDATED REQUIREMENTS SPECIFICATION, AND OTHER INFORMATION PROVIDED BY THE EMPLOYER		
Item	Description	Bid Amount
1	Review and Analysis of SPC Phase 1 Requirements and Reference Concept Designs	R
2	Preliminary Design	R
3	Detail Design	R
4	<b>Construction and Post Construction</b>	
4.1	Construction of Primary Elements	R
4.2	Construction of Electrical Installations	R
4.3	Construction of Fire Installations	R
4.4	Construction of Wets Services installations	R
4.5	Construction of Mechanical Installations	R
4.6	Construction of Data Centre Specialist Installation	R
4.7	Construction of Civil Works	R
4.8	Other Costs	R
5	<b>Retrofitting SPC Phase 1 modules - Provisional Sum</b>	<b>R 500 000,00</b>
		Sub-Total (Excluding VAT) R
		Value Added Tax (15 %) R
		<b>TOTAL (Including VAT) R</b>
	<b>CARRIED TO FORM D2.1 FORM OF OFFER AND ACCEPTANCE</b>	

NAME OF BIDDER: .....

OFFERED TOTAL: R.....  
 (Amount brought forward from  
 The Form of Offer)\*

\* Should any discrepancy occur between this figure and that stated in the Form of Offer and Acceptance, the latter shall apply.

**SIGNED BY/ON BEHALF OF BIDDER**

<b>NAME</b>		<b>SIGNATURE</b>	<b>DATE</b>

  

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**COMPANY STAMP**



## D4: Annexures

Annexure No.	Annexure Title
Annexure 1	<a href="#">F2700-0003-000 HPCB Requirements Specification Rev 01</a>
Annexure 2	<a href="#">SKAO Requirements Specification the SKA-MID iSPC</a>
Annexure 3	<a href="#">F2721-0000-CTHIS-WSP-XX-RP-PM-001 - NRF SARAO CTHIS - iSPC BoD</a>
Annexure 4	<a href="#">F2721-0000-CTHIS-GSS-XX-SP-SC-00-SL-04-02 CTHIS SPC Phase 1 Statement of Work</a>
Annexure 5	<a href="#">F2721-0000-CTHIS-WSP-XX-SP-CE-001 NRF SARAO CTHIS - iSPC Civils Technical Performance Specification</a>
Annexure 6	<a href="#">F2721-000-CTHIS-WSP-XX-RP-DC-001 Rev D - iSPC Data Centre Specialist Technical Performance Specification</a>
Annexure 7	<a href="#">F2721-0000-CTHIS-WSP-XX-SP-EE-001 - NRF SARAO CTHIS - iSPC Electrical Technical Performance Specification</a>
Annexure 8	<a href="#">F2721-0000-CTHIS-WSP-XX-SP-FE-001 - NRF SARAO CTHIS - iSPC Fire Technical Performance Specification</a>
Annexure 9	<a href="#">F2721-0000-CTHIS-WSP-XX-SP-ME-001 HVAC Technical Performance Specification</a>
Annexure 10	<a href="#">F2721-0000-CTHIS-WSP-XX-SP-SE iSPC Structural Technical Performance Specification</a>
Annexure 11	<a href="#">F2721-0000-CTHIS-WSP-XX-SP-WS-001 NRF SARAO CTHIS - iSPC Plumbing Drainage Technical Performance Specification</a>
Annexure 12	<a href="#">F2721-000-CTHIS-GSS-XX-RP-AR-001 - Architectural Specifications</a>
Annexure 13	<a href="#">SKA SARAO CTHIS BRA - Project Baseline Risk Assessment</a>
Annexure 14	<a href="#">SKA SARAO CTHIS HS Spec CIC Health and Safety Specification</a>
Annexure 15	<a href="#">CIC SKA SARAO CTHIS Contractor SHE Pre-qualifying Questionnaire</a>
Annexure 16	<a href="#">SHE Specification and 37.2 Agreement</a>
Annexure 17	<a href="#">CTHIS Schedule of Drawings and Specifications</a>
Annexure 18	<a href="#">F2700-0000-CTHIS-GSS-ZZ-DR-AR-F2700-0000-CTHIS-GSS-ZZ-DR-AR-00-SL-00-03 - CTHIS Updated Site Development Plan (SDP)</a>
Annexure 19	<a href="#">Geotechnical Investigation Report - Report 2531DK Geotechnical Investigation for SKA</a>
Annexure 20	<a href="#">F2700-000-CTHIS-GSS-XX-RP-AR-001 -Cover Page - CTHIS i-SPC MDC Design Specifications</a>
Annexure 21	<a href="#">F2721-000-CTHIS-MMQS-XX-BQ-QS-001 _CTHIS -iSPC - Detailed Pricing Schedule -Unpriced</a>