



**iThemba LABS**  
 Laboratory for Accelerator Based Sciences

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**REQUEST FOR QUOTATION OF ALPHA / BETA-GAMMA HAND-FOOT-CLOTHING CONTAMINATION MONITOR**

Supplier Name: .....

GOODS

SERVICE

<b>Request for Quotation Number:</b>	iLABS/RFQ 2025/26:47
<b>Date Issued:</b>	02 June 2025
<b>Description of Services/ Goods:</b>	iThemba LABS intends to acquire an Alpha / Beta-Gamma Hand-Foot-Clothing (HFC) Contamination Monitor.
<b>Closing Date:</b>	18 June 2025
<b>Closing Time:</b>	11:00 am
<b>Delivery Address:</b>	iThemba LABS, ATT: SCM Department, Old Faure Road, Faure, 7131
<b>Submit RFQ via email only</b>	<a href="mailto:scm2@tlabs.ac.za">scm2@tlabs.ac.za</a>
<b>Date Goods or Service Required:</b>	August 2025
<b>For More Information (Technical):</b>	Mr. Philip Beukes / Mr. Tiro Modisane Email: pr.beukes@ilabs.nrf.ac.za tjd.modisane@ilabs.nrf.ac.za Tel: 021 843 1000
<b>For More Information (Supply Chain Management):</b>	<a href="#">Khanyisa</a> Maqwara Email: scm2@tlabs.ac.za Tel: 021 843 1379

**THE FOLLOWING CONDITIONS WILL APPLY:**

- **Where quotations/proposals are R 2 000.00 or more, the preferential Procurement System Applicable is 80/20**
- Price(s) quoted must be valid for at least **sixty (60) days from closing date of the RFQ.**
- Price(s) quoted must be firm and must be inclusive of VAT.
- **No advance payment without a payment guarantee**
- **Payment terms are 30 days from date if invoice received**
- A firm delivery period **must** be indicated.
- Late proposals/quotations / bids will be not be accepted.
- **Submit your B - BBEE Certificate as accredited with SANAS or Sworn affidavit if you are claiming for specific goals.**
- **Bidder / service provider / supplier that fails to provide mandatory RFQ requirements may be disqualified.**
- **Changes made by the / service provider/supplier to the RFQ template and its terms and conditions will not be considered after the closing date and time**
- Provide CSD Summary Report ([www.csd.gov.za](http://www.csd.gov.za) )
- The attached forms to be completed by the Bidder (where applicable):
  - SBD 4 – Bidder disclose
  - SBD 6.1 – Preference Points Claim (South African Companies Only)
- This request for formal quotation is subject to the Preferential Procurement Policy Framework Act (PPPFA) and The Preferential Procurement Regulations, 2022, **The General Conditions of Contract (GCC and, if applicable, any other special Conditions of Contract.**

**REGISTRATION ON THE CENTRAL SUPPLIER DATABASE (CSD):**

The bidder must be on the National Treasury's Central Supplier Database in order to do business with the NRF and for the NRF to award a bid and sign the subsequent contract. Registration on the CSD ([www.csd.gov.za](http://www.csd.gov.za)) is compulsory and bids from unregistered bidders are not considered.

National Treasury Contact Details: +27 (0) 12 406 9222 or email [csd.support@treasury.gov.za](mailto:csd.support@treasury.gov.za)

## SCHEDULE 1 - SPECIFICATION

### **Introduction to the NRF**

The National Research Foundation (“NRF”) is a juristic person established in terms of the National Research Foundation Act, Act 23 of 1998, and a Schedule 3A Public Entity in terms of the Public Finance Management Act. The NRF is the government’s national agency responsible for promoting and supporting research and human capital development through funding researchers, provision of the National Research Platforms, and science outreach platforms/programs to the broader community. The NRF provides these services in all fields of science and technology, including natural science, engineering, social science, and humanities.

The NRF is a schedule 3A entity under the PFMA (Act 29 of 1999), which is required to plan and report on its activities and organizational performance, and which is to be audited by the AGSA on an annual basis. As part of the AGSA audit requirements, the NRF has to collect / document and store details, data and/or information of all persons and activities that form part of its performance record as proof thereof. In terms of this requirement, all persons making use of NRF facilities, platforms, equipment, tools etc., for research and related purposes are required to provide their personal details/data/information as per the template below or other similarly appropriate format. By completing your information in the template/register/record below and appending your signature thereto, you confirm your consent, in line with the Protection of Personal Information Act 4 of 2013, whereby the NRF and any of its business units may process (collect, receive, record, organize, collate, share, store, update, modify, retrieve, alter, consult, use, disseminate, distribute, merge, link, erase or destroy) the personal information you provide within and amongst its business units/functions for the purpose of fulfilling its statutory mandate, public accountability and other regulatory/legal requirements.

### **Introduction to the Business Unit responsible for this RFQ**

iThemba LABS (Laboratory for Accelerator-Based Sciences) is a multi-disciplinary research laboratory based at two sites in the Western Cape and Gauteng respectively, these provide facilities for:

- Basic and applied nuclear physics research using particle beams
- Research Radiation Biophysics
- The supply of accelerator-produced radioactive isotopes for nuclear medicine and research

### **Evaluation Process**

- Evaluation of proposals:

All proposals will be evaluated by Supply Chain Management for administrative compliance, functionality, price and B-BBEE. Based on the results of the evaluation process and upon successful negotiations, iThemba LABS will approve the awarding of the contract to successful bidder.

- Preference points system:

The 80/20 preference point system will be used where 80 points will be dedicated to price and 20 points to B-BBEE status. If all bids received are more than R 1 000 000.00, the proposal will be cancelled and re-issued.

**Supplier Response**

<b>Name of Supplier:</b>	
<b>Address of Supplier:</b>	
<b>Contact Person:</b>	
<b>Contact Tel:</b>	
<b>Email Address:</b>	
<b>CSD Supplier Number:</b>	MAAA.....
<b>Lead Time for delivery</b>	<b>NA</b>
<b>Currency:</b>	ZAR
<b>Payment terms:</b>	30 days from the date of receiving invoice

## Returnable Documents

<b>Administrative Compliance Returnable Documents (M – Mandatory); (O – Optional)</b>	<b>Submitted</b>	
<b>Completed RFQ (This document)</b>	<b>M</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Bidders Disclosure (SBD 4)</b> , signed and completed.	<b>M</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Preference Points Claimed (SBD 6.1)</b> , signed and completed with BBBEE certificate or sworn affidavit (applicable for local bidders).	<b>O</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Pricing schedule</b> completed. (Bidders may submit a customized quotation in addition.)	<b>M</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>SANAS accreditation</b> certificate or official letter.	<b>M</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No

## SPECIFICATIONS:

To acquire a high-sensitivity, microprocessor-based Alpha / Beta-Gamma Hand-Foot-Clothing (HFC) Contamination Monitor for detecting radioactive surface contamination on personnel. The unit must include hand, foot, and clothing detectors, a removable frisking probe and advanced features suitable for deployment in radiation-controlled zones. Portability, intuitive software, and compatibility with radiation protection systems are essential.

### **Functional Requirements**

<b>Feature</b>	<b>Specification</b>
Radiation Types Detected	Alpha, Beta, Beta-Gamma
Detection Zones	Hands (2), Feet (2), Body/Clothing
Detector Technology	Plastic/ZnS(Ag) scintillation
Removable Frisk Probe	Yes – removable detector/probe
Minimum Detectable Activity	≤ 0.1 Bq/cm <sup>2</sup> (Alpha), ≤ 0.5 Bq/cm <sup>2</sup> (Beta)
Background Compensation	Automatic dynamic background subtraction
Alarm System	Visual and audible alarms with programmable thresholds
User Interface	≥ 7" touchscreen panel with intuitive layout and voice-guided measurements
Calibration Tools	Built-in plateau testing, calibration routines, and diagnostics
Memory	Memory for ≥ 5,000 records; export via USB or Ethernet (XML format)
User Identification	Manual entry, barcode, or RFID; web-based access optional

### **Detector Specifications**

<b>Zone</b>	<b>Detector Type</b>	<b>Sensitive Area</b>	<b>Typical Efficiencies</b>
Hand Detectors	Plastic/ZnS(Ag)	≥300 cm <sup>2</sup>	Sr-90/Y-90: 52%, Cl-36: 49%, C-14: 20%, Am-241: 33%
Foot Detectors	Plastic/ZnS(Ag)	≥550 cm <sup>2</sup>	Sr-90/Y-90: 43%, Cl-36: 54%, C-14: 21%, Am-241: 19%

### Electronics & Connectivity

Component	Specification
Processor	Microprocessor-based embedded industry controller
Display	Minimum 7" touchscreen
Ports	USB (Host & Device), Ethernet (10/100/1000 Mbps), optional RS-232, RS-485
Data Export	USB, Ethernet; XML format

### Physical & Environmental Specifications

Parameter	Specification
Power Supply	220–240 VAC, 50 Hz; includes uninterruptible UPS
Max Dimensions	≤ 80 cm (W) × 150 cm (H) × 90 cm (D)
Max Weight	≤ 80 kg
Operating Temperature	-5 °C to +40 °C
Humidity	≤ 90% non-condensing
Construction	Corrosion-resistant stainless steel, Aluminium or powder-coated steel
Mobility	Lockable castor wheels or fixed-mount configurations

### Compliance and Certification

Requirement	Specification
Standards	IEC 61098, IEC 60325, ISO 11929, CE, CSA/UL/EMC
Calibration	Certificates traceable to national/international standards
Quality System	ISO 9001, CE or equivalent certified

### Installation, Training, and Warranty

Requirement	Details
Delivery Site	NRF iThemba LABS, Cape Town
Installation	On-site setup and commissioning by vendor
Training	On-site user and maintenance training
Warranty	Minimum 2-year warranty on hardware and electronics
After-sales Support	Remote and on-site support; spare parts availability for ≥5 years

### Documentation to be Supplied

- Technical datasheet and operation manual
- Calibration and efficiency test certificates
- Compliance certificates (CE, ISO, etc.)
- Maintenance and troubleshooting guide
- User training material (digital and/or print)

## Replacement Foil Frames for HFC Monitor

### Purpose

To procure replacement foil frames compatible with the Alpha/Beta-Gamma hand and foot detectors of the existing or procured HFC contamination monitors. These frames must support radiation-transparent protective foils, preserving detector sensitivity and protecting surfaces.

### General Requirements

Item	Specification
Application	Protection of scintillation detectors (hand and foot zones)
Detector Compatibility	Must be compatible with HFC monitors specified in this document
Radiation Type	Alpha and Beta-Gamma
Material	Lightweight, rigid, corrosion-resistant frame (e.g., anodized aluminum or coated polymer)
Foil Material	Mylar or equivalent radiation-transparent film; $\leq 6 \mu\text{m}$ thickness
Fixing Method	Snap-in, screw-fixed, or magnetic mounting depending on manufacturer design
Reusability	Frame reusable; foils replaceable
Cleaning	Cleanable using standard decontamination methods

### Frame Specifications

#### A. Foot Foil Frame (Alpha/Beta-Gamma)

- Compatible Area: Foot detector – sensitive area approx. 150 × 370 mm
- Frame Dimensions: Match or exceed active area
- Size Tolerance:  $\pm 2$  mm to OEM footprint

#### B. Hand Foil Frame (Alpha/Beta-Gamma)

- Compatible Area: Hand detector – sensitive area approx. 150 × 230 mm
- Frame Dimensions: Match or exceed active area
- Size Tolerance:  $\pm 2$  mm to OEM footprint

### Pricing Schedule:

Supplier Specifications include Model if applicable	Quantity	Price Per Unit (Incl. VAT)	Total (Incl. VAT)
Alpha / Beta-Gamma HFC Contamination Monitor	1		
Replacement Foil Frames for HFC Monitor Hand	2		
Replacement Foil Frames for HFC Monitor Foot	2		
<b>TOTAL (VAT INCLUSIVE):</b>			<b>R</b>

**STANDARD BIDDING DOCUMENT (SBD) 4**

**BIDDER'S DISCLOSURE**

**1. PURPOSE OF THE FORM**

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 table below.

Full Name	Identity Number	Name of State institution

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<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.

2.2 Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? **YES/NO**

2.2.1 If so, furnish particulars:  
.....  
.....

2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? **YES/NO**

2.3.1 If so, furnish particulars:  
.....  
.....

**3 DECLARATION**

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

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or 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.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

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<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.

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

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

.....  
Signature

.....  
Date

.....  
Position

.....  
Name of bidder

## STANDARD BIDDING DOCUMENT (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 80/20 preference point system.

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

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

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

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
<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:

$$\begin{array}{ccc} 80/20 & \text{or} & 90/10 \\ \\ Ps = 80 \left( 1 - \frac{Pt - Pmin}{Pmin} \right) & \text{or} & \\ Ps = 90 \left( 1 - \frac{Pt - Pmin}{Pmin} \right) & & \end{array}$$

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:

80/20

or

90/10

$$Ps = 80 \left( 1 + \frac{Pt - P_{max}}{P_{max}} \right) \text{ or}$$
$$Ps = 90 \left( 1 + \frac{Pt - P_{max}}{P_{max}} \right)$$

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

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

The specific goals allocated points in terms of this tender (B-BBEE Status Level of Contributor)	Number of points allocated (90/10 system) (To be completed by the organ of state)	Number of points allocated (80/20 system) (To be completed by the organ of state)		Number of points claimed (90/10 system) (To be completed by the tenderer)	Number of points claimed (80/20 system) (To be completed by the tenderer)
1	10	20			
2	9	18			
3	6	14			
4	5	12			
5	4	8			
6	3	6			
7	2	4			
8	1	2			
Non-compliant contributor	0	0			

**DECLARATION WITH REGARD TO COMPANY/FIRM**

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

4.4. Company registration number: .....

4.5. TYPE OF COMPANY/ FIRM

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

[TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that

the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

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

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

**Note: It is advised that documents be returned in PDF**