REPUBLIC OF KENYA

COUNCIL OF GOVERNORS

MINISTRY OF HEALTH
STATE DEPARTMENT FOR MEDICAL SERVICES
OFFICE OF THE PRINCIPAL SECRETARY

Telegram "MINHEALTH", Nairobi
Telephone: 254(020)2717077
Fax 254-20-2713750
Email address: psmedical@health.go.ke
When replying please quote:

AFYA HOUSE
CATHEDRAL ROAD
P.O. BOX 30016
NAIROBI.

CLARIFICATION OF TENDER DOCUMENTS: ADDENDUM NO. 1 – 23rd JANUARY, 2026

RE: SUPPLY AND DELIVERY OF MEDICAL EQUIPMENT, ACCESSORIES AND ASSOCIATED SUPPLIES ON A FRAMEWORK BASIS IN PUBLIC HEALTH FACILITIES

TENDER NO. MOH/CoG/OT/FA/01/2025-2026; IFMIS NEGOTIATION NO. 2082730.

Reference is made to the above tender that appeared on the print media (The Star Newspaper) on 8th January, 2026. Interested bidders have sought for some clarifications on the tender document which are hereby made as follows:

S/NO	DESCRIPTION OF INQUIRY	CLARIFICATION
1	Unavailability of Tender Documents from the State Department for Medical Services website (www.health.go.ke), the Public Procurement Information Portal, or the IFMIS portal.	The tender documents are available from the State Department for Medical Services website (www.health.go.ke), the Public Procurement Information Portal and on IFMIS portal using the IFMIS Negotiation Number 2082730. Any assistance in accessing the documents from the stated platforms may be sought from the following: **Director, ICT – Room No. LG 02.** **Head Supply Chain Management Services, State Department for Medical Services – Room No. 514B.** The tender was advertised on 8th January, 2026 and uploaded on the various platforms on 11th January, 2026 during which the tender will be open for Sixteen (16) days against

	GH In the interest of fairness and to ensure the Ministry receives competitive bids, we kindly request the following: Extension of Closing Date: An extension of the tender closing date.	the minimum required period on seven (7) days. The tender closing date therefore remains to be on **27th January, 2026 at 11.00am.**
2	Kindly clarify if we need to quote for everything per category or a partial quote in a category is acceptable?	Bidders may quote for the specific line items of interest. There is no requirement to quote for all the items in a category. The price evaluation will be conducted per line item not category. Please quote the exact category and item number as provided in the schedule of requirements in your price schedule form for ease of reference and comparison with the provided item specifications.
3	The technical specifications for autoclave, 100 litres with vacuum are missing.	**Category A- Item No. 14.** The technical specification for the Autoclave 100 litres are as provided here below.
4	The general description of the digital mobile x-ray unit indicates that it has 5 flat-panel detectors. However, this is not indicated in the performance specifications. Please clarify the number of detectors.	For the digital mobile x-ray: The inclusion of digit five (5) before flat panel detectors in the general description was a mistake and is regretted. The digit five is therefore deleted. There's only one detector and the details are as provided in the performance specifications.
5	Kindly clarify for us on the price schedule. Kindly clarify which items are exclusively reserved for firms registered under Public Procurement and Preferences scheme- (AGPO) in category B and C. Is it the lower ones or upper one. Also we are requesting for extension of time so that we able to prepare the document in the correct manner.	The items reserved under the Procurement Preference and Reservations Scheme (AGPO) are as follows: **Category B –** Item No.136 to 158. **Category C –** Item No. 44 to 78. The tender closing date remains to be on **27th January, 2026 at 11.00am.**

T.O

6	Kindly can you have a clear price schedule for ease of price quotation?	Tenderers are invited to note that the price schedule forms is a choice of the tenderer amongst the versions of the provided price schedule templates. Tenderers are therefore expected to complete whichever version of the provided price schedule forms in the tender document as appropriate for whatever category and the line items they are participating in. Bidders are however reminded to quote the exact category and line-item number as provided in the schedule of requirements with any of the provided versions of the price schedule forms.
7	AI-enabled handheld point of care ultrasound machine- Upon review, we have noted that some requirements appear to be tailored to a specific manufacturer, which may inadvertently limit competition by excluding other compliant manufacturers whose equipment meets the required functional and performance standards. In the interest of fair competition, we request that you consider revising the specifications to be more performance- and functionality-based.	**Category A - Item Nos. 219, 202 & 225** - The specifications for AI-enabled point of care ultrasound Machine item nos. 219, 202 and 225 is revised as below.
8	We wish to request for specification or the composition for item No. 37 (wound Dressing Kit) in category C	The wound dressing kit: **Description**- a sterile prepackaged kit containing essential supplies for managing and protecting wounds. **Composition:-** Sterile gauze Non stick pad Adhesive bandage Gauze roll Triangular bandages Disposable gloves Antiseptic wipes Sterile saline solution Cotton balls/wabs Waste bag Scissors Tweezers Dressing tray.
10	Should we have two 450ml bags, one which is 450ml with CPDA and another 450ml without anti-coagulant, that receives the	**Category C – Item Nos 6-10** The specifications are provided herebelow.

F.O

	Leukoreduced blood from the main bad.	
11	According to the specifications, it is stated that 450ml main bag and four 150ml satellite bags. Please clarify if the total volume is 450ml, which is equivalent to three satellite bags, is there need for the fourth satellite bag?	**Category C – Item Nos 6-10** The specifications are provided herebelow.
12	Item No 205: Ventilator Adult/Paed **Specification No. 3.1, Tidal Volume Pediatric: 20 – 500 mL (adjustable in 1 mL steps)**- The range given is very high and applicable in neonates. While the equipment required is for Adult/Paed **Specification No. 4.1, Manufacturing Standards: EN 1789 (medical transport equipment)**- This Certificate EN 1789 is specific for transport Ventilators, therefore not applicable for ICU Ventilator. **Specification No. 3.1, Weight: With cart and battery ≈ 15 kg**- This specification is quite low for a standard ICU Ventilator	**Category A Item No. 205** - Tidal volume 20 – 300ml The standards ISO 80601-2-12: 2023 medical Electrical Equipment. Weight 15kg to 35kg.
13	Item NO. 151 Patient Monitor 5 Parameters **Specifications No. 3.5 IBP, 3.6.4 Capnography**- These two additional specifications make the monitor a 7 parameter monitor and not a 5 Parameter Monitor	**Category A Item No. 151** -Yes 7 parameters, including etCO2
14	Item No. 157 Portable Cardiac Monitor **Specification No. 1. General Description**- The general description is of a Patient Monitor 5 Parameters and not a Cardiac Monitor. **Specification No. 3.1 - Display: 5-inch**- This Screen size is too small for a portable Cardiac Monitor.	**Category A Item No. 157** -The following parameters are added cardiac output i) BIS ii) etCO2 Screen size Minimum 15 inches
15	Category C Item No. 1- Haemoglobin Estimation Cuvettes of pack of 200pcs	**Category C Item No. 1**- The specifications are revised to new ones provided below.

16	Vaccutainers (blood collection tubes)	**Category C Item No. 4 & 5** - The item description is revised to **blood collection tubes**. The required capacity is purple 4ml and red 6 ml. Plain Red blood collection tubes is a pack of 1000 pcs packed in (10x 100). The package must come with one extra cap for each collection tube. Purple blood collection tubes pack of 1000 pcs packed in (10x 100). The package must come with one extra cap for each collection tube. The tubes should be Branded GOK.
17	Retractable Lancets	The gauge is revised to 21g – 25g The required lancets is retractable lancets. The contact activated lancets is deleted.
18	Surgical gloves	The tenderers are to quote for nitrate powdered gloves. No surgical gloves are required.
19	Gynaecological couch: please specify on mechanical range of tilt angles.	Use specifications as provided in the bid document.
20	Medical gases system - oxygen Clarifications on Performance specifications on production capacity of (350N cubic metre/h) compared to Dimensions of (Typical 20N metre cubic/h unit) what capacity do we go with?	The production capacity will be 20N cubic metre /h.
21	• Kindly clarify whether for biochemistry, hematology controls, calibrators and cleaning solutions are to be included in the quoted reagent price? • kindly clarify the minimum acceptable shelf life at the time of delivery for lab reagents and consumables,? • kindly specify the maximum acceptable response time for lab equipment breakdowns	• No reagents are expected to be supplied with the equipment and therefore no reagent price is to be included. Please ignore any reference to reagents. • No reagents are expected to be supplied with the equipment and therefore no reagent price is to be included. Please ignore any reference to reagents. • Within 72 hours after notification.

F.O

	under the framework agreement?	
	• kindly clarify the minimum preventive maintenance frequency required during the warranty and post -warranty periods?	• As and When Required.
	• kindly specify the minimum period for guaranteed spare parts availability after installation for lab equipment?.	• Three (3) years
	• kindly clarify whether regulatory compliance documents are required at bid submission or prior to contract award?	• Prior to bid submission.
	• kindly clarify whether equivalent international certifications will be accepted where local approvals(e.g., KMLTTB, PPB)are still in process?	• Yes equivalent international certifications are acceptable.
	• kindly specify the maximum allowable delivery timeline from issuance of a call -off order?	• See Schedule of Requirements
	• user training and maintenance on site, clarify numerous of staffs to be trained and duration of training?	• At least three (3) officers. The duration of training will depend on the machine functionality and the provided user manual.
	• For cholesterol analyzer should ldh be directly measured or is calculations be accepted and whether derived parameters (non hdl,th/hdl ratio must be automatically generated by	• Proceed as per specifications

	the analyser or manual calculation accepted? • Is delivery of consumables mandatory with the instruments for lab equipment?	• No reagents are expected to be supplied with the equipment and therefore no reagent price is to be included. Please ignore any reference to reagents.
22	Ultrasound scanner, mobile	**Category A Item No. 202** - The specifications are revised to new ones provided below.

TECHNICAL SPECIFICATIONS: 100 LITRE AUTOCLAVE

1. **General Description** Automatic, microprocessor controlled, 100 litres steam sterilizer suitable for sterilization of hospitals porous and non-porous loads. The autoclave should be horizontal stand-alone type and constructed from double walled high-grade stainless-steel materials.		
2. Composition 2.1 Main unit		
3. Performance Specifications 3.1 Main Unit		
3.1.1	Application	For sterilization of hospitals porous and non-porous Loads.
3.1.2	Sterilization agent	Saturated steam with inbuilt steam generator
3.1.3	Sterilization cycle	Fully automatic with Pre – vacuum, heating (steam pulsating), sterilization (holding), post vacuum (drying). With inbuilt printer capable of printing each successful sterilization cycle
3.1.4	Sterilization temperature range	105°C to 137°C, selectable programs for different kind of loads
3.1.5	Pressure equalization	By sterile HEPA filter, replaceable
3.2	Sterilization chamber design and capacity	Horizontal type, 100 litres, all high grade stainless steel construction
3.2.1	Sterilization Chamber door	Fully automatic, hydraulic, vertical or horizontal sliding.

F.O

3.3	Control unit	Microprocessor based controlling all operational cycles With large LCD or similar display of cycle progress i.e. temperature, pressures and time. With different programmable cycle programs for different type of loads. With facilities for calibration.
3.4	Steam generator	In built, Electrical heating three phase 415V, 50 Hz
3.5	Water to steam generator	De- carbonated water to safe guard heating element. Suitable RO filter units to be installed
3.6	Printer	In built printer capable of printing each successful cycle. Preferable thermal printer
3.7	Safety features	The autoclave should have major safety features such as: Safety pressure relief valve Door lock under pressure
3.8	Raw water Treatment	Supply and install, RO water filtration system for raw water complete with Pre-filters
4	Physical characteristics	
4.1	Main unit	Floor mounted, stand alone
	Dimensions	Approximate 1.2 x 1.4 x 1.2m (WxHxD)
5	Operating environment	
5.1	Power Requirements	415V, A/c 50 Hz, Single phase, with PE
	Ambient temperature	10° C to 40° C
	Relative humidity	40% to 90%
6	Accessories	
	Pull out trays, containers, and baskets.	1 Set
6.1	Loading cart, stainless steel	1 Piece
6.2	Automatic Voltage Regulator (AVR)	For the electronic circuit only

6.2.1	Capacity	Over VA of the electronic circuit
6.2.2	Input	Ac 240V, 50Hz, Single phase ± 15%
6.2.3	Output	Ac 240V, 50Hz, Single Phase ± 2.5 %
7	Spare parts	
7.1	Heaters	2 sets
7.2	Printing papers	10 Rolls
7.3	Door gaskets	2 Sets
7.4	RO filter cartridges,	2 Set
9	Quality standards	
9.2	Manufacturing standards	IEC 60601-1, ISO 9001 or any other internationally recognized standards
	Conformity to standards	CE marked or any other internationally recognized documents
10	Local back up service	
10.1	Available	Should be available locally
10.2	Capacity to service equipment	Agent shall have adequate facilities, spare parts, and qualified and skilled technical staff
11	Delivery point	
11.1	See Hospital Schedule	For inspection, installation, testing and commissioning
12	Pre installation works	
	Provide for foundation plinth, necessary plumbing works and electrical works including cabling, trunking and switch gears required to install the autoclave and its accessories to required IEE standards	
13	Installation and testing	
	Complete installation and set-up of the machine as per manufacturer's instructions	
14	Training	
14.1	User Training	On site user training on operation and daily up keep
14.2	Maintenance training	On-site maintenance training on preventive maintenance
15	Technical documentations	
15.1	User manuals	2 Sets
15.2	Service Manual	1 Set
15.3	Drawings	Nil

F.O

16	Commissioning	
16.1	Testing and commissioning of the machine to the satisfaction of the user.	
17	Warranty	
17.1	Equipment	Minimum of one year after commissioning on all parts.
17.2	Equipment System	Nil
18.	Maintenance contract	
18.1	Capacity to provide maintenance and repair service	Vendor/manufacturer shall have adequate facilities, spare parts, qualified and skilled technical staff to offer comprehensive maintenance contract for at least 10 years

KNBTS TECHNICAL SPECIFICATIONS FOR BLOOD BAGS.

Description and Specification of blood bags

- Blood collection bag Made up of DEHP (Di-2-ethyhexyl phthalate) plasticized PVC (polyvinyl chloride), collapsible non- vented sterile containers complete with collecting tube for completely closed system to avoid the chances of contamination.
- Must have proof of use in country of origin and at least 4 other additional countries'
- Must have evidence of quality certification

A. Specifications of Single Blood Bags

i. Capacity:

- Primary bag (450 ml) with CPDA-1 (63ml)

ii. Design and shape:

- Flexible pre sterilized
- Pyrogen free
- Non-toxic, non-haemolytic, biocompatible material
- Slit on both sides of the bags should be enough to accommodate10 ml test tubes.
- The capacity of the bag should be enough to prevent any ballooning/ rupture of the bag from seam when it is filled up with the requisite volume of blood.

ii. Tubing of bag:

- Flexible non kinking
- Non sticking
- Transparent
- Leak proof
- The minimum length of tubing from primary bag to the needle should be at least 80 cm.
- The tube should have multiple printed ID/ Segment number. The number should be legible and clear
- A clamp should be provided for closed system

iv. Needle:

- 16 gauge ultra-thin walled and straight
- Sharp, regular and smooth margins and beveled tip.
- Rust proof
- Tightly fixed with hub covered with sterile guard
- Hermetically sealed
- The needle should not separate from the tube at any point of time, especially while removing it from the vein for the donor safety

v. External port:

- Tamper proof and should not be re-capped
- Easily accessible Package:

vi. Packaging

- Protective dual packaging (individual & Aluminum) eliminating microbial contamination on surface maintaining the contents of the bag
- Easy to handle

v. Anticoagulant and preservative solution:

- CPDA-I The quantity of anticoagulant/ 63 ml)
- Clear & colorless
- No discoloration on storage
- Manufacturer to supply anticoagulant quality check certificate

vi. Label:

- Non-peel- off
- Heat sealed/ pressure embossed labels
- Date of manufacturing, date of expiry and lot number must be mentioned on each bag The expiry date should be at least 2 years from the date of manufacturing of blood bags and residual shelf life at the time of supply should be at least 75%of the total shelf-life.
- Should have 'GOK NOT FOR SALE'

vii. Resistance to distortion:

- Filled to normal capacity
- Bag shall withstand acceleration of 5000g for 30 minutes
- Bags should be able to withstand temperature between -80 C to 30 0C without breakage

B. Specifications of Double Blood Bags

iii. Capacity:

- Primary bag (450 ml) with CPDA-1 (63ml)
- Satellite bag (of 300 ml capacity)

ii. Design and shape:

- Flexible pre sterilized
- Pyrogen free
- Non-toxic, non-haemolytic, biocompatible material
- No risk of contamination and air embolism (close system) with leaks proof seals

F.O

- Slit on both sides of the bags should be enough to accommodate10 ml test tubes.
- The capacity of the bag should be enough to prevent any ballooning/ rupture of the bag from seam when it is filled up with the requisite volume of blood.

iv. Tubing of bag:
- Flexible non kinking
- Non sticking
- Transparent
- Leak proof
- The minimum length of tubing from primary bag to the needle should be 80 cm.
- The tube should have multiple printed ID/ Segment number. The number should be legible and clear
- A clamp should be provided for closed system

vii. Needle:
- 16 gauge ultra-thin walled and straight
- Sharp, regular and smooth margins and bevelled tip.
- Rust proof
- Tightly fixed with hub covered with sterile guard
- Hermetically sealed
- The needle should not separate from the tube at any point of time, especially while removing it from the vein for the donor safety

viii. External port:
- Tamper proof and should not be re-capped
- Easily accessible Package:

ix. Packaging
- Protective dual packaging (individual & Aluminum) eliminating microbial contamination on surface maintaining the contents of the bag
- Easy to handle

viii. Anticoagulant and preservative solution:
- CPDA-I The quantity of anticoagulant/ 63 ml)
- Clear & colorless
- No discoloration on storage
- Manufacturer to supply anticoagulant quality check certificate

ix. Label:
- Non-peel- off
- Heat sealed/ pressure embossed labels
- Date of manufacturing, date of expiry and lot number must be mentioned on each bag The expiry date should be at least 2 years from the date of manufacturing of blood bags and residual shelf life at the time of supply should be at least 75% of the total shelf-life.
- Should have 'GOK NOT FOR SALE'

x. Resistance to distortion:
- Filled to normal capacity
- Bag shall with stand acceleration of 5000g for 30 minutes

- Bags should be able to withstand temperature between -80 C to 30 0C without breakage

C. Specification of Triple Blood Bags

i. Capacity: Triple blood bag:

- Primary bag (450 ml) with CPDA-1 (63ml)
- First satellite bag (of 300 ml capacity) with SAGM (100ml)
- Second satellite bag of 300 ml capacity for platelet storage for 5 days

ii. Design and shape:

- Flexible pre-sterilized
- Pyrogen free
- Non-toxic, non-hemolytic, biocompatible material
- Should provide close system with leaks proof seals
- Slit on both sides of the bags should be enough to accommodate 10 ml test tubes.
- The capacity of the bag should be enough to prevent any ballooning/ rupture bag from seam when it is filled up with the requisite volume of blood.
- The bag should have diversion pouch

iii. Tubing of bag:

- Flexible non kinking
- Non sticking
- Transparent
- Leak proof
- The minimum length of tubing from primary bag to the needle should be at least 80 cm.
- The tube should have multiple printed ID/ Segment number. The number should be legible and clear
- A clamp should be provided for closed system

iv. Needle:

- 16 gauge ultra-thin walled and straight
- Sharp, regular and smooth margins and beveled tip.
- Rust proof
- Tightly fixed with hub covered with sterile guard
- Hermetically sealed
- The needle should not separate from the tube at any point of time, especially while removing it from the vein for the donor safety

v. External port:

- Tamper proof and should not be re-capped
- Easily accessible

vi. Packaging

- Protective dual packaging (individual & Aluminum) eliminating microbial contamination on surface maintaining the contents of the bag
- Easy to handle

vii. Anticoagulant and preservative solution:

- CPDA-I (63 ml)
- Clear & colorless

F.O

- No discoloration on storage
- Manufacturer to supply anticoagulant quality check certificate

viii. Label:

- Non-peel- off
- Heat sealed/ pressure embossed labels
- Date of manufacturing, date of expiry and lot number must be indicated on each bag
- The expiry date should be at least 2 years from the date of manufacturing of blood bags and residual shelf life at the time of supply should be at least 75% of the total shelf life.
- Should indicate 'GOK NOT FOR SALE'

xi. Resistance to distortion:

- Should not burst when filled to normal capacity
- Bag should withstand acceleration of 5000g for 30 min
- Bags should be able to withstand temperature up to -80 o C to 30 o C without breakage

D. QUADRUPLE BLOOD BAGS

i) Capacity:

- Primary bag (350/450 ml) with top first satellite bag (of 300 ml capacity containing 78 ml/ 100 ml additive solution)- for 42 days red cell storage
- Second satellite bag (of 300 ml capacity) for platelet storage for 5 days
- Third satellite bag (of 300 ml capacity)

ii. Design and shape:

- Flexible pre sterilized
- Pyrogen free
- Non-toxic, non-haemolytic, biocompatible material
- No risk of contamination and air embolism (close system) with leaks proof seals
- Slit on both sides of the bags should be enough to accommodate10 ml test tubes.
- The capacity of the bag should be enough to prevent any ballooning/ rupture of the bag from seam when it is filled up with the requisite volume of blood.

v. Tubing of bag:

- Flexible non kinking
- Non sticking
- Transparent
- Leak proof
- The minimum length of tubing from primary bag to the needle should be 80 cm.
- The tube should have multiple printed ID/ Segment number. The number should be legible and clear
- A clamp should be provided for closed system

x. Needle:

- 16 gauge ultra-thin walled and straight

- Sharp, regular and smooth margins and beveled tip.
- Rust proof
- Tightly fixed with hub covered with sterile guard
- Hermetically sealed
- The needle should not separate from the tube at any point of time, especially while removing it from the vein for the donor safety

xi. External port:

- Tamper proof and should not be re-capped
- Easily accessible Package:

xii. Packaging

- Protective dual packaging (individual & Aluminium) eliminating microbial contamination on surface maintaining the contents of the bag
- Easy to handle

xii. Anticoagulant and preservative solution:

- CPDA-I The quantity of anticoagulant/ (63 ml)
- Additive solution- first satellite bag (100 ml for 450ml blood bag
- Clear & colorless
- No discoloration on storage
- Manufacturer to supply anticoagulant quality check certificate

xiii. Label:

- Non-peel- off
- Heat sealed/ pressure embossed labels
- Date of manufacturing, date of expiry and lot number must be mentioned on each bag The expiry date should be at least 2 years from the date of manufacturing of blood bags and residual shelf life at the time of supply should be at least 75%of the total shelf-life.
- Should have 'GOK NOT FOR SALE'

xiv. Resistance to distortion:

- Filled to normal capacity
- Bag shall withstand an acceleration of 5000g for 30 minutes
- Bags should be able to withstand temperature between -80 C to 35 0C
- without breakage

E. PEAD QUADRUPLE BLOOD BAGS

Description

Pediatric (or Pediatric) Quadruple Blood Bags. These are specialized, interconnected, closed-system medical devices designed to collect, store, and process blood, specifically aimed at splitting a single unit of whole blood into four, smaller, pediatric-sized volumes (often around 100-150ml per bag).

i) Capacity:

Penta Blood bags,

- Primary bag Size 450ml with CPDA-1 (63ml)
- First Transfer bag should have a capacity of 150ml
- Second Transfer Bag should have capacity of 150ml
- The third transfer bag should have a capacity of 150ml

ii. Design and shape:

- Flexible pre sterilized
- Pyrogen free
- Non-toxic, non-haemolytic, biocompatible material
- No risk of contamination and air embolism (close system) with leaks proof seals
- Slit on both sides of the bags should be enough to accommodate10 ml test tubes.
- The capacity of the bag should be enough to prevent any ballooning/ rupture of the bag from seam when it is filled up with the requisite volume of blood.

vi. Tubing of bag:

- Flexible non kinking
- Non sticking
- Transparent
- Leak proof
- The minimum length of tubing from primary bag to the needle should be 80 cm.
- The tube should have multiple printed ID/ Segment number. The number should be legible and clear
- A clamp should be provided for closed system

xiii. Needle:

- 16 gauge ultra-thin walled and straight
- Sharp, regular and smooth margins and beveled tip.
- Rust proof
- Tightly fixed with hub covered with sterile guard
- Hermetically sealed
- The needle should not separate from the tube at any point of time, especially while removing it from the vein for the donor safety

xiv. External port:

- Tamper proof and should not be re-capped
- Easily accessible Package:

xv. Packaging

- Protective dual packaging (individual & Aluminum) eliminating microbial contamination on surface maintaining the contents of the bag
- Easy to handle

xv. Anticoagulant and preservative solution:

- CPDA-I The quantity of anticoagulant/ (63 ml)
- Additive solution- first satellite bag (100 ml for 450ml blood bag

F.O

- Clear & colorless
- No discoloration on storage
- Manufacturer to supply anticoagulant quality check certificate

xvi. Label:

- Non-peel- off
- Heat sealed/ pressure embossed labels
- Date of manufacturing, date of expiry and lot number must be mentioned on each bag The expiry date should be at least 2 years from the date of manufacturing of blood bags and residual shelf life at the time of supply should be at least 75%of the total shelf-life.
- Should have 'GOK NOT FOR SALE'

xvii. Resistance to distortion:

- Filled to normal capacity
- Bag shall withstand an acceleration of 5000g for 30 minutes
- Bags should be able to withstand temperature between -80 C to 35 0C without breakage

KNBTS TECHNICAL SPECIFICATIONS OF HB METER AND MICRO-CUVETTES

i) Description

The Hemoglobin (Hb) meter is a point-of-care (POC) device used for the rapid, quantitative measurement of total hemoglobin in blood (capillary, venous, or arterial)

ii) Technical Specifications

S/NO	Aspect	Specification
1.	Design	Should be Portable and hand-held, should have an easy-to-read Liquid Crystal Display (LCD).
2.	Memory	Stores up to 1,000 results with date and time
3.	Methodology	Should be based on measurement of whole blood Hb using spectro-photometry/ optical methods.
4.	Microcuvette	It should be made of polystyrene plastic.
5.	Measuring range	0 - 25.6 g/dl
6.	Unit of measure	g/dl
7.	Time	Results should be in < 5 seconds.
8.	Blood Sample type and volume	Should be able to analyze fresh capillary whole blood. Should be able to use a sample volume of ≤10 µl
9.	PC interface	Should have the capacity for fast data transfer
10.	Calibration	Should be able to auto-calibrate
11.	Hb within run precision and total Hb precision CV	≤ 1%
12.	Accuracy	Above 95%

F.O

13.	Storage conditions	0-50oC; ≤90% Relative Humidity
14.	Operating conditions	2-400 C ≤85% Relative Humidity
15.	Specificity	>90%
16.	Cuvette/strips shelf live.	At least 2 years closed cannister. 3 months have opened the canister.
17.	Power source	Batteries and AC adapter
18.	Manufacturer	Manufacturers should have ISO 9001:2008 certification/TUV certificate

ITEM DESCRIPTION	**Handheld ultrasound transducer**
Category	**Requirement description**
Technology	Chip-based Ultrasound, Piezo electric or any equal and equivalent technology
Form factor	Handheld
Compliant with	DICOM 3.0 IEC 60601-1 -2 and IEC 60601-2-37
Regulatory Clearance	FDA or CE (EU MDR)
Probe Types	Single, or Dual or multi-probes with the following functionalities - Linear - Convex - Phased
Probe Frequencies	Range between from 1 - 12 MHz
Scan depth	Range between 2 - 24 cm
Scan Modes	B-mode Tissue harmonic imaging M-mode Color Doppler imaging (CDI) Power Doppler imaging (PDI)
Image Display and Processing	Image magnification (zoom) Minimum display depth 2cm Maximum display depth 24cm Preprocessing & Postprocessing capabilities
Connectivity to smart devices	Wired or secure wireless
Clinical Applications	Abdominal Cardiac Adult Cardiac Pediatric Carotid and Arterial Fetal/Obstetric Gynecological Musculoskeletal (Conventional) Musculoskeletal (Superficial) Pediatric Peripheral Vessel

F. D

	Procedural Guidance Small Organs (including thyroid) Urology Lung Bladder FAST
Telemedicine capability	Remote diagnostic support
Software Features	
Operating Systems	Compatible with both iOS and Android (latest generations)
User Interface / Usability	User friendly with help functions
Education	Onboard e-manual
Analysis packages	Basic measurements
Digital calipers	Up to 4 linear calipers, 1 Elliptical calipers
Exam presets	Multiple presets by application and user defined preset selection
Tools	Common measurement tools
Controls	Gain TGC (near, mid, far) Depth

Connectivity	
Data export methods	DICOM
Exported still image formats	DICOM
Exported video clip formats	DICOM
Integration	DICOM
Hardware Features	
Probe Casing	Durable casing
Waterproofing	Waterproofing to IP67 standard
Advanced Micro-Organism Protection	High-Level
Battery	Lithium Ion Battery or equivalent.
Charger	Wired or Wireless charger, complies with Qi standards
Battery life	at least 1 hours (continuous scanning)
Recharge time	max 5 hours (for full recharge)
Weight	Less than or equal to 350 grams
Power Requirements	220-240 V
Drop test	As per IEC standards. Compliance report to be provided

AI – ENABLED HANDHELD POINT OF CARE ULTRASOUND MACHINE

Intended Use - Antenatal care, basic obstetric imaging, early pregnancy assessment, foetal viability, multiple gestation detection, placenta location, amniotic fluid estimation.

Imaging & Clinical Modes

- B-Mode, M-Mode
- Color Doppler (for foetal heart, umbilical vessels)
- PW Doppler

AI-Enabled Functions (Maternal Focus)

- Automated Gestational Age Calculation (BPD, HC, AC, FL)
- Fetal Heart Rate Detection & Measurement
- Automatic Fetal Presentation Detection (cephalic, breech)
- Placenta Localization (anterior/posterior/low-lying)
- Amniotic Fluid Index (AFI) Estimation
- Guided Scanning: On-screen prompts for correct probe placement
- Anomaly Flagging: Alerts for growth restriction, multiple gestation, absent cardiac activity (screening-level only)

Transducer

- Type: Convex/curvilinear
- Frequency: 2–6 MHz
- Depth: ≥ 25–30 cm
- Single or multi probe

Display & Interface

F.O

- Tablet/smartphone based or integrated screen
- Simple OB presets (1st trimester, 2nd/3rd trimester)
- Multi-language interface

Connectivity & Data

- DICOM compatible
- Cloud upload for tele-consultation with radiologists/OB specialists
- Secure patient data storage

Power & Portability

- Battery life: ≥ 3–4 hours continuous scanning
- USB charging (power bank compatible)
- Weight ≤ 500 g

Compliance

- IEC 60601-1, IEC 60601-2-37
- CE / FDA approval
- Data encryption (HIPAA/GDPR compliant)

Ideal Deployment

- Antenatal clinics, maternity wards, outreach programs, rural maternal health programs.

Emergency Care

Imaging & Clinical Modes

- B-Mode, M-Mode
- Color Doppler
- PW Doppler
- Tissue harmonic imaging (preferred)

AI-Enabled Functions (Emergency Focus)

- FAST / eFAST Protocol Automation (free fluid detection)
- Cardiac View Recognition: Parasternal long/short axis, apical 4-chamber
- Automated Ejection Fraction Estimation
- IVC Measurement for Volume Status
- Lung AI: B-line detection, pneumothorax screening
- Shock Protocol Guidance: Hypovolemic, cardiogenic, obstructive patterns
- On-screen Scan Quality Feedback

Transducer

- Type: Phased array or multi-frequency probe

- Frequency: 2–8 MHz
- Depth: ≥ 30 cm

Display & Interface

- One-touch emergency presets (FAST, Cardiac, Lung, Vascular)
- Rapid boot time (< 10 seconds)
- Glove-friendly touch interface

Connectivity & Data

- Wi-Fi/Bluetooth
- Real-time tele-ultrasound for remote expert consultation
- PACS/HIS integration

Power & Durability

- Battery life: ≥ 2–3 hours
- IPX6 or higher water/splash resistance
- Shock-resistant casing

Compliance

- IEC 60601-1 / 60601-2-37
- CE / FDA certified
- Secure clinical data handling Ideal Deployment

Emergency departments, ambulances, field hospitals, disaster response teams. Primary Healthcare In Low-Resource Settings

Imaging & Clinical Modes

- B-Mode
- M-Mode
- Color Doppler (optional)

AI-Enabled Functions (Low-Resource Focus)

- Exam-Guided Scanning: Step-by-step prompts for non-specialist users
- Automated Key Measurements:
- Fetal heart rate
- Gestational age
- Bladder volume
- IVC diameter
- Condition Screening:
- Free fluid detection
- Lung B-lines (pneumonia/heart failure)

Fr O

- Decision Support: Simple "normal / refer" prompts (screening only)

Transducer

- Type: Single or multi-frequency probe
- Frequency: 2–10 MHz
- Supports OB, abdominal, cardiac, lung, vascular in one device

Display & Interface

- Smartphone/tablet based
- Large icons, minimal text
- Multi-language support (including local languages where possible)

Connectivity & Data

- Offline operation with local storage
- Optional cloud sync when internet is available
- Telemedicine support for remote expert review

Power & Portability

- Battery life: ≥ 4–6 hours
- USB charging from power banks or solar systems
- Lightweight, pocket-sized
- Protective case included

Environmental & Durability

- Operates in high temperature and dusty environments
- IPX5–IPX7 water resistance
- Drop-resistant casing

Compliance

- IEC 60601 standards
- CE / FDA / WHO-listed device preferred
- Encrypted data storage

Item Description			**Ultrasound scanner, mobile**
Department		Room Name/No.	
1. General Description A mobile ultrasound system is a compact, battery-powered unit that brings high-resolution imaging to the point of care—bedside, emergency department, field clinics, or remote sites. It combines a lightweight console, a detachable probe, and a touchscreen interface, allowing clinicians to perform rapid assessments without transporting patients to a radiology suite.			
2. Composition			

2.1. Ultrasound scanner, mobile 1 No.	
3. Performance Specifications	
3.1	- Imaging Modes: B-mode, M-mode, Color Doppler, Power Doppler, Pulsed Wave Doppler, and basic cardiac packages. - Display: 10.1-inch high-definition LCD (1920 × 1080 px) with adjustable brightness and anti-glare coating. - Probes: - Linear array (5-12 MHz) for vascular, musculoskeletal, and superficial work. - Curved abdominal probe (2-5 MHz) for abdominal, OBS/GYN, and deep-organ imaging. - Phased-array cardiac probe (2-4 MHz) for basic echocardiography. - Battery: lithium-ion pack. - Power: AC adapter 220-240 V, 50Hz - Connectivity: Wi-Fi, USB-C, and DICOM export; - Weight: Nor more than 6kg - Operating Temperature: 5 °C – 40 °C; humidity 30 % – 75 % non-condensing. - Additional Features: Auto-optimize imaging, built-in measurement tools, patient database, and ruggedized housing
4 Quality standards	
4.1 Manufacturing standards	- **Safety & Compliance** - Safety & Compliance: IEC 60601-1 (medical electrical), IEC 60601-2-37 (ultrasound), CE-marked or FDA-cleared, ISO 13485 quality management.
5 Delivery point	
5.1	See Schedule For inspection and testing
6	Installation and testing Complete installation and set-up of the machine as per manufacturer's instructions
7	Training
7.1	User Training On site user training on operation and daily up keep
7.2	Maintenance On-site maintenance training on preventive maintenance training
8	Technical documentations
8.1	User manuals 1 Sets
9	Commissioning
9.1	Testing and commissioning of the devices to the satisfaction of the user.
10	Warranty
10.1	Equipment Minimum of one year after commissioning on all parts.

F.O

All other tendering Terms and Conditions remain unchanged. Any inconvenience caused is highly regretted.

The tender closing date and time remains as on Tuesday the 27th January,2026 at 11:00AM

DR. OUMA OLUGA, OGW
PRINCIPAL SECRETARY