**Section II: Schedule of Requirements**

**eSourcing reference:** ITB/2023/47240

Supply of Haematology Laboratory equipment to the Republic of Benin

1. **Summary of Requirements**

This ITB refers to the provision of Haematology Laboratory equipment to the Republic of Benin as further described in the document titled Section II: Schedule of Requirements.

1. **Technical specifications for Goods and Comparative Data Table**

**Haematology Laboratory equipment**

| **Item No** | **UNOPS minimum technical requirements** | **Quantity** |
| --- | --- | --- |
| 1 | **6-Part differential Human full Automated Haematology analyzer**  **Principles & Technologies:**  Fluorescent Flow Cytometry method for WBC, DIFF or better technology.  Hydrodynamic focusing DC detection method for PLT-I (Impedance), RBC, HCT or better technology.  Cyanide-free SLS-haemoglobin method: HGB or better technology  Parameters:   * **Able to classify immature granulocytes (IG) as a sixth population**   At least 27 Parameters for Whole blood / Pre-dilution mode including:  WBC, RBC, HGB, HCT, MCV, MCH, MCHC, PLT, RDW-SD, RDW-CV, PDW, MPV, P-LCR, PCT, NEUT#, LYMPH#,  MONO#, EO#, BASO#, NEUT%, LYMPH%, MONO%, EO%, BASO%, IG#, IG%, MicroR, MacroR.  Throughput: 60 samples/hour (minimum)  **Sample Aspiration in two modes:**  **Whole blood mode**  **Pre-dilution mode**  **Reagents:**  **4 reagents or less**: Diluent; Cyanide-free Haemoglobin Reagent, Lyse Reagent, Fluorescence Reagents apart from cleaning solutions.  **Data Storage configuration**   * **Sample data Storage Results** * **Patient information records** * **QC files analyser** * **Reagent replacement history** * **Maintenance history**   **Monitor:**  Fully integrated IPU (information-processing unit) including an LCD colour touchscreen (minimum 12.1 inch)  External Ports:  At least 3 USB ports for handheld barcode reader, printer and USB device connections.  RS-232C port and LAN port for host computer connection  Power supply: 115 - 230 Volts ± 10 %, 50 Hz  Supplied with: **Accessories and starter reagent kit**  **CE or FDA certified**  **ISO 13485 certified**  **ISO 9001 certified or Manufacturer’s QMS certificate.**  **One year warranty including spare parts and preventive and curative maintenance activities** | 6 |
| 2 | **Platelets Incubator with a built-in agitator**  – Platelets agitator providing a continuous rolling motion for safe platelets storage.  – Rolling and sliding accessories providing the storage platform with smooth shaking, which eliminates the need for the ball bearing which wears out much more quickly and squeaks. (or better technology).  – Uniform air circulation for the chips, ensuring an ideal environment for optimal preservation.  – Offering the security of a continuously temperature-controlled environment through an advanced control system and built-in chart recorder.  Capacity: At least 150 bags  Temperature range: 20 ºC to 35 ºC (minimum temperature range)  Interior construction: Bacteria resistant powder coated or better technology  Exterior construction: Bacteria resistant powder coated or better technology  Door: Dual-pane, tempered glass door with magnetic seal  System: Thermoelectric Heating and Cooling Technology (or better technology)  Data connectivity: USB port, LAN Port  Temperature chart recorder: Included  Battery backup: Included  Motion alarm: Programmable  Door lock: Key  - Power supply: mains 200VAC to 240VAC, 50Hz  – **Delivered with all necessary accessories for proper operation**  **CE or FDA certified**  **ISO 13485 certified**  **ISO 9001 certified or Manufacturer’s QMS certificate. One year warranty including spare parts and preventive and curative maintenance activities** | 4 |
| 3 | **Fully automated coagulation analyzer**  – Principles of detection coagulant method, chromogenic analysis by kinetics, immuno-turbidimetric method;  – Detection channel/method: 8 channels for clotting, chromogenic and immunoassays  - Parameters: at least 20 parameters can be analysed simultaneously  - Throughput: PT: 100 tests/h (or more) and PT/APTT: 80 tests/h (or more)  - Sampling: Continuous loading of maximum 5 racks of 10 tubes each, cap-piercing functionality,  STAT sample can be analysed as priority by executing either sample or rack interruption function  – Wavelengths 405 nm, 575 nm, 660 nm, 800 nm (or more wavelengths)  – Sample volume control available  – Sample tube loading capacity 50 tubes (at least)  – Detection tanks 8 tanks (or more)  – Incubation tanks 9 tanks (or more)  – Incubation temperature: 37.9 °C ± 1.0 °C  – Calibration curves 2 – 9 calibration points (or better method), with max. 5 calibration curves per parameter (or better method).  – Storage capacity of at least 150 cuvettes  - Printer port for external printer.  – Mains supply 100-240 VAC, 50/60 Hz  **– Delivered with all necessary accessories for proper operation**  **CE or FDA certified**  **ISO 13485 certified**  **ISO 9001 certified or Manufacturer’s QMS certificate.**  **One year warranty including spare parts and preventive and curative maintenance activities** | 6 |
| 4 | **Fully automated Erythrocyte sedimentation rate analyzer (ESR)**  – Reading Principle: capillary photometry  – Direct reading on EDTA tubes  – Small sample volume for paediatrics through adult sample use.  – Built-in printer  – Internal barcode reader for patient identification  – Internal quality control  – Availability of Playback function for Racks of samples  – Possibility of measurement when the haematocrit is low  – Mains supply 100-240 VAC, 50/60 Hz  – **Delivered with all necessary accessories for proper operation**  **CE or FDA certified**  **ISO 13485 certified**  **ISO 9001 certified or Manufacturer’s QMS certificate.**  **One year warranty including spare parts and preventive and curative maintenance activities** | 6 |
| 5 | **Automated capillary electrophoresis system**  – Fully automated;  – Rate: 40 samples per hour (minimum)  – Separation of all haemoglobin fractions;  – Quantification by 415 nm spectrophotometry or better technology  – Blood glucose display  – Simultaneous analysis of at least 8 samples  – Mains supply 200-240 VAC, 50/60 Hz  – **Delivered with all necessary accessories for proper operation**  **CE or FDA certified**  **ISO 13485 certified**  **ISO 9001 certified or equivalent.**  **One year warranty including spare parts and preventive and curative maintenance activities** | 6 |
| 6 | **High performance liquid chromatography (HPLC) of Haemoglobin**    For in vitro diagnostic quantitative determination of haemoglobin A1c (HbA1c) in whole blood from venous draw and finger stick.  – Principle: Boronate affinity chromatography (BAC) or better technology  – Minimum legible division: Area percentage = 0.01%  -Completely Automated  - Fast test time  -Instrumentation control: Windows Operating System with Proprietary Assay Software  -Result output: Display and Print  -Printout: Automatic, User Select  - Samples types: Whole blood, hemolysates made from whole blood or packed red blood cells.  Blood can be fresh or thawed from a frozen state. Venous EDTA, Heparin or Sodium Fluoride or Finger Stick  -Sample ID: Operator Input or Bar Code Reader  – Minimum sample volume: 10 microliters of whole blood, 5 microliters of packed red blood cells  – Loading capacity: 150 samples + emergency position (STAT sample position)  – Analysis time: about 1 min per sample  – Analytical column: Boronate bound to a porous polymer gel at 55°C or technology related to system’s principle or better technology  – Detector: UV Light LED  -LED wavelength detector: 413 nm ± 2nm  – Calibrators: Embedded, Glycated haemoglobin calibrators (2 levels) or better technology  – Controls: On-board, Glycated haemoglobin controls (2 levels) or better technology  – Mains supply 200-240 VAC, 50/60 Hz  - **Supplied with reagents and consumables for 1000 tests (very advanced expiry date)**  – **Delivered with all necessary accessories for proper operation**  **CE or FDA certified**  **ISO 13485 certified**  **ISO 9001 certified or Manufacturer’s QMS certificate. One year warranty including spare parts and preventive and curative maintenance activities** | 1 |

1. **Delivery requirements and Comparative Data Table**

| **UNOPS Requirements** | |
| --- | --- |
| **Delivery time** | Bidder shall deliver the goods 4 months CPT Cotonou Airport after Contract signature.  UNOPS plans to award contract/s based on CPT incoterm but reserves the right to award on FCA basis and arrange its own freight. The readiness of the goods should be 3 months after contract signature in case of FCA award. |
| **Delivery place and Incoterms rules** | Incoterms 2020, FCA , CPT Cotonou Airport |
| **Consignee details** | To be confirmed at time of order |
| **UNOPS Right to vary requirements** | At the time the Contract is awarded, UNOPS reserves the right to vary the quantity of the goods and associated services specified above, provided this does not exceed +/- 20%, without any change in the unit prices or other terms and conditions of the ITB; if applicable for the item |

1. **Related services and sustainable requirements**

| **Item** | **Description of the services** |
| --- | --- |
| 1. | **Installation & commissioning**  Bidder to provide equipment installation and commissioning at delivery destination.  The Bidder to highlight any specific pre-installation conditions. |
| 2. | **Local technical support**  The bidder to indicate: The complete details (name, address, email and telephone) of a local company or representative that may provide technical assistance, as applicable. |
| 3. | **Warranty**  One year warranty including spare parts and preventive and curative maintenance activities |
| 4 | **Quality certificates and norms**  The bidder must indicate the complete name, validity and certifying entity of the following certificates:  CE or FDA certified  ISO 13485 certified  ISO 9001 certified or Manufacturer’s QMS certificate |